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TRANSITIONS IN DEVELOPMENT

The Role of Aid and Commercial Flows

edited by Uma Lele
and Ijaz Nabi

INTERNATIONAL CENTER FOR ECONOMIC GROWTH

TRANSITIONS
IN
DEVELOPMENT

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Preface

Over the past four decades, billions of dollars have been transferred from developed to developing countries. Whether these flows of external capital from donors, lenders, and investors have succeeded in stimulating growth, reducing poverty, and creating human and institutional capacity to carry out the development effort is not always clear and is even, in some cases, a matter of controversy.

Editors Uma Lele and Ijaz Nabi of the World Bank assembled a group of scholars from around the world (all of whom had had some hands-on experience in development policy) for a conference in Talloires, France, to consider the role of external capital in development. *Transitions in Development* is the result of that conference. In case studies of countries in Asia, Africa, and Latin America, these experts show both how aid and other capital flows have worked and how they have failed. Along with several papers on broad, aid-related issues, these country studies offer policy lessons on how aid and commercial flows can best be used to achieve development goals.

Generally, external finance is only a small fraction of capital formation in developing countries, and it complements the national savings and investment effort. Nonetheless, it can make an important contribution to the development process in many countries by transferring technology, strengthening institutions, diversifying investments, opening new development opportunities, supporting appropriate policies, and helping stabilize political situations in rough periods. Steady and predictable flows of aid and commercial capital can be catalysts for advances in growth and human development.

This study addresses some of the most crucial questions now faced by development economists and policymakers, and it could not have been accomplished without the help of many individuals and organizations. I would particularly like to acknowledge the generous contributions and cooperation of the World Bank, the United States Information Agency, and the Pew Charitable Trusts. Their assistance was indispensable in making this volume a reality.

Nicolás Ardito-Barletta
General Director
International Center for Economic Growth

February 1991
Panama City, Panama

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Without the perseverance of A. Lawrence Chickering of the Institute for Contemporary Studies (ICS) and the strong and active support of Gregory Ingram, former director of the World Bank's Development Research Department, the project would not have gotten off the ground. Nicolás Ardito-Barletta, general director of the International Center for Economic Growth, an international affiliate of ICS, not only provided unstinting support for the project but also contributed substantively to the content of this volume. In particular, the importance of project aid in development would not have received the attention it deserves without his persistence. We are grateful to the authors of this volume for their willingness to spend time revising their papers in light of the discussions at the conference in Talloires, France, and to the policymakers from donor and recipient countries who commented on the draft papers at the conference (see list of conference participants).

In addition, we are grateful for the generous support of the World Bank to this project and in particular to Anne Krueger, former vice president of the Economic Research Staff, and Stanley Fischer, Edward V. K. Jaycox, and S. Shahid Hussain, vice presidents of Development Economics, the Africa Regional Office, and the Latin America and the Caribbean Regional Office, respectively, who allowed us to devote our time to the completion of this task after the World Bank's major reorganization in 1986. We also appreciate the support of Hans Wyss, director of the World Bank's Africa Technical Department.

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Finally, although many individuals and organizations offered valuable assistance and advice, responsibility for the views and interpretations expressed in this volume ultimately rests with the authors.

Uma Lele
Ijaz Nabi

List of Abbreviations

ADB	Asian Development Bank
ADBP	Agricultural Development Bank
ADF	Asian Development Fund
AfDB	African Development Bank
AfDF	African Development Fund
ASEAN	Association of Southeast Asian Nations
BIS	Bank for International Settlements *also* Basic Industries Strategy (Tanzania)
BOP	Balance of payments
CENTO	Central Treaty Organization
CGIAR	Consultative Group on International Agricultural Research
c.i.f.	Cost, insurance, freight
COMECON	Council for Mutual Economic Assistance
CPI	Consumer price index
DAC	Development Assistance Committee (of the OECD)
DFI	Development finance institution
DOM/TOM	Départements d'Outre Mer/Territoires d'Outre Mer
DSR	Debt service ratio
ECLA	Economic Commission for Latin America
EDF	European Development Fund
EEC	European Economic Community
EIB	European Investment Bank
ERR	Economic rate of return
FAO	Food and Agriculture Organization of the United Nations
f.o.b.	Free on board
GATT	General Agreement on Tariffs and Trade
GDI	Gross domestic investment
GDP	Gross domestic product
GDS	Gross domestic saving
GFI	Gross fixed investment
GNP	Gross national product
IBRD	International Bank for Reconstruction and Development

ICEG	International Center for Economic Growth
IDA	International Development Association
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFCT	Industrial Finance Corporation of Thailand
ILO	International Labor Organization
IMF	International Monetary Fund
ISI	Import-substitution industrialization
LIBOR	London Interbank Offered Rate
LLDC	Least developed country
NATO	North Atlantic Treaty Organization
NEDECO	Netherlands Economic Development Council
NIC	Newly industrializing country
OCR	Ordinary capital resources
ODA	Official development assistance
ODF	Official development finance
OECD	Organization for Economic Cooperation and Development
OECF	Overseas Economic Cooperation Fund
OGL	Open general licensing
OOF	Other official flows
OPEC	Organization of Petroleum Exporting Countries
PSBR	Public sector borrowing requirement
PVO	Private voluntary organization
SAL	Structural adjustment loan
SDR	Special Drawing Right
SEATO	Southeast Asia Treaty Organization
SIDA	Swedish International Development Agency
TRN	Total receipts net
UMIC	Upper-middle-income country
UN	United Nations
UNDP	United Nations Development Program
UNFPA	United Nations Fund for Population Activities
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
USAID	U.S. Agency for International Development
WFP	World Food Programme

PART I INTRODUCTION

CHAPTER 1

UMA LELE AND IJAZ NABI

Concessionary and Commercial Flows in Development

The international community has now accumulated several decades of experience in transferring capital from developed to developing countries. The volume of flows has varied over time, but represents a large aggregate amount. In 1981 total net flows were about $137 billion, of which nearly a third was official development assistance.[1] By 1987, total net flows fell to $66 billion, but the share of official development assistance rose to two-thirds. It is therefore natural to ask how effective official concessional assistance and commercial capital flows have been in promoting growth and development in recipient countries. This volume attempts to address these important questions.

Unfortunately, a great deal of the discussion on the effectiveness of aid and other capital flows to date has been somewhat polemical (see Bauer 1981, 1984; Hayter and Watson 1985; Lappé, Collins, and Fowler 1977). Other literature on the impact of such flows has involved either formalistic cross-country macroeconometric studies or project evaluations (Levy 1987; Hirschman 1967; Lele 1975). Analytical country studies with a firm empirical base and strong policy content have been few and far between. Many of the policy issues related to the impact of aid and capital flows on such factors as savings, investment, economy-wide and sector-specific growth, or on the policies of recipients, their institutional evolution, and the development of indigenous

human skills, have not been analyzed systematically. This neglect is particularly unsatisfactory in view of the substantial body of experience that is now available to researchers and policymakers wishing to come to firm conclusions on these important issues.

As interest in aid effectiveness has increased in recent years, some new thinking has begun to emerge on the processes of aid and capital flows. The international donor community has financed studies of aid that make use of empirical information and focus on aid policies (Krueger, Michalopoulous, and Ruttan 1989; Cassen and Associates 1986). All too often, however, these studies have either drawn on existing literature or been undertaken with the explicit purpose of generating support for foreign aid. They have consequently failed to provide either a systematic evaluation of the specific conditions in which aid has worked or failed, or a synthesis of the lessons of past experience for future donor and recipient policies with regard to development aid.

To explain the objectives of this study, a brief review of the evolution of the project is in order. The International Center for Economic Growth (ICEG) approached the World Bank in August 1984 to explore the possibility of joint sponsorship of a series of policy studies on the theme of aid, capital flows, and development. The Center's idea was to assemble a group of prominent economists to undertake an empirical analysis of the relationship between external capital inflows and development, using a range of successful and unsuccessful development cases to derive lessons of relevance to policymakers in developed and developing countries. The approach to the Bank followed a highly successful conference on economic growth, with a similar policy orientation, which resulted in a volume edited by Arnold C. Harberger (1984).

The World Bank's pre-reorganizational Development Research Department agreed to participate in the project, in the belief that cosponsoring a series of empirical studies on aid, capital flows, and development would serve at least four objectives. First, the studies would help to identify and fill some of the existing analytical and empirical gaps in our understanding of the relationship between aid, capital flows, and development, and would contribute to a more informed debate on this important but highly controversial subject. Second, cosponsorship with an outside institution, and publication of proceedings of the conference in book form by an independent publisher (rather than solely by the World Bank), would ensure that the studies were not perceived to be institutionally self-serving. Third, ICEG's enthusiasm for getting private financing for the conference, and its plans for wide dissemination of the proceedings in developed and developing countries, would open up debate on aid, capital flow, and development. Finally, it would complement a major study of aid effectiveness under way in collaboration with seven other donors, but focused specifically on Africa (see Lele 1990).

With these objectives in mind, the Bank and ICEG commissioned a series of empirical studies that were discussed at a very successful conference (in

September 1987 in Talloires, France) of analysts and policymakers from developed and developing countries. The papers were revised in light of discussions at the conference and are reproduced in this volume.

An Overview of Aid and Development

Economic development thought has been influential in the evolution of development practice and in identifying criteria for aid "effectiveness." Most important in this respect has been the two-gap growth model associated with H. B. Chenery and A. M. Strout (1966). The model (harbinger of the import-substitution development strategy) assumes that growth in developing countries requires imported materials and machinery, and that foreign exchange to pay for these is hard to come by. Thus this model identifies the foreign exchange gap as a binding constraint on growth. Program assistance, which focuses on foreign exchange needs, is the logical outcome of this thinking. Despite this intellectual justification, program assistance from the United States—the most important donor to developing countries in the 1950s and 1960s—remained small. It was limited to situations in which countries faced acute balance of payments disequilibria. A primary motive for U.S. bilateral assistance, including food aid, originated in the need to dispose of surplus commodities and to achieve humanitarian, political, and security objectives. U.S. commodity assistance had the indirect effect of alleviating the balance of payments constraint, although legal stipulations typically required that such assistance not replace the recipients' normal commercial imports.

The World Bank, then a less important player on the assistance scene, confined its activity to financing development projects aimed at providing much-needed, capital-intensive physical infrastructure.

By the end of the 1960s, both strategies supported by external assistance in developing countries—import-substituting industrialization and community development in the rural sector—had stalled. The capital-intensive industrialization did not create sufficient employment. Even with limited expansion of employment, however, population growth in many developing countries outpaced the rate of agricultural growth, resulting in food shortages. Increased food imports thus became necessary to maintain internal food prices and wages. This led to a shift in policy focus: technical change in agriculture was emphasized and ushered in the Green Revolution. Yields of food grains increased dramatically in many developing countries through the introduction of new seed varieties. This emphasis was a departure from the received wisdom of development models such as those of W. A. Lewis (1954) and J. C. H. Fei and G. Ranis (1964), which had assumed that food could be transferred in the course of industrialization along with labor and that the turning point in real wages would not be reached as long as surplus labor existed in the agricultural sector. These models did not anticipate the

fundamental importance of technical change in agriculture in alleviating the wage-goods (food) constraint (Lele and Mellor 1981).

The Green Revolution not only alleviated the wage-goods constraint, but also brought with it a recognition of the importance of price incentives and complex institutional structures in enabling rural households to make use of opportunities opened up by technical change. It also heightened concern about the differential ability of individuals to benefit from new technology, based on the individuals' access to land and other factors of production. This process facilitated an improved understanding of the linkages between the pace and pattern of agricultural growth and overall economic development.

Although the Green Revolution period pointed to the importance of egalitarian asset distribution to ensure that technical change in agriculture would have broad-based impact on growth linkages, in the 1970s donors' rapidly growing assistance programs instead emphasized a "direct assault on poverty" as a way of improving income distribution. Programs were designed to address "basic needs" in recipient countries—that is, primary education, health, housing, and safe drinking water—with relatively little focus on basic asset distribution in rural areas. The result was a rapid expansion of government at a time when the international economic environment was turning hostile. The two oil price shocks of 1973 and 1979 increased the energy import bill for most developing countries. The 1970s also saw a major world food crisis (in 1974), which raised the cost of food imports, and a short-lived boom in tropical beverage (coffee, cocoa, tea) prices. These events were followed by a prolonged recession in the Organization for Economic Cooperation and Development (OECD) countries, leading to a decline in prices of primary commodity exports of developing countries.

The expansionary internal policies of recipient countries, in the absence of adequate internal resource mobilization, increased these countries' need for external borrowings. This demand for funds coincided with the need of the international financial markets to recycle petrodollars. Eventually, however, rising interest rates, a response to inflation in the early 1980s, increased the cost of borrowed capital and brought on the debt crisis.

In the course of recent complex economic history, the development process, including its interaction with external factors, began to be much better understood compared to the simplistic views articulated in the growth models of the 1950s. In particular, the need to combine a conducive and a flexible macroeconomic policy with a microenvironment that fosters individual initiative became better appreciated. Whereas external capital is recognized to play a critical role in the development process, its productivity is acknowledged to be ensured only in circumstances where the policy environment provides the necessary structure of incentives. Thus conditionality and policy dialogue have become central in structural adjustment loans (or SALs, the new name for quick-disbursing foreign assistance). Several questions, however, remain: what are the correct macro and sector policies;

how important is policy reform relative to the investment requirements of developing countries; and what are the joint and individual effects of macro and sector policies on growth prospects, under the diverse circumstances prevailing in developing countries?

Evaluating the effectiveness of assistance in the 1990s thus requires at once more stringent and yet more complex and subtle criteria than were used in the 1950s. The country studies presented in this volume highlight the phases of policy advice and foreign assistance and make judgments on effectiveness in different phases. The studies will help in understanding how these criteria have evolved in different circumstances and whether increased sophistication has necessarily resulted in more *effective* foreign assistance.

The country studies present evidence to test the following rationales for aid:

1. Aid promotes improved economic policies and resource allocation in recipient countries.
2. Aid strengthens technical, managerial, institutional, and administrative capacity and thereby increases the efficiency of capital.
3. Aid achieves a straightforward income transfer from high- to low-income countries in circumstances inadequately served by the private market.
4. Aid protects consumption of the poor.

While some of the above rationales apply more obviously to multilateral donors, others play a role in bilateral donors' aid programs. Bilateral aid may have narrower political objectives, such as to maintain or strengthen colonial ties, to safeguard product and raw material markets, or to address purely diplomatic or strategic and military concerns. The studies focus on these motives as well and provide examples of the trade-offs and complementarities that exist between development and other objectives served by aid.

Moving from the rationales for aid and motivations of donors to the impact on recipients, the studies illustrate the range of consequences, from favorable to unfavorable, associated with aid flows. For example, aid may be associated with increased savings and investment, and with improvements in policies, institutions, and human capital resources, or may indeed postpone such achievements. Aid may help make policy dialogue on structural adjustment effective, stimulate export-led growth, and strengthen the private sector in recipient countries. However, if aid for adjustment efforts is inadequate in volume or is turned off before the reform is complete, it may actually retard adjustment efforts and the recipients may conclude that they are better off without aid. Finally, changes in relative prices brought about by the improved policies that aid may support, or distortions it may cause, may have a variety of consequences on equity and the efficiency of resource use. The objective of the discussion is not to establish any direct causality

between aid and the recipient's economic performance. (This would be a formidable empirical task, and the direction of causality is not clear even at the conceptual level: it may be, for example, that poor economic performance creates the need for aid in the first place.) The primary concern of this volume is to identify the policies and the economic environment that result in some countries' being more successful than others, both in attracting aid and in improving economic performance. Several criticisms of external capital flows are also explored explicitly, including the charges that

1. Aid increases consumption and reduces savings and investment.
2. Aid encourages growth of the public sector.
3. Aid promotes inefficient resource use, as reflected, for example, in increased capital-output ratios.

A number of important questions that cut across national borders are addressed in four special issues papers. In the mid-1980s, bilateral and multilateral development assistance constituted 26 percent and 8 percent, respectively, of total resource flows to developing countries. Ten years earlier the share of multilateral assistance had been only 0.05 percent of total resource flows (World Bank 1985). There are several important issues concerning the relative merits of the two sources of aid. These include the following: what are the relative advantages of the two types of flows in promoting development and policy change? Are there complementarities that can be exploited to build an international consensus on policy reform? Does concerted aid programming result in policy advice "fads" that could possibly harm the long-run objectives of promoting growth and alleviating poverty in developing countries? These issues are central to understanding the representative roles of multilateral and bilateral agencies as vehicles of resource flows and policy advice in a volatile international economic environment and are treated in John Mellor and William Masters's contribution to this volume, "The Changing Roles of Multilateral and Bilateral Foreign Assistance."

Food aid has aroused much controversy. Its detractors argue that it adversely affects farmers in recipient countries, that it is inflationary, that it fosters a relationship of dependency, and that donors use it to further their political agenda. However, there are examples of recipients that have used food aid wisely, in a period of transition, while concurrently investing in agricultural research and technological change. In any case, food aid is often invited in emergencies when other alternatives do not exist. The arguments underlying this controversy are analyzed in T. N. Srinivasan's "Food Aid: A Cause or Symptom of Development Failure or an Instrument for Success?"

Countries that need to borrow obtain either concessionary aid flows or commercial funds in the private international capital market. What are the advantages in moving from concessionary to commercial financial flows? How is creditworthiness determined, and do concessionary flows help in

improving creditworthiness (that is, is there a complementarity between official and private resource flows)? Has the debt crisis and the tight international capital market halted or even reversed (as in the case of Mexico and Brazil, among others) the transition process? Is the policy advice that accompanies current multilateral lending for structural adjustment likely, at least in the short run, to lower output growth in recipient countries and thus lower their creditworthiness? These are some of the issues addressed by Homi Kharas and Hisanobu Shishido in "The Transition from Aid to Private Capital Flows."

For many recipients of private flows, and for those aspiring to join their ranks, recent developments in the international capital market are not encouraging. Before private international flows to the highly indebted countries can resume, the current debt impasse must be overcome. Several imaginative schemes involving buy-backs and the conversion of debt into equity are being suggested. All of them, however, call for the restoration of debtor creditability. This depends on their ability to grow, which, in turn, may depend on the reduction of their debt burden. John Williamson's paper "Recent Developments in the International Capital Market" analyzes several important facets of this unfortunate debt circle and discusses the merits of alternative debt reduction schemes.

In addition to the four special issues papers, the volume contains eleven country studies. Each country study reviews a developing country's domestic policies and performances, and its interaction with foreign capital flows (both concessional/official and commercial/private funds) since World War II. The studies cover countries in Latin America, Asia, and Africa: Brazil, Colombia, Mexico, Thailand, India, Pakistan, Sri Lanka, Egypt, Senegal, Kenya, and Tanzania. They were chosen to capture differences in initial conditions, stages of development, and the relative importance of concessional and commercial flows for country performance (see Table 1.1 for their basic indicators). In terms of broad themes, the Latin American country papers highlight the role of external capital flows in the current debt problem of the region. The Asian country papers offer interesting case studies of the role played by political/strategic interests in determining official flows. The African country papers emphasize the consequences of neglecting the agricultural sector. The African papers also address the need to target aid toward physical and human investments in infrastructure in the early stages of development in order to enhance resource productivity.

The country histories are deliberately intended to span a long time frame of about thirty-five years, to reflect changing trends in such key aspects of the international economic environment as views on development strategies, trade, and aid. An important objective is to put recent concerns with structural adjustment and debt into the broader perspective of countries' longer-term economic development and to emphasize issues of, for example, the continuity of capital flows and the role of donor advice in recipient countries' policy formulation processes.

TABLE 1.1 Basic Economic and Social Indicators of Eleven Countries

	Africa				Asia				Latin America		
	Kenya	Tanzania	Senegal	Egypt	India	Pakistan	Sri Lanka	Thailand	Brazil	Colombia	Mexico
Economic indicators											
GNP per capita (current US$)											
1965	100	77	200	170	100	110	160	130	270	320	470
1987	330	180	520	680	300	350	400	850	2,020	1,240	1,830
Real GDP growth rate (average annual growth rate)											
1965–80	6.4	3.7	2.1	6.7	3.7	5.1	4.0	7.2	9.0	5.6	6.5
1980–87	3.8	1.7	3.3	6.3	4.6	6.6	4.6	5.6	3.3	2.9	0.5
Rate of inflation (average annual growth rate)											
1965–80	7.3	9.9	6.5	7.5	7.6	10.3	9.6	6.8	31.3	17.4	13.1
1980–87	10.3	24.9	9.1	9.2	7 7	7.3	12.4	2.8	166.3	23.7	68.9
Government consumption as % of GDP[a]											
1965	15	10	17	19	10	11	13	10	11	8	6
1987	19	8	17	14	13	13	10	12	12	10	10
Total long-term debt as % of GNP (disbursed and outstanding)											
1970	26.3	20.7	15.5	22.5	15.2	20.6	16.1	11.1	12.2	22.5	17.0
1987	64.3	144.1	69.2	108.7	16.5	38.2	64.7	36.2	33.7	45.3	69.6
Debt service as % of GNP											
1970	1.9	1.3	0.8	4.8	1.0	1.9	2.1	0.6	0.9	1.7	2.0
1987	7.6	3.0	6.4	5.3	1.7	3.5	5.4	6.2	3.0	7.6	8.2
Debt service as % of exports of goods and services											
1970	5.9	5.3	2.9	38.0	25.8	23.6	10.9	3.3	12.5	11.7	23.6
1987	33.8	19.2	22.3	21.5	24.0	26.3	20.2	20.6	33.2	36.3	38.4

continued on following page

TABLE 1.1 (continued)

	Africa				Asia				Latin America		
	Kenya	Tanzania	Senegal	Egypt	India	Pakistan	Sri Lanka	Thailand	Brazil	Colombia	Mexico
Social indicators											
Total population (millions)											
1965	9.74	11.59	3.93	29.39	487.00	52.58	11.13	30.94	84.28	18.49	44.77
Mid-1987	22.10	23.88	6.97	50.95	797.50	102.47	16.36	53.54	191.40	29.50	81.95
Urban population[b] (% of total)											
1965	9	6	33	43	19	24	20	13	50	54	55
1987	22	29	37	48	27	31	21	21	75	69	71
Population growth rate (average annual growth rate)											
1965–80	3.6	3.3	2.5	2.2	2.3	3.1	1.8	2.9	2.4	2.2	3.1
1980–87	4.1	3.5	2.9	2.7	2.1	3.1	1.5	2.0	2.2	1.9	2.2
Rate of urbanization (average annual growth rate)											
1965–80	8.0	10.8	2.9	2.9	3.9	4.3	2.3	5.1	4.5	3.4	4.4
1980–87	8.6	11.3	3.8	3.7	4.1	4.5	1.2	4.9	3.7	2.9	3.2
Life expectancy (years)											
1965	47	43	41	49	45	45	64	56	57	56	60
1987	58	53	48	61	58	55	70	64	65	66	69
Infant mortality rate (per thousand)											
1965	112	138	171	172	150	149	37	88	104	96	82
1987	72	106	128	85	99	109	33	39	63	47	47
Population per physician (number)											
1965	13,300	21,700	21,100	2,300	4,900	4,300	5,800	7,200	2,500	2,500	2,100
1984	10,100	n.a.	13,450	790	2,520	2,900	5,520	6,290	1,080	1,190	1,240

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TABLE 1.1 (continued)

	Africa				Asia				Latin America		
	Kenya	Tanzania	Senegal	Egypt	India	Pakistan	Sri Lanka	Thailand	Brazil	Colombia	Mexico
Enrollment in primary school (% of age group enrolled)											
1965	54	32	40	75	74	40	93	78	108[c]	84	92
1986	94	69	55	87	92	44	103[c]	99	105[c]	114	114
Male											
1965	69	40	52	90	89	59	98	82	109[c]	83	94
1986	97	70	66	96	107[c]	55	104[c]	101[c]	108[c]	112[c]	115[c]
Female											
1965	40	25	29	60	57	20	86	74	108[c]	86	90
1986	91	69	45	77	77	32	102[c]	97	99	115[c]	113
Enrollment in secondary school (% of age group enrolled)											
1965	1	2	7	26	27	12	35	14	16	17	17
1986	20	3	13	66	35	18	66	29	36	56	55
Male											
1965	6	3	10	37	41	18	34	16	16	18	21
1986	25	4	18	77	45	25	63	29	31	55	56
Female											
1965	2	1	3	15	13	5	35	11	16	16	13
1986	15	3	9	54	24	10	70	28	36	56	54
Safe water access (% of population)											
1975	17	39	37	66	31	25	19	25	77	64	62
MRE	27	49	55	90	57	43	40	64	84	70	70

NOTES: MRE = most recent estimate. n.a. = not available.
a. General government consumption includes all current expenditure for purchases of goods and services by all levels of government. All expenditure, including capital expenditure, is regarded as consumption expenditure.
b. Countries use different definitions of urban populations, which may affect comparability.
c. For some countries with universal education, gross enrollment will exceed 100.
SOURCE: World Bank (1988a, 1988b, 1989).

While the authors are predominantly economists, all have had policy experience. The instructions to them stressed that although rigorous economic analysis is required, the papers should focus on policy-relevant findings and should be generally accessible to policymakers in donor and recipient communities. The authors have each tried to complement strictly economic perspectives with broader policy points of view. The country studies have benefited considerably from the discussions and policy insights of the policymakers who were invited to the conference in Talloires as discussants of the papers (see the list of conference participants). Their comments were invaluable in preparing the revised versions of the country studies and issues papers included in this volume.

PART II COUNTRY STUDIES

Frontispiece Page Mark

CHAPTER 2 UMA LELE AND MANMOHAN AGARWAL

Four Decades of Economic Development in India and the Role of External Assistance

India, the second largest country in the world (population: 760 million) and the largest democracy, also has the greatest concentration of the world's poor (250 to 300 million). By virtue of the country's sheer size, India's economic performance should be of global economic and political significance. This, however, has not been the case. India's rate of economic growth has been unimpressive in comparison with the high expectations set for it at independence in 1947, relative to the smaller, more outward-oriented newly industrializing countries (NICs), especially given the superior trained manpower and institutional capacity India inherited at independence. However, India's consistently upward growth trend since 1947 stands in strong contrast to the five decades of consistent decline in per capita income that it had experienced prior to independence. Also, the sharp deceleration in economic growth experienced by many developing countries in the 1980s has not occurred in India. Furthermore, India's postindependence growth has occurred in the face of a succession of wars, famines, and other political and economic upheavals, both domestic and external. India's achievements have been significant not only in agriculture, but also in macroeconomic management, domestic resource mobilization, industrial and trade liberalization, and poverty alleviation (see Tables 2.1 and 2.2 for broad indicators of India's economic performance).

We are grateful to Dr. Manmohan Singh for his comments on the earlier draft.

TABLE 2.1 Share in GDP of Selected Indicators for India, 1951–85 (percentage)

	Gross capital formation	Gross domestic savings	Agriculture	Industry
Pre-plan (1951)	10.0	10.2	58.9	14.9
End of First Plan (1956)	14.3	13.9	57.3	15.9
End of Second Plan (1961)	16.9	13.5	54.2	17.7
End of Third Plan (1966)	18.2	15.6	45.6	22.0
End of annual plans (1969)	15.4	14.1	46.3	21.2
End of Fourth Plan (1974)	20.0	19.3	45.2	21.6
End of Fifth Plan (1979)	23.7	23.9	41.6	22.5
End of Sixth Plan (1985)	24.5	23.3	36.9	24.3

SOURCE: Government of India, Central Statistical Organization, National Income Accounts, New Delhi.

Aid donors have played an extremely important role in this process, mainly through the transfer of ideas, institutions, and technologies and the development of human capital. In addition, concessional assistance, especially from the United States in the 1960s and the World Bank in the 1970s and 1980s, made a significant contribution to India's achievements. Attempts to impose policy conditionality, however, have had a disastrous effect on the relationship between India and its donors. The recent relative lack of attention to India's achievements or to its financial needs within the development community is, paradoxically, the result of India's conservative economic management, which enabled it to avoid a debt crisis.[1]

TABLE 2.2 Growth Rates of Selected Indicators for India, 1951–85 (percentage)

	National income	Agricultural production[a]	Industrial production	Per capita consumption	Gross fixed investment	Population	Exports
First Plan 1951–52 to 1955–56	3.6	4.1	7.3	1.7	3.0	n.a.	1.8
Second Plan 1956–57 to 1960–61	4.0	4.0	6.6	1.8	5.8	n.a.	0.7
Third Plan 1961–62 to 1965–66	2.2	-1.4	9.0	0.1	8.7	n.a.	4.8
Annual plans 1966–67 to 1968–69	4.0	6.2	2.0	2.0	1.5	2.18[b]	1.5
Fourth Plan 1969–70 to 1973–74	3.3	2.9	4.7	0.4	3.1	2.25[c]	10.7
Fifth Plan 1974–75 to 1978–79	5.4	4.2	5.9	2.3	6.6	n.a.	17.3
Sixth Plan 1979–80 to 1984–85	5.2	4.3	5.5	2.7	5.3	n.a.	14.5

NOTE: n.a. = not available
a. Growth rates are for aggregate production.
b. 1966–71.
c. 1971–81.
SOURCE: Government of India, Central Statistical Organization, National Income Accounts, New Delhi; plan documents for the different plans, Government of India, Planning Commission, New Delhi.

This chapter begins by discussing the historical record of aid flows to India. Next we will consider the evolution of the donor community's view of India's changing development strategy during three distinct periods: (1) independence until the mid-1960s, when India followed an import-substitution industrialization policy; (2) the mid-1960s to the mid-1970s, when the government promoted technological innovation in agriculture and reduced the role of the public sector in the economy; and (3) the mid-1970s to the late 1980s, a period of trade liberalization. Finally, the chapter identifies the economic challenges that India will face in the 1990s and the role that concessional external capital could play in the development process.

The Historical Record of Aid Flows

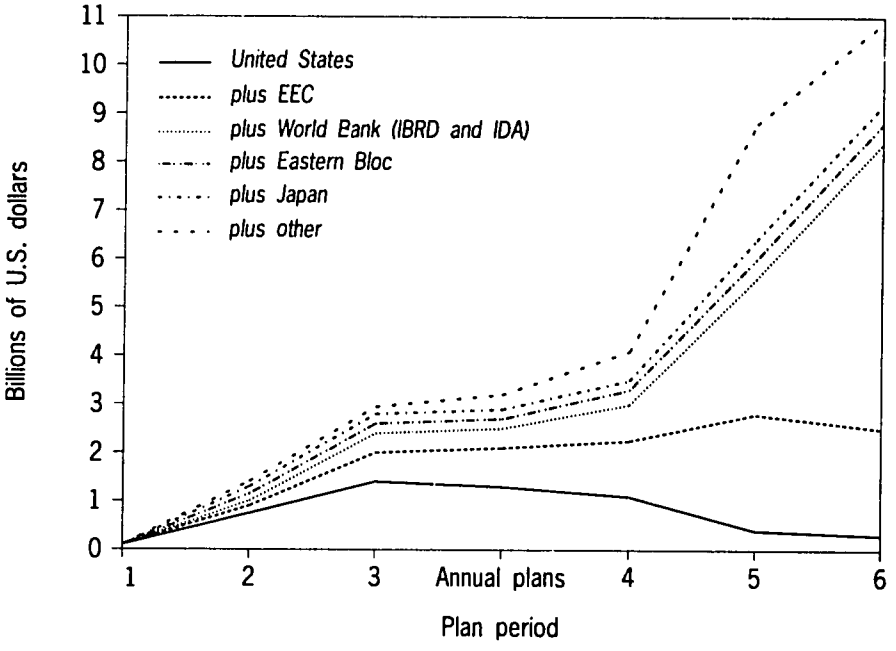
India's (and Pakistan's) independence in August 1947 heralded the spread of self-government in the developing world and led to a sense of excitement and anticipation about the prospects for the country's economic development and political future. Reflecting this mood of optimism, as well as the desire to contain the spread of communism then exemplified by the revolution in mainland China, there was intense interest in the Western world, and particularly in the United States, in helping India in its mammoth development task.

At independence, India was an extremely poor country of 350 million people with an annual per capita income of $50, per capita cereal consumption of 400 grams a day, a life expectancy of thirty-two years, a literacy rate of a mere 17 percent, and a national savings rate of less than 10 percent. Agriculture accounted for nearly 60 percent of gross domestic product (GDP), 80 percent of employment, and 50 percent of exports. Per capita food production had been declining continuously for nearly fifty years prior to independence (Blyn 1966). Some industrial growth had occurred during the war years, but the largely agro-based industrial output accounted for only 15 percent of GDP. Although India's network of railroads per square kilometer was better than that of China, other physical infrastructure was still abysmally poor.

The massive dislocations accompanying the large-scale movement of people following the separation of India and Pakistan, and the attendant violence, compounded the problem.[2] The need to resettle and provide relief for the new arrivals made major economic demands on the new government.

India's adoption of a Western-style democracy made it an attractive alternative to the totalitarian regime of the People's Republic of China in the eyes of the Western democracies. India's pursuit of a "nonaligned" foreign policy, its centralized planning system, and the role of the public sector in industrial production, however, led to continuous conflict with Western donors, particularly the United States.[3] This relationship has consequently had many ups and downs. For instance, the Indian rejection of

FIGURE 2.1 India's Sources of Aid, by Plan Period, 1951-52 to 1984-85



First Plan: 1951-52 to 1955-56
Second Plan: 1956-57 to 1960-61
Third Plan: 1961-62 to 1965-66
Annual plans: 1966-67 to 1968-69
Fourth Plan: 1969-70 to 1973-74
Fifth Plan: 1974-75 to 1979-80
Sixth Plan: 1980-81 to 1984-85

NOTE: Most of these inflows until recent years were ODA.
SOURCE: *Economic Survey*, various years, Government of India, New Delhi.

the U.S. resolution in the United Nations branding China as the aggressor in the Korean War led the U.S. Senate to postpone shipments of food aid to India following the poor harvest in 1950 until all questions of Indo-U.S. relations had been examined. When food aid was finally sanctioned, Congress attempted to make it conditional on India's granting the United States the right to prospect for and develop raw materials useful for the U.S. nuclear program (Eldridge 1969; Brecher 1959). Later, the U.S. Congress refused to approve the financing of the public sector Bokaro Steel Plant project during the Kennedy-Johnson administration. Nevertheless, because of a combination of humanitarian, political, and strategic considerations, the United States became the largest supplier of concessional assistance to India (see Figure 2.1), with U.S. aid reaching its zenith in the 1960s. As much as 60 percent of total external assistance to India during the Third Plan

period (1961–62 to 1965–66) came from U.S. bilateral sources, with the next largest donor, the European Economic Community (EEC), contributing only 15 percent.[4] India's emphasis on centralized planning also attracted some of the most influential U.S. and European academics to work on its prestigious five-year plans.

Disenchantment with India's failure to achieve food self-sufficiency and the inefficiency of the industrial sector during the first three plans, together with emerging Indo-U.S. foreign policy differences, led to drastic reductions in the level of concessional U.S. bilateral assistance to India beginning in the second half of the 1960s. By the Sixth Plan period (1980–81 to 1984–85) U.S. assistance had become a minuscule 2.8 percent of total official capital flows (see Figure 2.1); by 1987, only $40 million of U.S. bilateral assistance was expected to be committed to India.

U.S. assistance played two key roles in India. First, it helped maintain food consumption until domestic agricultural production could expand. Second, by providing the necessary funds and technical assistance, it played a key role in generating the Green Revolution. U.S. efforts at policy conditioning through the use of aid in the mid-1960s, however, were less successful, as policy-making required a certain political consensus within India.

In the 1970s humanitarian concerns made India the largest beneficiary of concessional assistance from the World Bank's then recently established subsidiary, the International Development Association (IDA). Despite bilateral foreign policy differences with India, the United States, as a major contributor to IDA and the largest shareholder of the World Bank, did not object when World Bank President Robert McNamara made India the major beneficiary of IDA. Forty percent of IDA funding was allocated to India in the 1970s, with the World Bank's share in total external assistance to the country (concessional and nonconcessional) rising from a mere 11.3 percent in the Third Plan period (1961–62 to 1965–66) to slightly over half (53.3 percent) during the Sixth Plan (1980–81 to 1984–85) (see Figure 2.1). Recent years have seen a decline in IDA financing but an increase in the relative importance of total World Bank financing.[5] By the end of fiscal year 1987 the World Bank had financed 250 projects in India involving loans and credits totaling over $20 billion; 40 percent of the financing consisted of IBRD loans and 60 percent of IDA credits. Nearly 95 percent of this total was for project loans and only 5 percent ($1.5 billion) for import support. By sector, this financing was allocated as follows: 20 percent for agriculture, 45 percent for basic infrastructure (energy, transport, and communications), 15 percent for industry, and 10 percent for human resources.

External aid constituted slightly less than one-third (28.25 percent) of total investment outlays during the Third Plan period (1961–62 to 1965–66) but fell to a mere 7.7 percent in the Sixth Plan (1980–81 to 1984–85). Domestic resource mobilization increased considerably during this period, but we will show that high capital-output ratios have limited the effect of increased resource mobilization on growth.

Not only has India been the largest recipient of financial assistance on concessional terms (nearly $52 billion since 1951 of which $38 billion had been disbursed by the end of 1986),[6] but also both U.S. bilateral aid and the World Bank have played important roles in facilitating economic development generally, and especially in addressing poverty. In per capita terms, however, aid levels to India have been low, at $2 or less per capita compared with $20 to $50 per capita typically received by small developing countries. Indeed, India's inability to mobilize sufficient concessional assistance in per capita terms due to its sheer size and the extent of its poverty make more rapid growth difficult, as we will show in this chapter.

As the pathbreaker in many development experiments, India was able to attract the most prestigious groups of international development experts and aid donors, who contributed richly to a variety of practical issues in economic development assistance. For instance, major advances in planning models, policy dialogue, and agricultural institution building occurred as a result of India's early interactions with U.S. assistance programs. By the same token, India made important contributions to international thinking on aid-related issues, including the concept of program lending, the role of aid consortia (the first of which was set up by the World Bank for India in 1958), the development of project appraisal techniques, local cost financing, and the use of preferential treatment for local contracting industries to establish indigenous capacity (Mason and Asher 1973). The donor community's project assistance, even that related to policy reforms, has been more productive than its high-profile attempts to influence India's macroeconomic policy, as we will demonstrate.

Evolution of India's Development Strategy

Laying the foundations (1950s to mid-1960s). Growth, poverty alleviation, and self-reliance have been the three main stated objectives of successive Indian plans. The relative importance attached to these goals, however, has varied from plan to plan[7] depending on concerns about national security, internal political order, reduction of regional inequalities, and achievement of an important position in world affairs.

The development strategy adopted in the Second Plan (1956–57 to 1960–61) was industrialization through import substitution, to be achieved by defining a clear role for the public sector in basic industries.[8] India already had large market shares in traditional exports such as tea, jute, and cotton manufactures. Pessimism about further export growth, combined with instability in earnings from primary exports, however, was part of the reason for adopting an import-substitution industrialization (ISI) strategy. Given India's large size and potential geopolitical role, strategic factors also played a part in the adoption of a basic industries strategy (for further analysis of this strategy, see Nayar 1976). A low savings rate (less than 10 percent), the

lack of a well-developed private industrial class, and shortages of wage goods produced by the agricultural sector were considered the major constraints to industrialization.

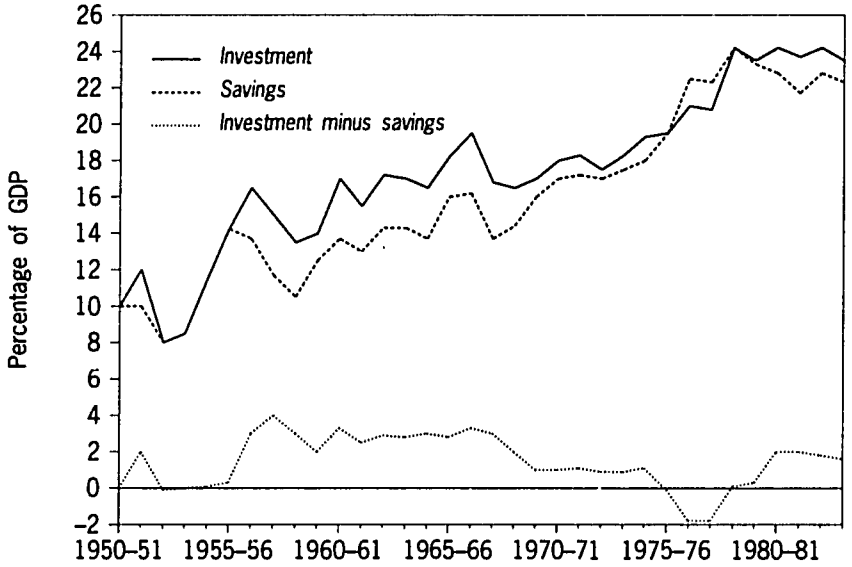
Agriculture was seen mainly as the holding ground until rapid industrialization could create adequate employment to absorb surplus labor. As basic industries would provide little employment, small-scale industrial and handicraft sectors would have to create jobs and meet consumer demand. For social reasons the government stressed institutional reforms in agriculture consisting of securing land tenure, abolishing money lending, and increasing the access of small farmers through community development and extension. The public sector also made significant investments in large-scale irrigation. The difficulties of removing the organizational and structural constraints within the agricultural sector, however, reinforced the government's perception of the need for industrialization.

The policy of import substitution led to the neglect of many export opportunities, and India lost market shares in traditional exports. In the case of some products, such as edible oil, it became a major net importer.

Despite some criticism of this strategy,[9] broad early support from the intellectual community and the donors resulted in the establishment of the Aid India Consortium. When the ISI strategy generated large balance of payments (BOP) deficits during the period 1958–64, substantial aid flows ensued. These funds financed about one-sixth of the investments during the Second and Third Plans (see Figure 2.2). Donors provided food aid, which enabled India to maintain higher levels of per capita food consumption than otherwise would have been possible given its balance of payments problems. Donor aid also relaxed the wage-good constraint, limited the inflationary potential of large investments, and provided crucial budgetary support. Aid also helped in developing India's capabilities in such crucial areas as agricultural research and rural electrification, which are discussed further below.

Reassessment of the ISI strategy and the agriculture/industry debate. Implementation of the plans revealed weaknesses in the ISI strategy, raising questions about its appropriateness and destroying the domestic and international consensus that had originally supported the strategy. The increasing BOP deficits along with the slow rise in the productivity of the food-grain sector led India to rely on food aid to avoid buying commercial food imports.[10] The slow growth of employment and uncertainty about the effect on poverty of the growth that had occurred were also rising concerns. Higher defense expenditures after the war with China in 1962 and long gestation lags in the development of basic industries made it difficult to increase public sector savings to finance larger investments in accordance with the strategy. Unfortunately, reassessment of the strategy did not take place in the wake of the first BOP crisis in 1958 (soon after the start of the Second Plan), but only after substantial capacity in basic industries had been

FIGURE 2.2 Investment, Savings, and Capital Flows in India, 1950–51 to 1983–84



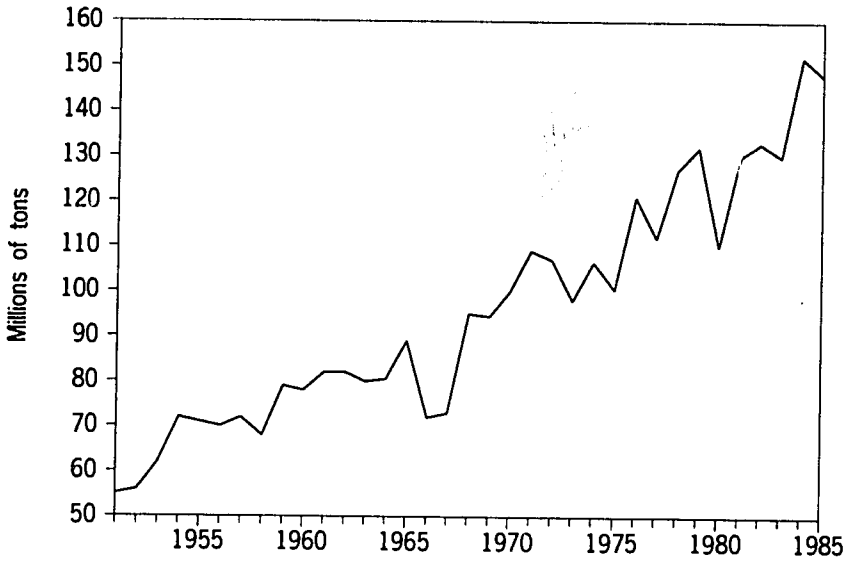
SOURCE: Central Statistical Organization, Government of India, New Delhi.

constructed. Thus, the adjustment process that occurred after aid was cut off in the mid-1960s led to a waste of constructed capacity. Furthermore, there were genuine differences of opinion regarding the pace of adjustment, the nature of adjustment required, and its effect on income distribution.[11] Vested interests that had developed a major stake in the previous structure also made adjustments difficult.

The donors began to question the viability of the ISI strategy, including the role of quantitative restrictions (QRs) in running a restrictive trade regime, and thought that the policy adjustments made by the Indian government were inadequate.[12] They imposed conditionality without achieving a consensus on the macroeconomic, particularly the BOP, implications of policy changes, and without resolving different objectives of the policy. This led to policy changes in inappropriate circumstances and without adequate complementary support, and the reforms therefore failed. In agriculture, however, there was broad agreement on the policy changes required and differences existed mainly about the pace of change. It is to these issues that we now turn.

The agricultural drama of the mid-1960s. Though food-grain production had grown in the First and Second Plan periods almost as targeted (see Figure 2.3), demand had grown more rapidly than anticipated, as the population

FIGURE 2.3 Gross Production of Food Grains in India, 1951–85



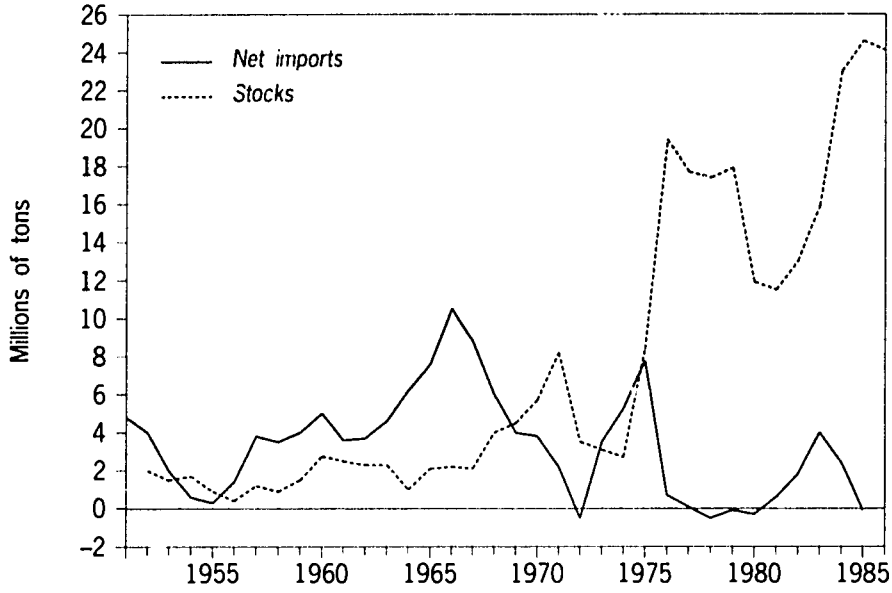
SOURCE: Central Statistical Organization, Government of India, New Delhi.

grew at almost double the anticipated rate of about 1 percent per year. The imbalance of supply and demand led to imports of about 3 million tons of food grain a year between the mid-1950s and the mid-1960s (see Figure 2.4), with U.S. PL 480 food aid accounting for most of the imports.

Imports during the drought years of the mid-1960s were even higher (Figure 2.4) and accounted for about 10 percent of domestic consumption; as much as four-fifths of the imports of about 10 million tons needed in 1967 was provided by donors under PL 480. Even with this level of imports, per capita food availability, after growing to almost 175 kilograms per year in the early 1960s, had declined in 1967 to nearly its 1951 level of about 147 kilograms per year (see Figure 2.5). While large U.S. food surpluses were the major stimulus behind PL 480 food aid throughout the world at this time (see chapters on Pakistan, Sri Lanka, Thailand, and Egypt in this volume), it was clear that the United States would be unable to meet India's growing food import requirements on a continuing basis. Furthermore, India's physical infrastructure, including port facilities, was inadequate to handle the large and growing food imports.

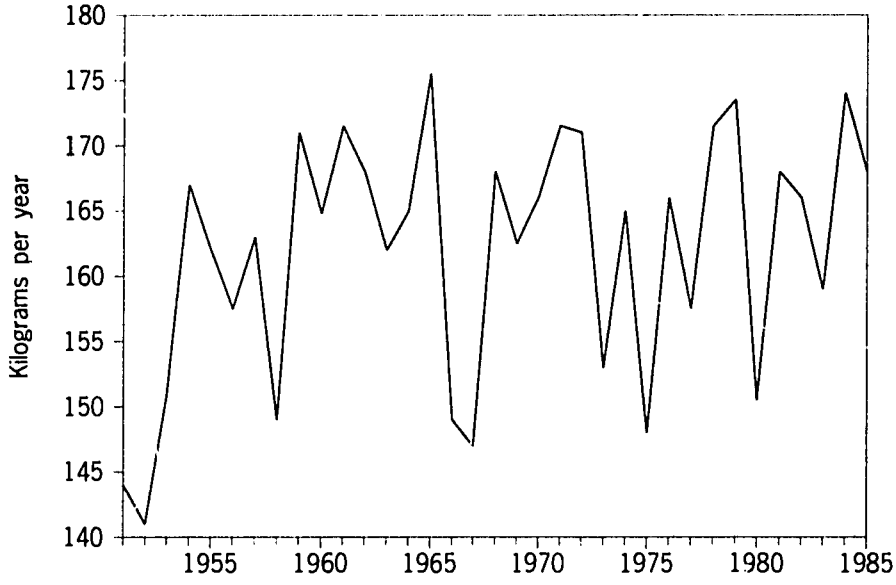
The criticisms of the Indian government's neglect of agriculture or of its "urban bias" (Lipton 1968; Schultz 1965) that were then in vogue are difficult to substantiate. The government of India appointed numerous special committees to investigate the problems of the agricultural sector and

FIGURE 2.4 Net Food-Grain Imports and Closing Stocks in India, 1951–86



SOURCE: Central Statistical Organization, Government of India, New Delhi.

FIGURE 2.5 Per Capita Food-Grain Availability in India, 1951–85



SOURCE: Central Statistical Organization, Government of India, New Delhi.

to suggest solutions, and many of their recommendations were implemented.[13] Policy solutions, however, had not yet anticipated the fundamental role of technical change in increasing agricultural production. Furthermore, the share of agriculture in public sector investment was no lower in the Second and Third Plans (22 percent) than after the Green Revolution. It stood at 22 percent in the Fourth Plan (1969–70 to 1973–74) and less than 21 percent in the Fifth Plan (1974–75 to 1979–80). (See Table 2.3 for sectoral distribution of investments with different plans). Reflecting the consensus about the limited absorptive capacity of the agricultural and rural sectors, donor agency programs were even more concentrated in the nonagricultural sector than those of the Indian government. For instance, during 1950–68 the World Bank financed sixty-one projects in India, only eleven of which were related to agriculture and rural development, accounting for less than 10 percent of aggregate commitments in the period, that is, $156 million out of about $2.36 billion (Bumb 1985). The United States provided a similar combination of assistance.

The other major element of the urban bias criticism consisted of the allegation of depressed agricultural prices. Later analysis also fails to support this critique and instead suggests that between 1957 and 1972 Indian producer prices for wheat were well above world market prices, even when measured at trade-weighted, purchasing-power-parity exchange rates (see Figure 2.6).[14] Rice prices were somewhat below international prices before 1967, but production increases were far slower to materialize in rice, even after price increases, owing to major technological constraints (see Figure 2.7). The impact of price policy on aggregate supply response is, of course, a controversial subject, particularly in the absence of technological change and the presence of a segmented market—part of which is formed by the public distribution system designed to maintain low prices for vulnerable consumers and part by the open market (Krishna 1982). Furthermore, subsequent research was to support the dominant role of nominal prices as a determinant of poverty and hunger (Mellor and Desai 1985). Here suffice it to say that many economists who were then criticizing India for urban bias are now emphasizing the limitations of "getting prices right" (Lipton 1968).

It is now clear that the shortcomings of the approaches adopted before the mid-1960s concerned the lack of policies designed to achieve technological change and of critical supporting organizational changes. During the 1950s the government and the donor community had stressed structural and institutional reform. The U.S. government had strongly supported community development and agricultural extension services (the brainchild of a U.S. architect) as a way of promoting a grassroots democracy (Bowles 1971). After the mid-1960s, however, the government placed greater and more direct emphasis on promoting technological change as the key to increasing food production, notably by reorganizing the Indian agricultural research system and improving the production, certification, and distribution of high-yielding varieties of seed and fertilizers and by extending access to credit.

TABLE 2.3 Planned and Actual Sectoral Investment Distribution in India (percentage of total)

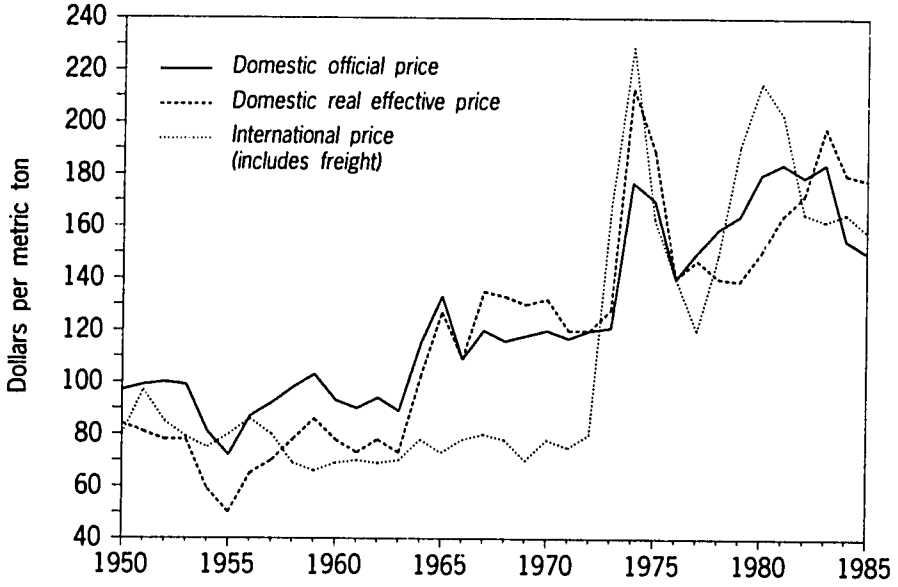
Plan period	Agriculture and irrigation	Energy	Industry and minerals	Transport	Communication	Social services	Others	Total
First								
Planned	31.95	12.57	8.12	21.17	2.85	20.54	2.80	100.00
Actual	31.28	13.27	4.95	24.03	2.40	21.02	3.05	100.00
Second								
Planned	21.96	8.98	18.54	27.27	1.58	19.96	1.71	100.00
Actual	20.96	9.67	24.08	26.68	1.31	16.22	2.08	100.00
Third								
Planned	22.85	12.59	26.50	19.11	1.32	16.01	1.62	100.00
Actual	20.86	14.60	22.93	23.08	1.54	15.11	1.88	100.00
Fourth								
Planned	22.39	15.39	22.83	16.52	3.84	15.75	3.28	100.00
Actual	22.50	18.58	19.69	16.12	3.40	15.44	4.27	100.00
Fifth								
Planned	20.85	25.06	18.72	14.06	3.53	14.39	3.39	100.00
Actual	22.17	18.77	24.30	14.81	2.62	17.33	0.00	100.00
Sixth								
Planned	24.69	27.22	15.40	12.73	3.21	13.15	3.60	100.00
Actual	23.74	27.93	15.40	12.90	3.15	15.37	1.51	100.00
Seventh								
Planned	22.09	30.46	12.48	12.76	3.60	17.68	0.93	100.00
Actual	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

NOTE: n.a. = not available.
SOURCE: Plan documents for the different plans, Government of India, Planning Commission, New Delhi.

Controversy over the causes of the Green Revolution still exists and concerns the extent to which the revolution reflects exogenous technological change (Srinivasan 1989) as opposed to organizational and public policy reforms within India that contributed to the absorption of new technology during the mid-1960s (Lele and Goldsmith 1986). The role of external pressure from donors in achieving organizational and policy change is also a debated issue.[15]

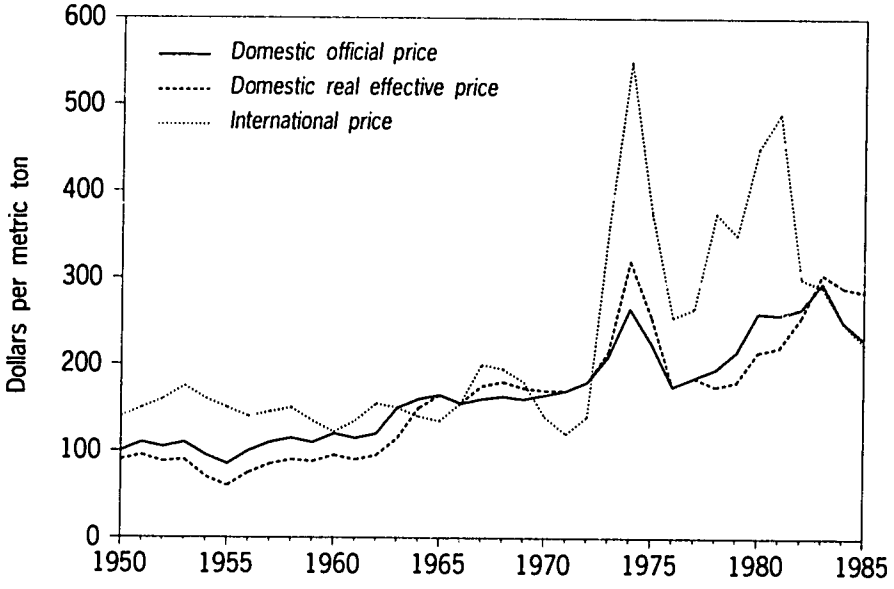
The measures undertaken in India were made possible by the availability of high-yield wheat and rice varieties produced after a series of major technological breakthroughs in the international agricultural research institutes in Mexico and Taiwan. The improvement in India's agricultural research capability in the late 1960s allowed the rapid adaptation of the new technology to the country's diverse production needs. While the need for improvement in Indian research capabilities had already been recognized by a few farsighted civil servants and scientists and supported by the leadership of the U.S. aid agency, donor pressure following the major food crisis in 1965 prompted C. Subramaniam, then the minister of agriculture, and his associates to overcome the opposition from vested interests in the Indian scientific community

FIGURE 2.6 Domestic and International Price of Wheat in India, 1950–85



SOURCE: Central Statistical Organization, Government of India, New Delhi.

FIGURE 2.7 Domestic and International Price of Rice in India, 1950–85



SOURCE: Central Statistical Organization, Government of India, New Delhi.

to the reorganization of research facilities. The Rockefeller Foundation, the U.S. Agency for International Development (USAID), and others facilitated the training of Indian scientists under well-planned programs. Adoption of new technology was also fostered by public sector investment in irrigation during the first two plans, which increased irrigable land by one-fifth.

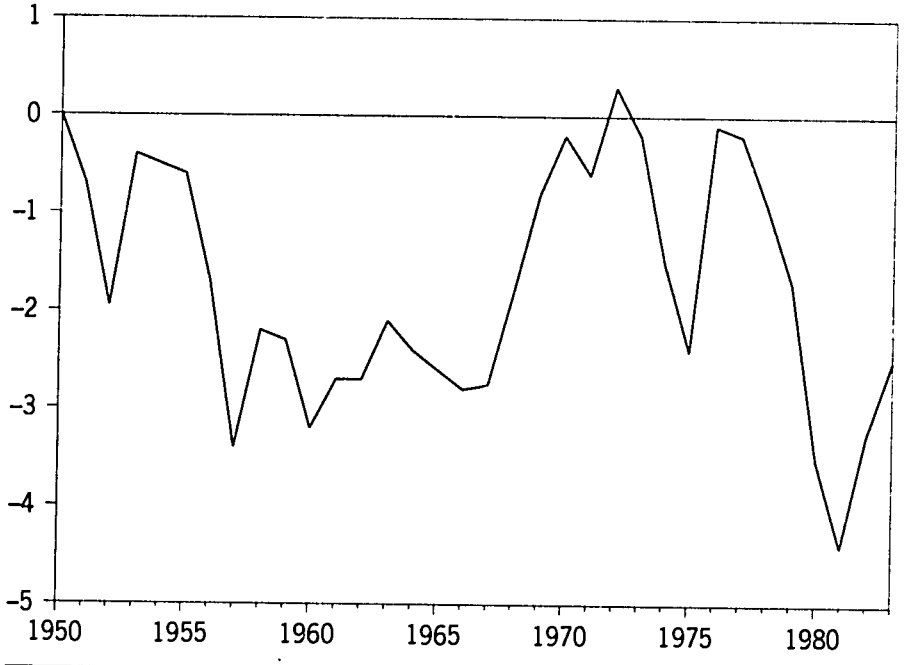
After the mid-1960s, the government became less a large direct investor and more a creator of the conditions needed to encourage private investments, by providing agricultural credit, a fertilizer supply network, and guaranteed minimum prices for wheat and rice. Given the new technological possibilities and the government's actions, private investment in tubewell irrigation increased rapidly. As expected, however, the shift in emphasis to areas of high agricultural potential tended to widen regional income disparities.[16]

Despite the erratic history of the politics of Indo-U.S. aid relations in the mid-1960s, detailed further below, India was fortunate that the United States was its primary source of agricultural advice, institutional innovations, and new technologies. The United States had a uniquely large store of directly relevant agricultural expertise to offer to India. There was continuity and unity in the advice India received from the U.S. government and the Ford and Rockefeller Foundations, and a remarkably synergistic process of interaction and cooperation developed between American experts and their Indian counterparts. These factors, along with the United States' largely program-type aid, meant that India could focus on solving important policy, institutional, and manpower issues without frittering away its valuable administrative capacity in countless projects. These circumstances are in sharp contrast to the situation in Africa today, where a large number of donors with diverse opinions on development strategy have been allocating aid that taxes rather than creates indigenous planning and implementing capacity (Lele 1988a).

Export orientation and devaluation. Although exports had started to grow before the drought in the mid-1960s, India's large trade deficit had already become a matter of concern (see Figure 2.8). Despite stringent import controls, the BOP deficit had increased from about 2 percent of GDP in 1963 to about 3 percent in 1966, as food imports soared. India's myriad export-promotion schemes and import-licensing procedures were administratively cumbersome and obscured the incentive signals provided by the trade regime as a whole (Bhagwati and Desai 1970). Further, the shortage of spare parts and components was leading to underutilization of capacity. Under pressure from donors, the Indian government devalued the rupee by about 40 percent in mid-1966, liberalized imports for fifty-nine priority industries, simplified the tariff and subsidy schemes, and relaxed licensing requirements for domestic capacity creation.

The liberalization, however, was brief. The required $900 million of nonproject aid for fiscal year 1966–67 became available only by September

FIGURE 2.8 Trade Balance as a Percentage of GDP in India, 1950–83



NOTE: A negative percentage = deficit.
SOURCE: Central Statistical Organization, Government of India, New Delhi.

1966 after prolonged discussions, and there was a shortfall in the following two years as donors pledged only about $600 million. Further, aid tying, particularly commodity tying by bilaterals, encouraged the import control system to match import demand with available foreign exchange supplies. The lack of sufficient and timely external assistance at this critical juncture prevented the import of intermediate goods needed for better capacity utilization. Also, the drought had reduced the supply of agricultural exports and of raw materials for agro-based industries, so that only limited growth of export supply could be expected. As a result, the Indian government was faced with a deteriorating BOP position, which forced it to reinstate stringent import controls.

The short-lived reform generated considerable controversy in India and set back the influence of the domestic lobby that favored liberalization.[17] The reforms also had a major domestic political fallout.[18] Furthermore, the episode exacerbated problems between the Indian government and the leading donors (the United States and the World Bank).[19] The Indian government felt that the reform package was largely a unilateral effort of the Bank and that it portrayed an inadequate understanding of the scale of the external resources required and the period for which they would be needed.[20] The non-U.S. consortium members also felt that they had not been sufficiently

consulted about the policy and thus they could not mobilize the required nonproject aid. John Lewis (1979) has characterized the devaluation episode as a "political disaster" for India, a view that was shared in retrospect by Bernard Bell, leader of the World Bank's crucial Bell Mission.[21]

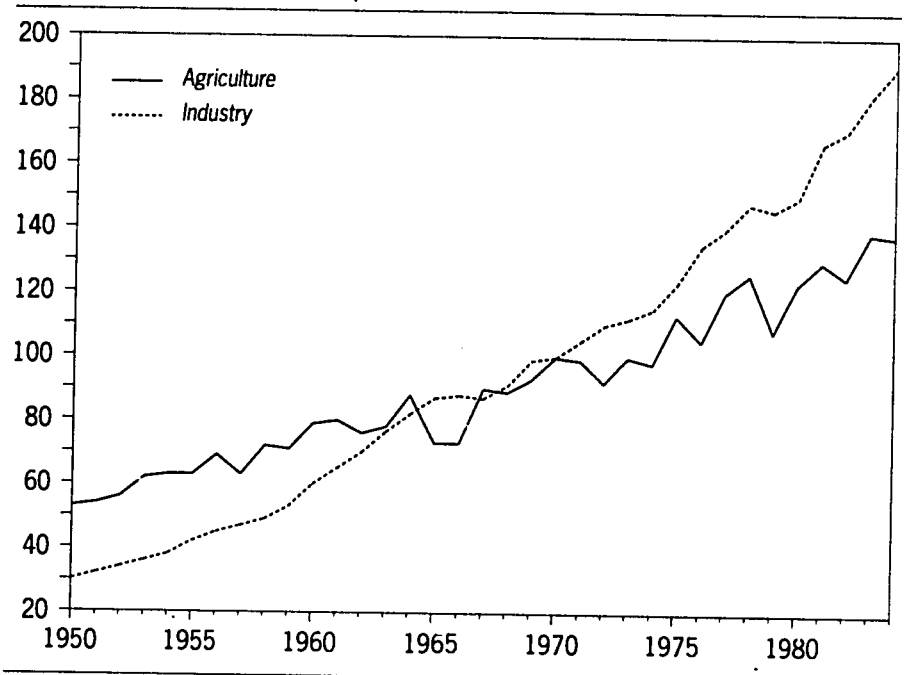
The value of U.S. and World Bank development assistance pledged through the Aid India Consortium declined sharply from $545 million and $250 million respectively for 1961–62 to $275 million and $73 million respectively for 1967–68, and to only $8.7 million and $15 million respectively for 1968–69 (Bumb 1985), leading to a cutback in aggregate external assistance from about $1 billion a year in 1961–62 to $318 million in 1968–69, although non-U.S. annual aid commitments were almost constant. One explanation for the decline in U.S. assistance was the thawing of U.S. relations with China that made further assistance to India unnecessary (see Nayar 1972).

Evolution of the new strategy.

1965 to 1975: adjustments to the cutback in aid. The cutback in aid had profound effects on India's balance of payments position, domestic development strategy, and subsequent economic performance. During the first phase of the adjustment, which occurred mainly in the period 1965–75, the government concentrated on reducing imports and increasing savings. Higher domestic savings, with investment constant at about 17–18 percent of GDP, almost eliminated the savings-investment gap (see Figure 2.2). Controls reduced imports from $3 billion in 1965–66 to $2.2 billion in 1970–71, lowering both the trade and current account deficits (Figure 2.8).[22] The economy was then poised for further increases in savings and investment and accelerated growth during the Fifth Plan (1974–75 to 1979–80). But the decline in aid in the late 1960s had both short- and long-term effects. In particular, the effect of growth on reducing poverty was drastically different because of the macroeconomic adjustments made necessary by the severe cutback in foreign aid, together with the correction of weaknesses revealed in the original strategy. Moreover, the Bangladesh war of 1971 and the oil price rise of 1973 delayed the resumption of growth and changed the character of public sector investments.

Public sector gross fixed capital formation declined from 8.4 percent of GDP during the Third Plan (1961–62 to 1965–66) to 7 percent during the Fourth Plan (1969–70 to 1973–74) and decreased from 50 percent of total gross capital formation in the Third Plan to 40 percent during the period of the annual plans (1966–67 to 1968–69) and the Fourth Plan. Despite this drop, total gross domestic investment remained at about 16–17 percent of GDP because of higher private sector investment, financed by increased household savings. Private savings increased from 14.3 percent in the Third Plan period to 17 percent during the Fourth Plan, in response to the spread of financial institutions (particularly commercial banks after nationalization) into new areas, higher interest rates, and improved investment opportunities

FIGURE 2.9 Indexes of Agricultural and Industrial Production in India, 1950–84 (1970–71 = 100)



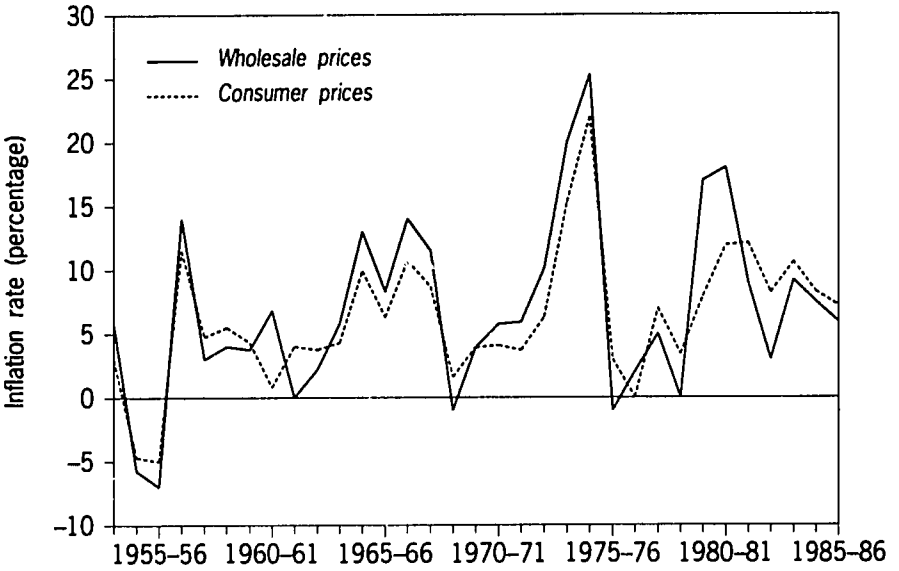
SOURCE: Central Statistical Organization, Government of India, New Delhi.

in agriculture. The industrial recession caused mainly by the public sector's reduced demand for investment contributed to an overall sluggish economic performance in the late 1960s and early 1970s (Figure 2.9) and to the slow increase in manufactured exports. National income grew at about 3 percent a year and industrial production only at about 4 percent. During this period, the behavior of India's manufactured exports contrasted sharply with that of the newly industrializing countries, despite India's respectable record in export growth (10.7 percent annually) from 1969 to 1974.[23]

The economy was poised for growth by the early 1970s, since higher domestic food production had reduced the need for food imports (see Figure 2.4), with a consequent decline in the BOP gap and the debt service ratio. Industrial output was also recovering from the earlier recession.

As this recovery was occurring, however, the first oil shock came in 1973, leading to higher inflation and a larger BOP deficit. The deficit was financed initially by the International Monetary Fund's Special Oil Facility and Trust Fund, aided later by higher exports and larger remittances from workers migrating to the Middle East. Indeed, increases in export earnings (caused in part by a fast rate of devaluation) and workers' remittances resulted in current account surpluses and large increases in reserves in 1976–77 and 1977–78 despite a drop in net aid disbursements.

FIGURE 2.10 Inflation Rates in India, 1953–54 to 1985–86



SOURCE: National Income Accounts, Government of India, New Delhi.

The Bangladesh war had also increased public expenditures, including spending for 10 million refugees (although victory in the war later raised the government's popularity). These expenditures, together with the 1973 oil price increases and the drought, raised the rate of inflation to 22 percent in 1974 (see Figure 2.10).

Reduced aid levels and higher public expenditures caused by exogenous shocks left few resources with which the government could address the growing internal concerns about slow growth and increasing poverty, expressed in the new political slogan "Garibi Hatao" (Remove Poverty). In the absence of resources, the obvious political response was to appear to tighten controls on the rich through bank nationalization (in 1969), a new industrial licensing policy (in 1971), reversal of the policy of decontrol set after the 1966 devaluation, and the establishment of a monopolies and restrictive trade practices commission. Despite these populist economic measures, the increasing political discontent resulted in government moves to centralize political power by, for instance, decoupling central and state elections, and finally by a desperate suspension of fundamental rights with the declaration of "emergency" rule in 1975.

The successful tackling of inflationary pressures and of the BOP deficit enabled the government once again to adopt policies for growth, including increasing public sector savings to finance investments in agricultural inputs that were greatly needed to continue the Green Revolution and in energy

and oil exploration in response to the increased oil prices. Not only was India's domestic resource mobilization effort impressive by developing country standards, as the savings rate increased from 14.1 to 21.1 percent, but public sector savings also increased, financing half of the planned outlays. The reduced role of the public sector in India's industry led to protests from vested interests. The role of the private sector, however, increased, with its share of investment in manufacturing and mining rising from 40 percent during the Second and Third Plans to 60 percent in the Sixth (draft) and Seventh Plans (proposed).

The inability of the government to invest adequately in infrastructure, both physical and human, has been disturbing. Indeed, infrastructure shortages are now one of the most important constraints to rapid growth and have been since at least the early 1970s. Power shortages disrupt production schedules and force companies to generate high-cost power through the installation of diesel-generating sets. Although public sector investment in power generation and transmission has been growing, the state electricity boards lack internal surplus funds, because of overstaffing and high wage costs. Resource constraints of the central government and management problems have limited the expansion of power supply. Nevertheless, the large and increasing share of public sector investments devoted to energy has eaten into the amounts available for other sectors such as transportation (the share of transportation, mainly railways, has declined from 27 percent of public sector investment in the Second Plan to about 13 percent in the Seventh Plan), communication, and irrigation, as well as for expenditures on social sectors such as education and health.

The declining share of public expenditures devoted to the social sectors also means that the welfare of the poor, who are potentially the most important beneficiaries of services, has not improved to the extent it could have. The seriousness of the relative decline in India's position vis-à-vis NICs and other developing countries that started from a lower base can be easily seen.[24]

1975 to the late 1980s: continued experimentation with liberalization. India's substantial accumulated stocks of food grains (Figure 2.4) and foreign exchange raised questions in the mid-1970s about the justification for continuing high levels of IDA assistance and led to increased donor pressure for liberalization. The government's need to support the business community, following the suspension of political rights, also favored import liberalization. Financing from the World Bank—particularly the IDA—was an important factor in enabling the Indian government to undertake trade liberalization,[25] but more bilateral aid from the United States has not been forthcoming. In this phase liberalization concentrated on those imports that enabled a fuller utilization of capacity. The government also provided export incentives such as cash subsidies, import "replenishments," liberal export credits, waivers of export licensing requirements, and price decontrols, although it did not dismantle licensing and regulatory agencies and procedures.

TABLE 2.4 India's Balance of Payments Evolution, 1976–77 to 1985–86 (millions of U.S. dollars)

	Change between 1976–77 and 1980–81	Change between 1980–81 and 1985–86
Exports of goods and nonfactor services	4,413	1,982
Imports of goods and nonfactor services	11,328	1,383
Petroleum	5,092	-2,730
Nonpetroleum goods	5,412	2,903
Balance of goods and nonfactor services	-6,915	599
Interest payments	124	664
Current account balance	-4,085	-1,142
Fund drawings	649	-521
Medium- and long-term capital	1,240	627
Commercial loans publicly guaranteed	194	543
Reserve changes (– means increase)	1,911	-892
Other capital flows[a]	285	1,928

a. These are mainly deposits by nonresident Indians.
SOURCE: World Bank, *World Bank Economic Memorandum 1987: India, an Industrializing Economy in Transition*, Washington, D.C.

The import liberalization initiated in the mid-1970s has continued, even when the BOP position worsened in the latter half of the 1970s because of higher petroleum prices and nonpetroleum imports (see Table 2.4). The current account balance deteriorated by about $4 billion during the period from 1976–77 to 1980–81, despite increasing exports and higher remittances. India financed this deficit by drawing on the IMF's Extended Fund Facility, reducing reserves, and utilizing increased capital inflows from bilateral and multilateral agencies. With recessions in the industrial world, export growth slowed in the late 1970s and early 1980s, but the government has continued to cautiously liberalize imports, as reduced petroleum prices and a lower volume of petroleum imports have provided a cushion, and thus the current account deficit has not worsened.[26]

The changes in the regulatory system initiated by Indira Gandhi have been continued and reinforced by her son Rajiv Gandhi since he took office in October 1984, following Mrs. Gandhi's assassination. The government delicensed various product groups, including twenty-five industrial and eighty-two pharmaceutical products in 1985, eased licensing requirements for additional capacity, "broad-banded" industries to permit greater flexibility in choosing a product mix, encouraged capacity growth based on a minimum economic scale, and reduced restrictions on large firms by revising the definition of a large enterprise (and by allowing them entry into many industries). In addition, efforts have been made to improve the

administration of controls, and restrictions on imports of capital goods and technology have been relaxed. The new approach is reflected in the government's persistence with, and even expansion of, liberalization despite the need to resort to increased commercial credits and a rising debt service ratio. These efforts are clearly reflected in India's substantially improved export performance in recent years in such areas as diamonds, jewelry, leather, and engineering goods, although it is still lackluster relative to the NICs and mainland China. Despite these and many other clearly discernible changes and results, the government's policy has been characterized by a lack of clarity that has limited investor responses.[27] The ambiguity is itself a reflection of continued uncertainty about BOP financing and the need to maintain the political appearance of commitment to the socialist pattern of society.

Some Critical Factors for the 1990s: Past Patterns and Likely Prospects

In this chapter we have shown that India's overall economic performance since independence has been poor in relation to the high expectations set for it, and given the degree of human, institutional, and administrative capital India has been able to draw on. India is clearly poorer than many of the smaller, more dynamic NICs that surged ahead in the late 1970s, but the external and internal problems India has encountered have also been more formidable. Nevertheless, the trend has been one of sustained improvement in living standards and an acceleration in growth performance in each successive decade. In particular, performance in the 1980s has been better than expected and superior to the developing world at large, much of which has suffered from the debt crisis and is therefore unable to service existing debt or to gain access to additional external capital. India's superior performance in the 1980s is in part due to its past access to substantial concessional capital and to a conservative macroeconomic and external borrowing strategy. The 1990s, however, will bring a more difficult set of external and internal challenges.

Effects of aid on BOP financing, public sector investments, and domestic resource mobilization.

Trends in the balance of payments. There is no question that India's vulnerability to balance of payments deficits increased in the 1980s, given the overall decline in aid from multilateral and bilateral agencies, the decreasing share of concessional aid, the U.S. resistance to India's access to IMF and World Bank resources,[28] and the economy's increasing reliance on commercial borrowing in the wake of improved, but still uncertain, export performance. While the continuation of such financing trends would not

immediately lead to an unduly high debt service ratio, the debt burden and debt service obligations as a share of exports would be much larger.[29]

The reasons underlying India's mediocre export performance are as yet only imperfectly understood, however, because of the complex interactions between the control system, past capacity expansion, shortages of much-needed infrastructure, and the incentives to export.[30] This points to the need to improve both industrial efficiency and the attractiveness of exports, including the adoption of a more aggressive exchange rate policy. There is internal opposition to active exchange rate adjustment, however, on grounds of inflationary pressure and the likelihood of weak supply responses due to the many structural factors that distort Indian industry. It is to a discussion of these structural factors that we now turn.[31]

Scope for additional savings, resource mobilization, and public sector outlays. The need to increase industrial efficiency becomes clear when it is noted that there is relatively little scope for increasing the overall GDP growth rate by increasing investment rates. India's savings rate is already close to 22 percent, having doubled during the past thirty-five years, even though per capita income is low and has grown slowly. Further, the household sector already accounts for nearly 84 percent of savings, with the government and the corporate sectors contributing only 12 percent and 4 percent respectively. The Seventh Plan, therefore, acknowledges the difficulty of raising the household savings rate.

Not only have contributions of public sector enterprises to savings been small, but in recent years they have been eroded by increases in food and fertilizer subsidies, interest payments, and defense expenditures, which together account for almost 9 percent of GDP.[32] Unless the government can control these expenditures, it must either reduce outlays on social services (such as education, health, and poverty programs) or reduce investments in public goods such as transport and energy, key sectors for increasing industrial growth and employment.

To generate additional revenues, the current policy is to increase prices of public goods. This approach, however, tends to generate cost-push inflation without increasing productivity. Taxing agricultural income is one of the few options for raising public sector revenues, but it is politically difficult.[33]

Changes in industrial structure and efficiency. Table 2.5 shows that incremental capital-output ratios (ICORs) calculated by the Planning Commission have declined after reaching a peak in the Fourth Plan period, although not steadily.[34] The growing importance of capital-intensive industries, such as chemicals and fertilizers, petroleum, coal, steel, and nonferrous metals, have contributed to high ICORs.[35] Industrial controls and licensing[36] and protection from competition (in the form of both imports and competing domestic products) have also created an environment where productivity is neglected. Increased wage costs and labor unionism combined with price

controls on "essential" less capital-intensive commodities have driven capital to favor less employment-oriented industries. India's diversity and large size have also dictated large investments in relatively backward areas for political reasons in order to maintain regional balance. These policies have severely restricted employment growth in industry and led to a burgeoning unemployment problem.

Not only has poor industrial growth lowered India's share of world exports of manufactures (from a mere 0.8 percent in 1965–66 to about 0.4 percent in the early 1980s), but it has also made exports uncertain (as in the case of cotton yarn and textiles) because of an uncertain production environment.

Alleviating poverty and improving income distribution. In the agricultural and rural sectors, growing population continues to put a burden on limited land. India's population growth rate has remained constant since the 1950s in contrast to the rapid decline in population growth rates in East Asian countries and Sri Lanka. India's combination of massive poverty and a rich data base has produced a substantial (and controversial) literature and debate on the extent of poverty, the nature and direction of changes in its scale and composition over time, and the impact of development policies and programs on poverty alleviation. There has been widespread concern (especially following the Green Revolution) that unequal access to land and finance as well as to the fertilizer, seeds, etc., needed for the new input-intensive, yield-increasing technology tends to widen income disparities—and that this in turn exacerbates existing inequalities in asset distribution, leading not only to a further skewing of income distribution, but also to an increase in the proportion of people in extreme poverty (Griffin 1978).

Dandekar and Rath (1971) argued that agricultural development in the 1960s had largely bypassed the poorest 40 percent of the population, which consisted of the landless, marginal farmers and the urban unemployed. Subsequent work has shown, however, that there has been some diminution in the incidence of poverty--particularly since the acceleration of agricultural growth since the mid-1960s. Currently about 30 percent of the population is below the poverty line.[37] M. S. Ahluwalia (1978, 1985) has shown that in years

TABLE 2.5 GDP Growth Rates and ICORs at Constant Prices for India (by plan period)

Plan	GDP growth rate (%)	ICOR at constant prices
First	3.6	3.2
Second	4.0	4.1
Third	2.2	5.4
Annual plans	4.0	4.9
Fourth	3.3	5.7
Fifth	5.2	3.9
Sixth	5.2	4.8

SOURCE: Government of India, Planning Commission, New Delhi.

of improved agricultural performance (measured as an increase in the net domestic product in agriculture per head of rural population) there has been a definite *decline* in the incidence of poverty, and vice versa.

In a related poverty-oriented context, research has also highlighted that changes in nominal food prices are an important explanation of poverty, given that a significant portion of the food consumed by the poor is purchased rather than self-produced (Mellor and Desai 1985). More specifically, since the very poorest households are typically sellers of labor rather than of marketable surpluses of crops, their welfare is not affected by food price changes except as consumers. India's policy of maintaining food stocks since the early 1970s—a development that would have been impossible without the new high-yield varieties—has been important in reducing the vulnerability of the poor to a sharp rise in nominal prices in years of crop failures. The virtual absence of famine-related deaths and the relatively stable food prices represent a major, and often ignored, contribution of the Green Revolution to poverty alleviation.

Agricultural growth, however, has by no means been equal in all regions. The better-endowed, well-watered regions have gained substantially more from growth than have the poorer regions.[38] The important question is why has there not been a more rapid decline in the incidence of poverty through an agriculturally led strategy, as Mellor (1976) argued there would be.

Several factors help explain the phenomenon. First, increased food production reduced imports, as had been hoped for;[39] however, the foreign exchange released for development through technical change has not been used in an employment-oriented industrialization strategy. Second, food aid declined. Third and finally, the costly buildup of large food-grain buffer stocks of 20–25 million tons (designed to support wheat prices), which were criticized by donors and Indian analysts alike, has meant that real prices of wage goods did not decline to the extent that they could have, and thus the demand for labor did not increase by as much as it otherwise would have.

One might ask why India has not undertaken more extensive public works programs than those currently under way (the Maharashtra Guaranteed Employment Scheme is by far the most ambitious), so as to take advantage of surplus food stocks and labor, and to invest in expanding physical infrastructure (for example, rural transport, small-scale irrigation, and rural water works). Not only does the limited current stock of such rural infrastructure constrain further increases in production, as we noted earlier, but India would seem to have substantial administrative capacity to undertake additional public works. The Maharashtra Guaranteed Employment Scheme provided jobs to 1.6 million people in 1987–88 for 180 million person-days at a cost of only $1.1/person-day, or at a total cost of $205 million annually. About 60 percent of the $205 million is in the form of direct wages to the poor.[40] This would have led to an additional consumption of nearly 300,000 tons of food grains (Lele 1987). With about 30 percent of the population still below the poverty line, compared to the earlier 40–50 percent, there are still

about 250 million poor people, assuming that the average household size is about five persons. Providing similar employment to one adult per poor household would cost about $6 billion annually in wage costs at current wage rates and would increase food demand by about 15 million tons annually.[41] At least initially, this increased consumption would have to be met by increased imports, which would in turn allow the United States and European countries to dispose of surplus food without causing disincentive price effects on India's and other developing countries' agricultural production (Lele 1988b; Schuh 1985).

The current lack of emphasis on such an employment-oriented strategy is a result of a complex set of factors, although it is tempting to explain it in terms of a lack of political will. Large public works programs raise issues of material balances and of the fiscal resources at the disposal of the public sector. While wheat, and to a lesser extent rice, is in surplus, an expansion of demand for a variety of other food grains (sorghum, millet, and pulses) and foods (especially edible oil and chilies) prompted by increased employment would have substantial inflationary effects—without increased imports, which India can ill afford. Furthermore, despite India's apparent overall strength in terms of administrative capacity to plan and implement employment guarantee programs, its ability is still limited in the relatively poor states.

India's policy attitudes have been dictated by a history of vulnerability, and the associated "short tethering," performance conditioning, reduced concessional assistance from the United States and the World Bank, increased defense expenditures, and lack of European interest in issues of pressing poverty in the part of the world where the poorest are concentrated. Obtaining aid on concessional terms and in sufficient amounts is thus likely to continue to be problematic—and would in any event depend on an increase in global flows of concessionary funds large enough to respond to pressing needs elsewhere in Asia, particularly in China, and in Africa. Thus prospects for India's poor are not bright, except through improved growth through increased internal efficiency, following the trend under way for the past two decades in India. But without an employment-oriented strategy, this progress will be slower than it needs to be. Additional concessional flows on an assured long-term basis will be critical in facilitating the adoption of such a strategy.

Conclusion

A broad-based development strategy is essential to preserve India's democratic system. Implementing this strategy requires deepening technological change in areas already affected by the Green Revolution and extension of that process to other areas. As in the past, such a strategy will require substantial investments in both human capital formation and physical infra-

structure. Currently these investments are constrained by savings. Though savings can be increased in the public sector, it will prove difficult to raise rates in the private household sector, which accounts for over 80 percent of total savings and where the savings rate is already high. Financing such investments by borrowing more heavily on commercial terms would be unsuitable because of the long gestation lag before these investments yield their benefits. Thus, the process of liberalization in India is being constrained by the balance of payments position. India requires adequate long-term flows of concessional aid, which, as shown by Indian economic performance since the early 1970s, the country can absorb effectively.

CHAPTER 3

IJAZ NABI AND NAVED HAMID

The Aid Partnership in Pakistan

At independence in 1947 Pakistan was one of the poorest countries in the world. Since then, with an impressive average growth rate of 5.3 percent per year over the past four decades, the country has started to climb out of the abject poverty it inherited from the British raj. Foreign aid played an important role in the pattern of growth, not only in the volume of resources it made available but also especially through its influence on the development strategy Pakistan pursued.

Pakistan's growth has fluctuated considerably. In the 1960s, a period of high growth, gross domestic product (GDP) grew an average of 6.7 percent per year. With population growth of about 3 percent per year, this translated into annual per capita growth of 3.7 percent. The 1970s were a difficult period, and GDP grew only 3.9 percent a year, which was less than 1 percent per capita. In the 1980s GDP again grew rapidly, at an average 6.6 percent per year (3.6 percent per capita). During this period, Pakistan's economy has undergone considerable structural change. In slightly less than four decades between the end of the 1940s and the mid-1980s, agriculture declined from more than one-half to about one-quarter of GDP, while manufacturing grew from 7.8 percent to almost 20 percent.

Because Pakistan is in a particularly sensitive geopolitical position, aid to the country, especially from the United States, has also fluctuated a great

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deal in response to changing political circumstances. In the early 1960s aid reached a peak of more than 11 percent of GDP per year. It declined slightly in the latter half of the decade, and then in 1971 fell markedly to under 7 percent. Although U.S. aid has increased from its lows in the 1970s, total aid in the late 1980s was no greater in constant dollars than it was in the 1970s; in fact it is lower as a fraction of GDP, less than 4 percent. In the 1980s, however, the country was helped by substantial remittances from workers employed overseas, especially in the Middle East.

The net effect of aid on Pakistan's development is a complicated issue. Certainly, despite their instability, aid flows have compensated for a low savings rate, which has averaged around 13 percent; and periods of high growth have been stimulated by policy reforms, especially trade liberalization, encouraged by donors. Moreover, technical advice from donors, an especially important component of aid to Pakistan, gave shape to the country's economic institutions and led to the growth-oriented development strategies of the 1960s and 1980s.

Despite these achievements, Pakistan has made few improvements in basic health care, population control, and education, which sorely need attention. The country's very low rate of primary school enrollment in relation to other developing countries is especially troubling. Nor has the aid partnership adequately addressed equity issues. The country's import-substitution policies during the 1960s, for which the donors shared responsibility, were not only inefficient but also inequitable; they concentrated benefits in the rapidly industrializing West Pakistan at the expense of the poorer East Pakistan. And, as in the case of so many developing countries, its policy of subsidizing large enterprises at the expense of smaller ones has not served either efficiency or equity very well. Moreover, to sustain its current growth rate, Pakistan will have to continue to rely on foreign aid, which, given aid's past instability, is a worrisome prospect.

This chapter examines the successes and failures of Pakistan's aid-induced development strategy. It begins with a brief discussion of macroeconomic trends since independence and shows the role that aid played in helping Pakistan achieve its growth. Then follows an examination of Pakistan's geopolitical location and its relationship to aid flows. The next section highlights the importance of aid in Pakistan's decision making by tracing the main phases of the aid partnership between Pakistan and its major donors, the United States and the World Bank, and evaluating policies and performance in each phase. Further evidence on the aid partnership appears in the section on donors' lending portfolios.

Next there is a discussion of aid effectiveness in Pakistan, focusing on the relationship between aid and growth, and between aid conditionality and policy, as well as on savings and trade gaps in Pakistan. The chapter then looks at Pakistan's debt burden, which will influence the country's creditworthiness and thus also its ability to attract foreign capital in the future. Finally, we consider the potential for alternatives to aid, such as

TABLE 3.1 Growth Rates of GDP in Pakistan, 1950–87 (percentage)

Period (ending fiscal year)	Average growth rate
Pre-plan period (1950–55)	3.1
First Five-Year Plan (1956–60)	3.1
Second Five-Year Plan (1961–65)	6.8
Third Five-Year Plan (1966–70)	6.7
Non-plan period (1971–77)	3.9
Fifth Five-Year Plan (1978–83)	6.6
Sixth Five-Year Plan (1984–88)	6.9[a]
1949–50 to 1986–87	5.3

a. 1983–87.
SOURCE: Pakistan, Ministry of Finance, *Pakistan Economic Survey*, various years.

domestic resource mobilization and exports, and conclude by considering a few lessons from the Pakistani experience, including an agenda for policy reform.

Macroeconomic Performance

At independence Pakistan had an annual per capita income of about $100. Since then the growth rate has been enviable, with GDP increasing at an annual average of 5.3 percent, putting Pakistan ahead of its South Asian neighbors (India, 3.5 percent; Sri Lanka, 4.6 percent; Bangladesh, 3.9 percent; and Nepal, 3.5 percent). As a result, despite rapid population growth of about 3 percent annually, per capita income has increased by over 140 percent in real terms; at today's prices, it is just under $400, which puts Pakistan at the upper end of the low-income countries. This growth performance is remarkable in view of the traumas Pakistan has experienced. At independence economic activity was disrupted by the partition of the Indian subcontinent, which uprooted nearly 14 million people. Pakistan has fought two full-scale wars with India, in 1965 and 1971, and has suffered a civil war that led to the creation of Bangladesh. The list of shocks to the economy would be considerably longer if it included the vagaries of the monsoon in the Indus River basin.

Although the rate of growth over the forty-year period has been high, it has also been uneven (see Table 3.1). In the 1950s, the average annual growth rate was only 3.1 percent, which (with 3 percent population growth) produced almost no growth per capita. This decade was a period of recovery after the partition. Before independence the areas comprising Pakistan were primarily agricultural; for manufactured goods they depended on industrial centers that are now in India. Consequently, the cessation of trade with India in 1949 was very disruptive, and economic performance reflected this. The economic policies of the 1950s were largely an attempt to adjust to the new economic realities.

The 1960s were a period of high growth in both industry and agriculture. During this decade, GDP grew at 6.6 percent annually, and by the end of the 1960s a substantial industrial base had been created. In the early 1960s, however, policies emphasized growth and ignored equity considerations. In the second half of the decade, the government planned to redress this, but external resources declined sharply, forcing the plans to be shelved. This may have contributed in an important way to increasing social and economic tensions, an important factor in the rise of the People's Party and its assumption of power in 1971.

During the 1970s Pakistan faced numerous internal and external shocks. In 1971 the country was dismembered, and the eastern half emerged as the independent country of Bangladesh. In 1972–73 the People's Party government undertook widespread nationalizations in the industrial and financial sectors. The first oil shock also occurred in 1973. Economic growth during the 1971–77 period averaged only 3.9 percent per year (less than 1 percent per capita), with large- and medium-scale industry growing at about 2 percent annually, compared to the 15 percent annual rate in the previous two decades.

In the 1980s rapid growth returned, with the government of General Zia-ul Haque reviving the economic policies of the 1960s. GDP grew at 6.6 percent annually, large- and medium-scale industry at about 10 percent, and agriculture at about 4 percent.

To sum up, Pakistan has witnessed alternative periods of slow and rapid GDP growth, and the average annual growth rate of 5.3 percent does not tell the whole story. This growth has resulted in significant structural transformation of the economy. Agriculture's share of GDP declined from 53.2 percent in 1949–50 to 25.5 percent in 1986–87. The share of manufacturing, particularly that of large- and medium-scale industry taken together, increased from 7.8 percent in 1949–50 to 19.9 percent in 1986–87. Sectoral employment shares have also undergone similar though less dramatic changes; agriculture employed over 75 percent of the labor force in 1949–50, but in the late 1980s employed just over 50 percent. Despite this apparent structural transformation, however, the economy is still heavily dependent on agriculture. Nearly one-half of manufacturing output and four-fifths of exports are based on agriculture.

Despite sustained aggregate growth, Pakistan's record on equity and its performance in the social sector leave much to be desired. Public pronouncements of planners in the 1960s suggest awareness of the mounting problems of social neglect. In practice, however, little was accomplished. A review of selected social indicators reveals that in 1983 the average Pakistani's quality of life was still quite low compared about that of people in other countries (see Table 3.2). Particularly striking is the alarmingly low rate of primary school enrollment relative to other developing countries. The meager share of expenditure on education and health reflects a lack of concern with the impact this might have on future growth rates. An unhealthy and

TABLE 3.2 Pakistan's International Ranking in Socioeconomic Indicators, 1983

Indicator	Value	Rank in all 120 market economies	Rank in 36 poorest economies
Population (millions)	92.4	9	4
Per capita GNP (US$)	380	80	2
Enrollment in primary school as % of age group	49	99	24
Life expectancy at birth (years)	51	23	8
Average index of per capita food production (1974–79 = 100)[a]	104	23	11
Daily per capita calorie supply as % of requirement	95	30	10
Central government defense expenditure as % of total expenditure	34.8	4	1
Central government expenditure on education as % of total	3.1	65	14
Central government expenditure on health as % of total	1.0	65	15

a. Data are for 1982–84.
SOURCE: World Bank (1986a).

TABLE 3.3 A Summary of Pakistan's Macroeconomic Indicators, 1961–88 (plan period averages in percentages)

	Second Plan (1961–65)	Third Plan (1966–70)	Non-plan period (1971–77)	Fifth Plan (1978–83)	Sixth Plan (1984–88)
GDP growth rate	6.8	6.7	3.9	6.6	6.9[a]
Agriculture growth rate	3.8	6.3	1.7	4.4	3.9[b]
Industry growth rate	16.0	9.9	3.7	9.5	8.3[c]
Investment (% of GDP)	19.30	16.26	15.99	17.74	16.94
Domestic saving[d] (% of GDP)	11.48	12.20	12.65	15.69	15.76
	(11.65)	(12.29)	(10.44)	(7.26)	(7.99)
Aid inflow[e] (% of GDP)	11.11	10.58	6.81	5.25	3.82
Public capital formation (% of total capital formation)	49	47	63	64	60
Imports (% of GDP)	14.97	11.29	16.49	22.27	20.64
Exports (% of GDP)	7.31	7.31	10.95	11.80	11.70
Net factor income from abroad (% of GDP)	−0.17	0.08	2.21	8.43	7.77
Budget deficit (% of GDP)	n.a.	n.a.	9.85	5.68	7.00
Inflation index[f]	105.56	126.81	220.55	411.40	567.72
Debt (% of GDP)	10	20	43	36	31

NOTE: n.a. = not available.
a. 1983–87.
b. Actual and target.
c. 1983–86.
d. National savings rate in parentheses includes net factor income from abroad.
e. Net transfers.
f. GDP deflator 1959–60 = 100.
SOURCE: *Pakistan Economic Survey*, various years, Government of Pakistan, Ministry of Finance, Economic Advisor's Wing.

uneducated work force is not likely to be very efficient either at work or at war (note Pakistan's high ranking of the share of defense expenditure).

Pakistan's growth is all the more remarkable given its mediocre success in mobilizing domestic resources for development. The savings rate, averaging approximately 13 percent from 1961 to 1988, has been low historically (see Table 3.3) and is less than half that of neighboring India's. The investment rate, on the other hand, has been higher than the savings rate. This difference can be largely explained by the considerable amount of foreign aid Pakistan has received. In the following discussion the relationship between aid donors and Pakistan is explored in order to examine the role of aid and its effectiveness in Pakistan's economic development.

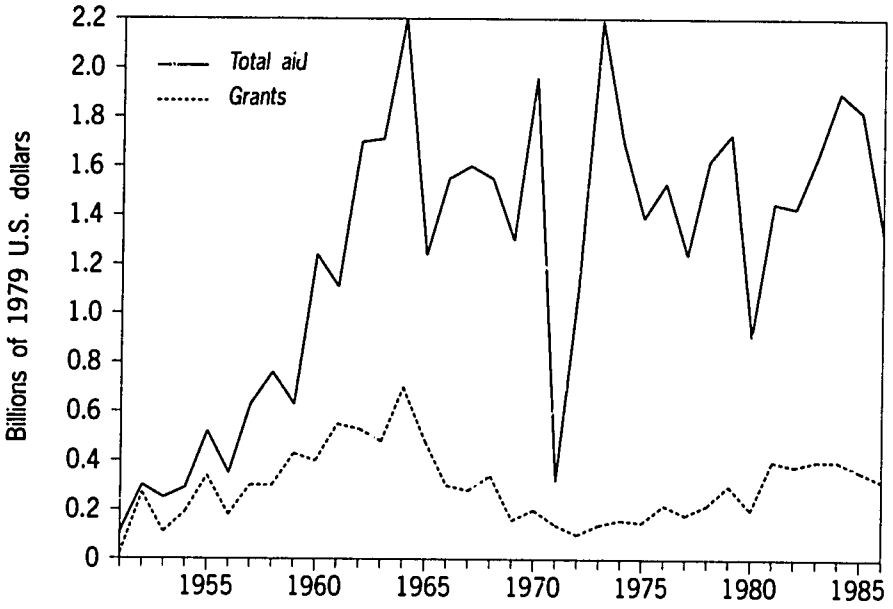
Geopolitics of Aid to Pakistan

Pakistan, bordering on the Middle East, Central Asia, and South Asia, has as its neighbors the world's three most populous countries: China, India, and the USSR. It lies close to, and shares a religion with, the strategically important, oil-rich Persian Gulf region. As a result of this geopolitical position, political considerations have remained paramount in determining aid to Pakistan. In particular, the terms of Pakistan's relationship with the United States have greatly influenced the quantity of aid it has received. This relationship has passed through three broad phases. During the Cold War, in the 1950s and the early 1960s, the United States established a chain of military alliances for the containment of Soviet communism. These stretched from Europe (NATO) through the Near East (CENTO) to the Far East (SEATO). Pakistan, as a member of both CENTO and SEATO, was an important link in this chain. In the late 1960s and early 1970s, the era of detente and growing U.S. involvement in Vietnam, these military alliances and Pakistan's standing with the United States declined in importance. Pakistan's close links with both China and the United States, however, allowed Pakistan to act as an intermediary between the two countries and to continue to enjoy favor with the Nixon administration.

In the 1970s, with the end of the Vietnam War and the aftermath of Watergate, the United States turned inward and relations with Pakistan reached a nadir. At the same time the Organization of Petroleum Exporting Countries (OPEC) emerged as a major economic power. Pakistan, because of its proximity and religious ties, became a supplier of defense personnel and civilian manpower to the oil-rich Islamic countries and in return received considerable official aid from them.

Finally, at the end of the 1970s with the fall of the Shah in Iran (a key country in U.S. strategic plans for the region), the invasion of Afghanistan by the USSR (which posed a threat to the oil-rich Gulf states), and the emergence of the United States from its post-Vietnam seclusion, Pakistan

FIGURE 3.1 Total Aid and Grants to Pakistan, 1951–86

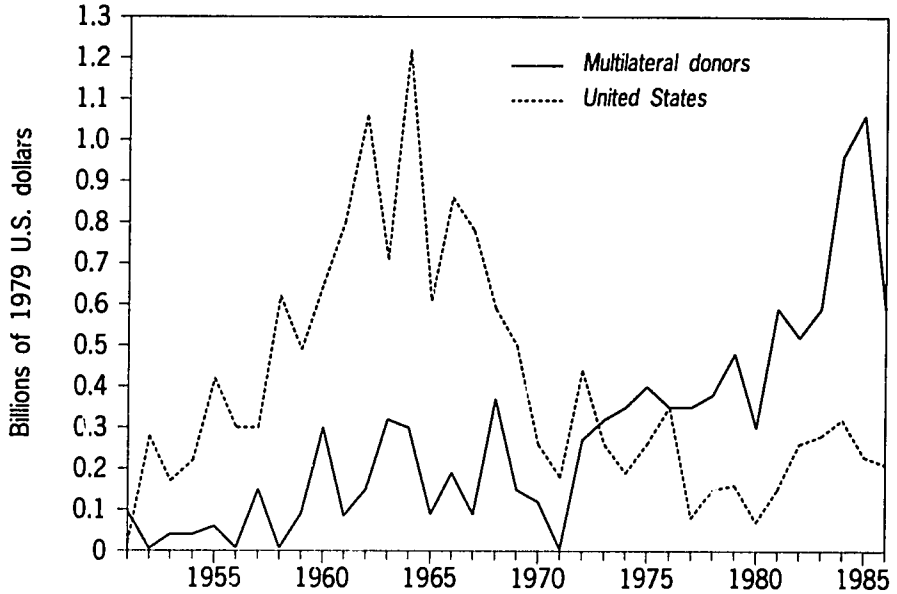


SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

once again became a close ally of the United States and a frontline state for containing the Soviet Union.

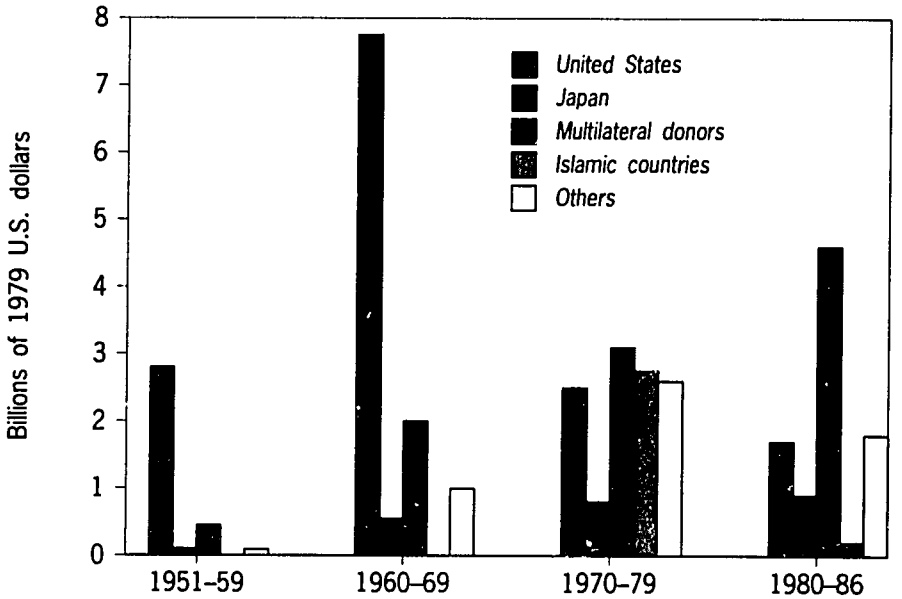
Figure 3.1 shows that aid flows to Pakistan have fluctuated with the changes in the political climate outlined above. From 1955 onward, when Pakistan joined CENTO and SEATO, foreign aid increased rapidly. The grant element in aid commitments increased from an annual average of $150 million in the mid-1950s to $635 million in the mid-1960s. During this decade, the United States directly provided 50 to 80 percent of the total aid received by Pakistan (see Figures 3.2 and 3.3). The year 1965 was the beginning of the change in the U.S.-Pakistan relationship. The United States was preoccupied with Vietnam, and Pakistan felt let down by the U.S. suspension of military supplies during the Indo-Pak war of September 1965. In the last three years of the 1960s the average annual commitment of aid was $600 million, somewhat lower than that of the three years prior to 1965. Moreover, the U.S. share declined to about 40 percent of total aid. In real terms, the changes were even more striking. Because of its good economic performance, however, Pakistan still enjoyed a favored position with the United States and the international donor community. With the breakout of the civil war in East Pakistan in 1971, however, Pakistan's standing took a nosedive, which was reflected in the drastically reduced aid commitments in 1971–72.

FIGURE 3.2 U.S. and Multilateral Aid to Pakistan, 1951–86



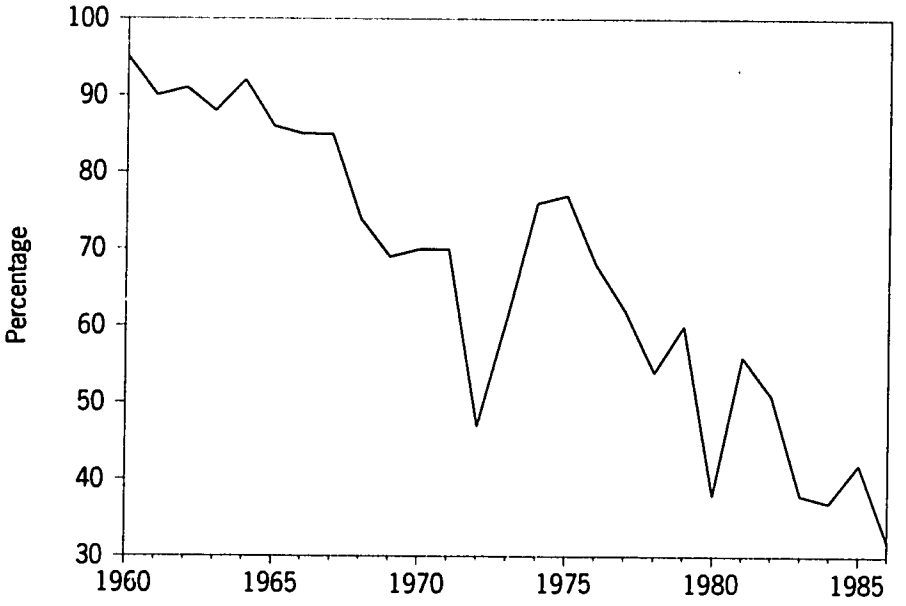
SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

FIGURE 3.3 Total Official Capital Flows to Pakistan, 1951–86



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

FIGURE 3.4 Net Aid Transfers as Percentage of Gross Aid Disbursed to Pakistan, 1960–86



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

After an increase in 1972–73, U.S. aid to Pakistan was on a downward trend, reaching an all-time low (about $50 million) in 1980–81. Flows from the Aid to Pakistan Consortium countries remained more or less constant in real terms at approximately $100 million in 1979–80 prices, much lower than the average commitment of $1,600 million (in 1979–80 prices) during the mid-1960s.

This decline in aid to Pakistan coincided with a rapid increase in energy prices. With stagnating gross real aid flows and declining net flows (see Figure 3.4), Pakistan was forced to look to other sources. The oil-rich Islamic countries provided some assistance (see Figure 3.3): following the first oil shock, Iran committed $580 million in 1973–74, and other Islamic countries provided $260 million in 1974–75. After the second oil shock, Saudi Arabia provided $260 million in 1979–80.

The invasion of Afghanistan by the Soviet Union reemphasized the strategic importance of Pakistan to the United States, leading to the third phase of U.S.-Pakistan aid relations. Though complicated by the nuclear proliferation issue, U.S. aid to Pakistan has increased steadily, with its level in the mid-1980s reaching 2.5 times that of the 1970s in real terms. This was accompanied by an increase in aid from the Consortium countries as a whole, which reached an annual average of about $1,600 million in the 1983–86

period. This is hardly a coincidence and points strongly to the importance of geopolitics in determining aid flows to Pakistan. In the next section we shall see that the nature of the political regime within Pakistan was also important in determining the volume and effectiveness of aid.

The Aid Partnership

The relationship between Pakistan and its two major aid partners, the U.S. Agency for International Development (USAID) and the World Bank, has been long and close. It has influenced not only the investment portfolio in Pakistan but also the overall development strategy, through these donors' active participation in institution building and their wide-ranging technical advice. These facets of the relationship have had a subtle but important influence on Pakistan's economic performance, which simple correlations of growth rates with aid flows or the econometrics of the savings function are unlikely to capture adequately. In this section we briefly review the salient features of this relationship, taking stock of the successes and failures.

Both the World Bank and USAID got off to a good start in Pakistan. In the 1950s the World Bank had negligible dollar commitments but because of its active participation in the Indus Waters Treaty between India and Pakistan, and its leadership of the Aid to Pakistan Consortium established to implement that treaty, it was perceived by the government of Pakistan as a friend and a guide. The successful completion of that treaty overcame a major conflict between India and Pakistan and was crucial to the later success of the Green Revolution.

USAID had an active food aid program under PL 480 that provided crucial balance of payments support when Pakistan began to run deficits after the Korean boom.[1] In Pakistan there was some ambivalence toward this nascent aid relationship. To fully understand this attitude we would have to delve into Pakistani politics in some detail, which would take us beyond the scope of this paper. Simply put, Pakistani politicians were fissiparous while the bureaucratic structure inherited from the British raj was relatively coherent. Within the bureaucracy, there was a left-leaning faction—in the tradition of British Fabianism—that was opposed to Pakistan's involvement in the aid relationship. However, Ayub Khan's military coup of 1958 and the new alliance between the army and the bureaucracy rendered that view unfashionable and thrust the bureaucrats into a position of decision making rarely paralleled elsewhere. Ayub Khan was favorably disposed to the West in general and to the United States in particular, and had ambitious plans for the economic development of Pakistan. Thus began the long partnership between Pakistan, the World Bank, and USAID.

Ayub Khan (1958–69): The blossoming of the aid partnership. Conditions were right for the aid partnership to blossom; Pakistan had a stable and

well-disposed government with ambitious development goals. The Harvard Advisory Group, put in place by the Ford Foundation, played a dominant role in preparing the development strategy and policy guidelines for Pakistan's Planning Commission. Its domination continued until the Second Plan (1961–65); Pakistani technocrats took over from the Third Plan onward. USAID was, through its earlier aid program, beginning to acquire technical and institutional expertise for working in Pakistan. The Indus Waters Treaty was completed and promised major growth in agriculture. The World Bank was well liked, and as a young institution in the field of development, saw Pakistan as an excellent opportunity. Not least important was the fact that development economics was beginning to acquire a respectability that the Harvard Advisory Group was eager to put to test.

These complementary relationships resulted in a massive flow of concessionary capital into Pakistan, which was channeled into the economy according to a thought-out development strategy. (Net transfers to Pakistan in the Second Plan period, 1961–65, were at an all-time high of 11.11 percent of GDP.) The essential ingredients of the strategy were import-substituting industrialization, taxation of agricultural exports, and investments in energy and irrigation infrastructure. The tools to achieve the goals were commodity aid, including PL 480, and a strong dose of technical advice. The latter was invaluable in building up the pool of skilled manpower that now runs the important institutions established during this period, such as the Water and Power Development Authority and Pakistan Industrial Credit and Investment Corporation.

During the Second Plan period of the early 1960s, capital flows were being channeled primarily into the water and power sectors and resulted in the completion of the Mangla and later the Tarbela dams, which were to play an important role in Pakistan's Green Revolution in the latter half of the 1960s. Here the United States, Pakistan's largest donor, took the lead in developing a comprehensive strategy for agricultural development outlined in the Ravelle Report (United States 1964), whose objectives were to build on the extensive canal network that already existed in Pakistan and to tackle the associated problems of soil waterlogging and salinity. The positive side of the report was that its groundwater development scheme met with success unprecedented in Pakistan's history. The negative side was that it recommended administrative restructuring of the country that went far beyond what Pakistan's bureaucracy considered to be legitimate interference by a donor. The Bank supported the U.S. position, and seeds of discord were sown in what had been a smooth relationship.

Overall, however, this was a period of remarkable success in the partnership between Pakistan and its major donors, which was reflected in the macroeconomic performance already described in the first section. What is noteworthy is that the partnership showed little awareness of the equity problems likely to emerge from a development strategy that tended to concentrate benefits on fast-industrializing West Pakistan at the expense of

jute-exporting East Pakistan. Nor, it seems, was there much concern for neglect of the social sectors, blame for which was later laid at Pakistan's door alone. Notice also the shared responsibility for the import-substituting development strategy, which today is so out of vogue.

Meanwhile, other aid-related problems had begun to surface. With the large inflow of foreign capital, Pakistan began to experience an early version of the Dutch disease: the appreciation of the real exchange rate discriminated against exports and encouraged the flow of resources to the nontradable sector. To counter this, the government put in place an export bonus voucher scheme with multiple exchange rates that favored exports and influenced the pattern of imports. For all its merits, the scheme was complicated, and after a while the supply and demand of vouchers could not be managed, leading to arbitrariness and corruption. To further liberalize trade, Pakistan adopted a "free list," but only after the United States agreed to provide commodity aid (albeit tied to U.S. sources) for balance of payments support. This arrangement worked well and Pakistan was on its way to trade liberalization until 1965, when Pakistan and India fought a war, and Pakistan's naivete in counting on politically motivated U.S. aid, even when a sound economic program was being implemented, was fully revealed. For the next fifteen years Pakistan remained in political disfavor; U.S. political concerns and alliances changed (see previous section) and no matter what the economic performance, the United States would have a low aid profile in Pakistan for some time to come.

Pakistan's sustained growth in the Third Plan period (1966–70), despite reduced aid flows, was made possible by the success of Green Revolution technology—agriculture grew at a remarkable 6.3 percent during this period—which, in turn, resulted from investments in irrigation and agriculture, such as research at Faisalabad Agricultural University, made during the Second Plan period. The aid partnership, however, was disrupted again and then virtually suspended after the civil war of 1971, which created Bangladesh.

Zulfiqar Ali Bhutto (1972–77): Souring of the partnership. The new Pakistan's internal politics further exacerbated the falling out that had started in 1965. The Bhutto period presents an interesting paradox concerning the aid relationship, arising partly from the mixed signals sent by the government. In 1972 the rupee was devalued from Rs 4.76 to Rs 10.59 to the dollar, leading to the discontinuation of the export voucher scheme and some import liberalization that should have pleased donors. The land reform, however, was less convincing, as was the rhetoric on improving income distribution. In fact, inflation soon eroded gains in money wages made by workers. Then followed a spate of nationalizations that scared away private investment. To generate revenues for the expanding government, Pakistan nationalized trade in cotton, wheat, and edible oil. The energy crisis and the world recession then put a double squeeze on the economy, increasing the

import bill and exposing the inefficient import-substituting industrialization that had taken place. Further nationalizations followed. This frenzied scenario had grave economic consequences, and most macroeconomic indicators fell sharply (see Table 3.3).

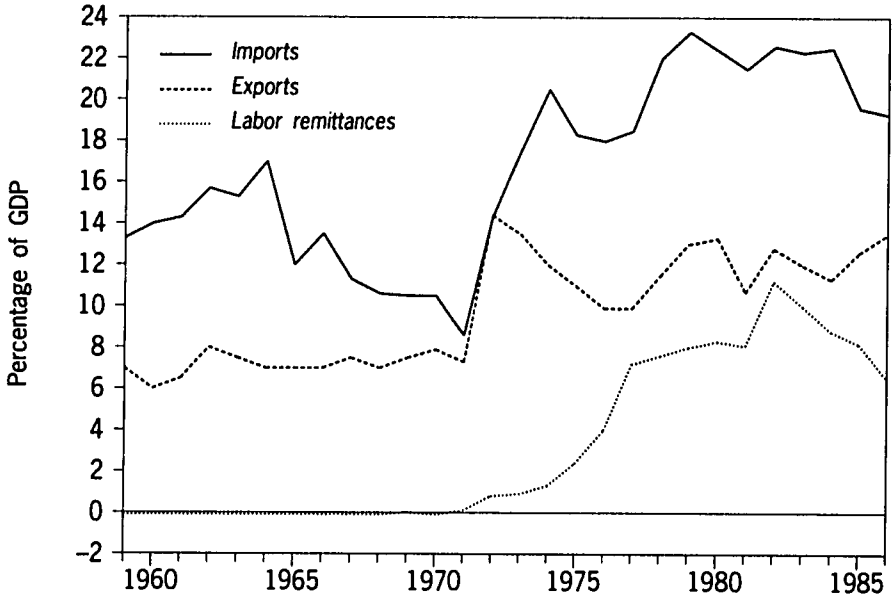
Despite the economic disruption and hardships, as well as some attempts by the government to address the equity issue, the donors did not warm up to the government. Matters were made worse by the government's preoccupation with the highly capital-intensive, Soviet-supported steel mill. According to one World Bank report (1986b), it appears that through the structural adjustment program it recommended to Pakistan, the Bank dug itself into position of "preconditioned nonlending," since the government was unlikely to carry out the reforms. The economic crisis that followed would have been far graver had the Islamic countries, first Iran and later Saudi Arabia, not come to Pakistan's rescue (see Figure 3.3).

We close the discussion of the aid relationship in the Bhutto period with a few remarks on the missed opportunities. First, it appears that sustainability of both the aid relationship and Pakistan's previous performance was sacrificed for political reasons. Second, donors should have put the rhetoric of that period to test by investing in the social sector. This focus would have been worthwhile in itself during a period of murky economic performance. Finally, by winding down the aid program, the donors lost any leverage they may have had in modifying the policies that reversed Pakistan's excellent economic progress.

Zia-ul-Haque: Lending for structural adjustment. In 1979, the Soviet Union invaded Afghanistan, and Ayatollah Khomeini ousted the Shah of Iran. Pakistan's geopolitical location again commanded a premium. The donors who had shunned General Zia-ul-Haque after the military coup and Bhutto's execution were keen to forge a new aid partnership. The government adopted a more liberal economic strategy, encouraging privatization and restoring private investors' confidence. Investment began to trickle into the social sectors as well. However, lending programs were unimpressive, reflecting the reduced resource availability in the 1980s compared to the 1960s and the growing awareness of inefficiencies in resource utilization. The structural adjustment concerns resulted in program lending by the World Bank through structural adjustment loan (SAL) I in 1980–83 and by the International Monetary Fund (IMF) through its Extended Fund Facility. The multilaterals advised Pakistan to delink the rupee from the dollar (which led to a gradual depreciation of the rupee), focus on efficient import substitution, reduce government expenditures, establish tax reforms to increase domestic resource mobilization, encourage savings, institute price reforms, and push for export-led growth and privatization.

This was a long and diverse menu, and Pakistan was selective. The rupee was delinked and devalued against the dollar, farmgate prices were raised, some concrete measures were taken to reassure the private sector,

FIGURE 3.5 Shares of Trade and Labor Remittances in GDP in Pakistan, 1959–86



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

and further import liberalization measures were taken. The new policy initiatives bore fruit, and Pakistan achieved a remarkable 6.6 percent growth rate during the Fifth Plan period (1978–83). Both industry and agriculture contributed to this progress with growth rates of 9.6 percent and 4.4 percent, respectively. In the Aid to Pakistan Consortium meeting of 1982, the World Bank congratulated Pakistan on its economic successes, which paved the way for further aid. The Bank itself was generous to Pakistan: toward the mid-1980s, thirty-seven projects were sanctioned—equal to the number of projects approved throughout the 1960s and 1970s.

Despite the recovery, problems remained. Public sector expenditure was high, tax reforms were pending, and the savings rate was low. Moreover, Zia had his own agenda for Islamization of the economy, especially the banks,[2] which he was determined to push through despite the uncertainties created in the financial markets. Furthermore, at least in the Fifth Plan period, only lip service was paid to investment in the social sector. (In the Sixth Plan period of 1984–88, Pakistani planners at last began to address the dismal situation of the social sector. In 1987 nearly 45 percent of the budget was spent on that sector.) Thus, although the relationship between the World Bank and Pakistan improved in the 1980s, it is not as cozy as it was in the early 1960s. This change is evident in the government's refusal to sign the second industrial sector loan, because it felt unable to agree to some of the conditions

TABLE 3.4 World Bank Lending to Pakistan, FY 1960 to FY 1984

Sector	IBRD Millions of US$	IBRD Number of projects	IDA Millions of US$	IDA Number of projects	Total Millions of US$	Total Number of projects
Agriculture	145.2	5	862.4	34	1,007.6	39
(Cancellation)			(64.4)		(64.4)	
Public utilities	40.0	1	207.4	10	247.4	11
(Cancellation)			(50.0)		(50.0)	
Transportation	295.8	13	275.8	14	571.6	27
(Cancellation)	(35.0)		(39.8)		(74.8)	
Education	0.0	0	85.1	7	85.1	7
(Cancellation)			(17.5)		(17.5)	
Population	0.0	0	18.0	1	18.0	1
Development finance corporations	280.0	10	253.0	8	533.0	18
(Cancellation)			(3.0)		(3.0)	
Industry	105.5	3	62.8	2	168.3	5
Nonproject lending	60.0	1	341.1	10	401.0	11
(Cancellation)			(27.0)		(27.0)	
Energy	167.4	6	105.0	4	272.4	10
Grand total	1,093.9	39	2,210.5	90	3,304.4	129
(Cancellation)	(35.0)	(1)	(201.7)	(19)	(236.7)	(20)
Actual lending	1,058.9	38	2,008.8	71	3,067.7	109

NOTE: IBRD = International Bank for Reconstruction and Devlopment; IDA = International Development Association.
SOURCE: Statement of loans/credits presented in World Bank (1986b).

contained in it. Meanwhile, Pakistan's balance of payments position was better than it might have been because of the new, albeit temporary, inflow of remittances from Pakistanis working in the Persian Gulf, which peaked at nearly $3 billion in 1982 (see Figure 3.5). Another factor, of course, was that Pakistan had patrons other than the World Bank. The United States resumed its aid in 1982 with a large six-year commitment of $1.66 billion from fiscal 1982 to 1987, and the Asian Development Bank increased its lending. The thrust of their economic programs is taken up in the next section, where the project portfolios of donors are discussed in more detail.

Donors' Lending Portfolios

Priorities in donor lending and consistency in their pursuit of development objectives are best analyzed by examining their project portfolios.

The World Bank. Calculations based on the aggregate World Bank lending portfolio (the portfolio is presented in Table 3.4) suggest the following trends. First, there has been considerable fluctuation in lending from one plan to

another. Second, loans to Pakistan have been made through both IDA (concessionary) and IBRD (nonconcessionary), the former becoming more important throughout the 1970s. In recent years, the IBRD window has again become more important. Third, most of the lending has been in agriculture and water (33 percent), followed by industry and finance (23 percent), transportation (19 percent), public utilities and energy (9 percent), and finally the social sectors—education and population (about 3 percent). Nonproject lending amounted to 13 percent; thus direct policy-based lending through SALs has been small. As shown above, however, there was plenty of policy content in the project loans, given the earlier warm relationship between the World Bank and Pakistan.

Priorities have been changing over time, and in most cases quite appropriately. Early in the Bank's relationship with Pakistan (in the Second Plan period) large water projects, crucial to Pakistan's successful Green Revolution, were important. Emphasis on industry and finance started in the Third Plan. Lending for energy was also important, reflecting the difficulties faced by Pakistan because of the oil crises. In the 1980s, irrigation again assumed importance for both area expansion and maintenance and improvement of existing facilities. Lending to the social sectors is also a recent phenomenon, but unfortunately still on a smaller scale than the situation has warranted. Here the Bank's vital input may be the analytical support it is providing to identify the parameters of a comprehensive education program.

Although changes in the portfolio mix of World Bank lending have adequately reflected changing priorities, there are some questions as to the commitment to equity, particularly with regard to financial sector support. For example, since the 1970s World Bank lending both to the Agricultural Development Bank of Pakistan (ADBP) and to industrial development finance institutions has increased. ADBP lending for farm mechanization has been criticized on equity grounds, because it is seen to lower rural farm employment opportunities. Similarly, financial institutions' lending to industry has been accused of focusing too much on large firms.

The Asian Development Bank. The Asian Development Bank (ADB) began lending to Pakistan in 1968 (see Table 3.5), and its importance has increased over time. Until June 1986, total ADB lending to Pakistan (disbursed and undisbursed) was $2,456 million, approximately 15 percent of the total external indebtedness of Pakistan. Between 1982 and 1986, the loans committed by ADB to Pakistan averaged about $340 million per year, or about 25 percent of all foreign loans to Pakistan. Of the total funds committed to Pakistan by ADB, almost 60 percent are at highly concessionary terms from ADB's special funds (Asian Development Fund, or ADF) and the rest are from ordinary capital resources. Project lending in energy, agriculture, and industry comprises most of ADB development assistance to Pakistan. Except for a small program loan for crop intensification in 1979, program assistance

TABLE 3.5 Asian Development Bank Lending to Pakistan by Sector/Subsector, 1968–84 (millions of U.S. dollars)

Sector	OCR[a]	SF[b]	Total	%
Agriculture and agro-industry	67.10	503.85	570.95	27.00
Irrigation	0.00	265.50	265.50	
Fisheries	6.73	79.50	86.23	
Livestock	0.00	33.20	33.20	
Agricultural credit	0.00	64.00	64.00	
Agro-industry	60.37	61.65	122.02	
Energy	477.37	410.50	887.87	41.98
Hydro	230.00	69.70	267.90	
Thermal	103.60	224.40	328.00	
Transmission and distribution	0.00	116.40	116.40	
Gas	143.77			
Industry and nonfuel minerals	44.52	51.50	96.02	4.54
Development banks	233.00	136.00	359.00	16.97
Industrial Development Bank of Pakistan (IDBP)	70.00	20.00	90.00	
Pakistan Industrial Credit and Investment Corporation (PICIC)	89.00	24.00	113.00	
National Development Finance Corporation (NDFC)	48.00	80.00	128.00	
Bankers Equity Limited (BEL)	14.00	12.00	26.00	
Transport and communication	66.80	10.80	77.60	3.67
Ports	37.80	10.80	48.60	
Telecommunication	29.00	0.00	29.00	
Water supply	0.00	61.50	61.50	2.91
Social infrastructure	0.00	62.00	62.00	2.93
Education	0.00	31.00	31.00	
Health and population	0.00	31.00	31.00	
Grand total	878.79	1,236.15	2,114.94	100.00

NOTE: Data include line of credit to Bankers Equity Limited (approved in 1983) and direct equity investment to NDFC (approved in 1984).
a. OCR = ordinary capital resources.
b. SF = special funds that are highly concessionary.
SOURCE: Asian Development Bank, Manila.

was channeled through development finance institutions (DFIs) that on-lent to individual enterprises.

There have been a number of shifts in emphasis in ADB's sectoral lending priorities. Before the first oil shock, lending was to development banks and to agriculture. After the oil shock, there was a significant shift toward the energy sector. In the 1971–78 non-plan period, lending to energy went from zero to $272.4 million, or 41 percent of overall lending during the period. This emphasis was maintained during the Fifth Plan (1978–83) when 42.4 percent of total lending went to this sector. The increase in ADB assistance to energy was accompanied by a reduction in industry's share, which, although it increased from $37 million in 1966–70 to $175.6 million in

1970–78, decreased as a proportion of total ADB lending to Pakistan from 79 percent to 26.3 percent. This was still the second largest sectoral allocation during the period. Loans to the agricultural sector increased from $9.9 million in the Third Plan (1966–70) to $108.5 million in the non-plan period, but overall lending increased even faster so that the proportion of agricultural loans in total lending fell from 21 percent to 16.3 percent. In the Fifth Plan period, ADB loans to agriculture increased, both absolutely and relatively, to $290.6 million or 27.6 percent.

A comparison of the sectoral distribution of Pakistan's overall development expenditure with ADB lending shows that while in certain sectors they have tended to complement one another, in others they have reinforced existing biases. For example, in the decade after the first oil shock, Pakistan increased the share of energy in development outlays fairly slowly, from 18 percent in the non-plan period (1971–78), to 25 percent in the Fifth Plan period (1978–83), while ADB directed over 40 percent of its lending to the energy sector. This greater emphasis on energy was timely and appropriate; however, Pakistan's failure to reorient its own development expenditures to this sector resulted in increasing energy shortages in the 1980s. In the social sector Pakistan followed a policy of benign neglect throughout the period, allocating 13 to 16 percent of development outlays to these sectors; ADB also neglected the sector, allocating it less than 8 percent of total lending. Part of the explanation for poor external financing of the social sector lies in the complex center-province financial relations. Currently, social sector financing is a provincial matter, making it difficult to obtain external resources for social expenditure. Until recently, ADB channeled most of its funds for lending to industry through DFIs for on-lending to individual enterprises. More recently, it has also begun to undertake direct equity participation on an experimental basis.

To sum up, Asian Development Bank lending has accommodated Pakistan's development priorities well: ADB conditionality and policy dialogue have, in general, not led to friction with the Pakistani government. The continuous increase in ADB's annual lending to Pakistan, without any sharp fluctuations (unlike World Bank lending, for example) testifies to a harmonious relationship.

USAID. In August 1981, Pakistan and the United States signed an agreement whereby the United States would provide Pakistan with $3.2 billion in military and economic assistance between 1982 and 1987. Half of this was economic aid, nearly 40 percent of which was to be financed out of PL 480 funds (owned by the United States through food sales to Pakistan) to meet local costs of projects. Military aid was provided at commercial interest rates, and economic aid was a mixture of concessionary loans and outright grants.

To assess the USAID strategy, we briefly compare it with past objectives by reviewing non–PL 480 aid commitments (see Table 3.6). Between 1959 and

TABLE 3.6 U.S. Bilateral Aid Commitments to Pakistan, 1959–87 (non-PL 480 assistance in millions of U.S. dollars)

	1959–68			1973–77			1982–87	
	Millions of US$	%		Millions of US$	%		Millions of US$	%
Industry	1,014.3	66		40.0	13		0.0	0
Technical assistance	9.3		Fertilizer plant	40.0				
Loans to PICIC	22.0							
Commodity loans	983.0							
Agriculture	185.8	12		216.9	71		223.2	40
Technical assistance	24.8		Water management	10.3		Agricultural research	3.2	
SCARPS	36.0					Irrigation system management	65.0	
Fertilizer	125.0		Fertilizer imports	206.6		Farm water management	10.0	
						Agricultural commodities and equipment	120.0	
						Forestry planning and development	25.0	
Infrastructure	341.5	22		0.0	0		185.0	34
Railways	155.1					Rural electrification	155.0	
Other transport	12.4					Energy planning and development	30.0	
Telecommunication	4.6							
Power	169.4							
Social sector	0.0	0		51.1	16		86.6	16
			Malaria control	24.0		Malaria control II	41.0	
			Family planning	18.6		Population welfare planning	25.6	
			Rural health	8.5		Primary health care	20.0	
Special projects	0.0	0		0.0	0		55.0	10
						Gadoon-Amazai area development	20.0	
						Project design	10.0	
						Tribal area development	15.0	
						Development support training	10.0	
Total	1,541.6	100		308.0	100		549.8	100

SOURCE: Data for 1959–68 and 1973–77: Jeffalyn and Johnson (1982); 1982–87: provisional, supplied by USAID, Islamabad.

1968, 66 percent of the total $1.54 billion of aid committed was to industry, 12 percent to agriculture, and 22 percent to infrastructure. There was clearly a heavy commitment to industry; substantial commitment was also made in the form of PL 480 food exports to Pakistan, which, by keeping agricultural prices low and supporting the balance of payments, helped the industrialization strategy.

Aid commitments in the 1973–77 period reflected a shift of priorities in the then low-profile aid program. The focus was mainly on agriculture, with the fertilizer support program occupying center stage. What little aid industry received was for fertilizer manufacture, an agricultural input. Projects were also initiated in the social sector—malaria control, family planning, and rural health—to reflect new concerns with equity and poverty eradication.

A proper analysis of the recent, larger aid program of the 1982–87 period will be possible only as more data become available. By 1983, twenty projects had been identified, and data for these were released to the authors by USAID in Islamabad. Most of the commitments were in agriculture. Commitments to infrastructure development were renewed, and social sector projects—malaria control II, population, and primary health care—continued to be emphasized. Further technical assistance was provided through a number of initiatives such as project design and development support training. A tribal area development project was designed, reflecting concern with the sensitive Pakistani-Afghan border. USAID has also responded to the recent alarming increases in drug abuse and drug smuggling out of Pakistan. A project was designed in the Gadoon-Amazai area, a center of narcotics production, to provide alternative economic opportunities.

Although, as suggested above, data to make a full assessment of the impact of the new aid partnership on Pakistan's economy are not yet available, it is clear that the partnership is building on previous successes. The contribution of USAID-supported irrigation projects to Pakistan's agricultural development is well documented. The new aid program has given timely attention to improving the efficiency of the existing system through maintenance support and reduction of water losses on the farm. Similarly, the research (Pakistan Agricultural Research Council) and training programs initiated will help to increase the pool of technical expertise vital to Pakistan's growth. Although social sector projects have been designed, much more needs to be done, particularly in the areas of population control and education, to help overcome alarming deficiencies in this area.

The discussion of the U.S.-Pakistan bilateral aid relationship is incomplete without mention of aid tying, which reduces total resource availability to Pakistan. Mahboob-ul-Haque (1967) has identified two main costs of aid tying: source tying results in higher per unit costs of aid-funded imports of equipment and commodities, and freight on U.S. carriers is often substantially more expensive than on other (including Pakistani) carriers. To date, little has been achieved on this issue.

The Effectiveness of Aid

Aid and growth. The relationship between aid and economic growth in Pakistan seems indirect and complex. In the 1960s Pakistan received large amounts of foreign assistance, and the economy expanded rapidly. The savings rate increased in the first half of the decade, and exports grew faster than imports. Between 1969–70 and 1975–76 the average level of real net transfers was less than two-thirds of the 1960s level. During this period economic growth was much slower, the real value of exports stagnated, and real savings actually declined. Although the aid climate has been favorable since 1976–77 and commitments have been higher, the level of real net transfers has only been about 75 percent of the 1970–76 level and less than half that of the 1960s. Export performance has been erratic, with periods of rapid growth in 1977–81 and 1985–87, and a decline during 1982–84. Nonetheless, over the entire period, exports doubled in real terms while imports increased by less than 60 percent. Also, as discussed earlier, the savings rate remained at the level reached in the 1960s and did not increase.

A simplistic reading of the evidence would suggest a positive correlation between aid and growth. In the 1960s and 1980s, Pakistan had the support of the donor community, it received substantial aid flows, and it achieved high growth rates. In the 1950s and 1970s this was not the case, and economic growth suffered. A closer look at the amount of flows in the 1980s, however, reveals that aid as a fraction of GDP in fact declined substantially (see Table 3.3). A better explanation is that domestic economic policies and the international economic environment were more conducive to economic growth in the 1960s and 1980s than in the 1970s. In the 1980s, remittances eased the resource flow situation considerably. The international economic environment may be independent of foreign aid but domestic policies are not. Thus it may be hypothesized that when large flows of aid are available, the donors are able to exercise greater influence on domestic policies that improve economic performance. Some examples of the influence of donors on domestic economic policies are discussed below.

Policy and aid conditionality. Some form of conditionality is attached to most large projects funded with aid. Here we discuss only those conditions that tend to be concerned with overall policies rather than those that are project-specific. We will discuss three episodes of aid conditionality and its influence on Pakistan's domestic policies.

At the time of the first martial law in 1958 Pakistan had an extremely restrictive trade regime, with almost all imports subject to licensing and strict controls. During that period, in addition to economic aid, the United States provided direct technical input into economic policy formulation. The Harvard Advisory Group made policy recommendations to the government of Pakistan and helped set up a planning board, which was later upgraded to the Planning Commission. It functioned as an independent body with great

influence on economic policy-making. U.S. advisers felt that the restrictive trade regime was the primary obstacle to economic growth and were able to convince Pakistan to undertake a program of import liberalization. As a result, first the export bonus voucher scheme was introduced, and then the open general licensing (OGL) scheme was greatly expanded. By 1965 considerable import liberalization had taken place and a large number of industrial raw materials were placed on the OGL scheme (funds were directly made available by USAID for free import of iron and steel under this scheme). In 1965, however, the reduction in aid following the Indo-Pak war halted these import-liberalization programs, and controls were reestablished. Although some steps toward import liberalization were again introduced in the late 1960s, the momentum was lost.

In the 1960s, the United States was by far the largest donor and greatly influenced Pakistan's domestic economic policies through the sheer size of its aid programs. A USAID (1967) paper stated that "existing government policies, priorities, and administrative capacity should not be taken as immutable but rather regarded as policy variables." In this regard the case of import liberalization in Pakistan during the first half of the 1960s was cited as an example of effective influence over the recipient country's economic policies.

In 1981 the IMF and the World Bank argued that Pakistan's exchange rate was out of line and that devaluation was necessary. This condition was attached to the IMF structural adjustment loan of 1981. In January 1982 Pakistan delinked from the dollar and eliminated overvaluation of the rupee. It is interesting to note that even after the structural adjustment loan period was over, Pakistan continued to follow a flexible exchange rate policy and to devalue the rupee against the dollar. This is an example of a reform introduced under pressure from outside agencies that was continued after pressure was removed because Pakistan recognized its usefulness.

The World Bank and IMF have been advising Pakistan to institute a tariff reform and an import-liberalization program for many years now. The government, however, has resisted this advice, because of the likely loss of revenue from the reform and the failure to appreciate the benefits of the programs. A recent example is the government's refusal to sign an agricultural loan with the World Bank, because of conditions attached that involved eliminating the subsidy on fertilizer and increasing irrigation water rates. Though the government accepted the economic rationale of these measures, it felt that the steps would have unacceptable negative political impact in rural areas.

To conclude, where sufficient resources are involved and when the government can clearly see the value of particular economic policy changes, it is willing to implement reforms. There are always, however, internal political considerations and revenue implications that the government must take into account when implementing any policy change. Reforms that adversely affect established interest groups or have broad negative political consequences are generally not undertaken despite external pressure.

Chenery and Strout "gaps" and Pakistan. According to Chenery and Strout (1966), a country passes through three stages on its way to self-sustaining growth. In the first stage the dominant constraint is the country's absorptive capacity: the economy is so primitive it cannot beneficially invest the minimum amount—approximately 15 percent—necessary to achieve the required growth rate of 5 to 6 percent. At this stage the purpose of foreign aid is to increase absorptive capacity by providing technical assistance, training, education, managerial ability, entrepreneurial talent, and so forth.

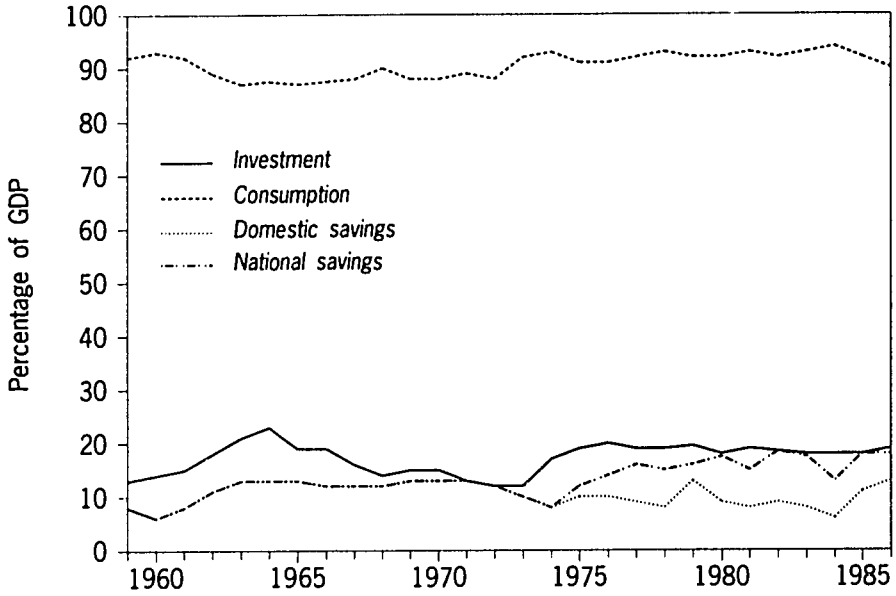
Once the absorptive capacity of the economy has increased sufficiently, the constraint on growth is domestic savings. In this, the second stage, a low-income country with a large proportion of its population at the subsistence level can hardly be expected to save 15 to 20 percent of its national income. At this stage, the purpose of foreign aid is to supplement domestic savings to fill the gap between savings and the level of investment required for reasonable growth. At the same time, exports may be less than imports, but for a time the savings gap is greater than the trade gap.

As the economy grows, more and more imported inputs are required in the form of capital goods and industrial raw materials. Exports cannot keep pace with increasing imports and the gap between the two continues to grow until it exceeds the savings gap. At this, the third stage, the trade gap is said to be dominant, and now the purpose of foreign aid is to bridge this gap, and in doing so, aid more than fills the savings gap. As the economy develops further, rising levels of income lead to an increase in savings as a proportion of national income until the required rate of savings is attained and the savings gap is closed. As development proceeds, import substitution of capital goods takes place first with the result that exports grow faster than imports and ultimately catch up with them, closing the trade gap. With the closing of the trade gap, the need for foreign aid ends.

Since the above outline of Chenery and Strout's framework was largely inspired by the Pakistani experience, it is appropriate to see how their basic ideas have stood the test of time in the context of subsequent developments in Pakistan. Before looking at actual data, however, it is necessary to point out some of the problems in applying the model. First, in most developing countries, including Pakistan, savings are calculated by the residual method using the familiar national income accounting identity, $S = I - (M - X)$, where S is savings, I is investment, M is imports, and X is exports. This defines the savings gap $(I - S)$ as always being equal to the trade gap $(M - X)$; therefore it is impossible to say which gap is dominant by merely examining the data. It is a matter of judgment whether, at any given time, it is lack of savings or scarcity of foreign exchange that is the binding constraint on investment and growth.

Second, there is some ambiguity as to whether the appropriate measure of foreign aid is gross disbursements, net disbursements, or net transfers (net disbursements are gross disbursements less principal repayments; net transfers are net disbursements less interest payments on past debt). When

FIGURE 3.6 Investment, Consumption, and Savings as Shares of GDP in Pakistan, 1959–86



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

Chenery and Strout wrote their paper, it made very little difference which of the three measures was used. It now seems obvious, however, that in the context of the model net transfers is the appropriate measure, and it is used in this discussion.

It appears that in the 1950s absorptive capacity was a constraint on growth in Pakistan; technical assistance, particularly in the area of economic management, helped remove it. Toward the end of the 1950s, however, Pakistan had clearly entered the second phase, where the savings gap was dominant; the domestic savings rate was 6 to 8 percent, but foreign aid made possible an investment rate of 13 to 14 percent. As a result of the rapid increase in foreign aid in the first half of the 1960s, the investment rate rose quickly and reached 23 percent by 1964–65. The savings rate also rose significantly, to 13 percent in 1964–65, but the savings gap increased from 6 percent of GDP in 1959–60 to about 10 percent in 1964–65. In the latter part of the decade, the savings rate remained in the 12 to 13 percent range, and as foreign aid declined so did the investment rate, which came down to about 16 percent by the end of the 1960s. It seems clear that in the 1960s lack of savings was the primary constraint on investment. Foreign exchange shortages, which resulted in a reversal of the trade-liberalization process in the second half of the 1960s, also had an adverse impact on investment and growth.

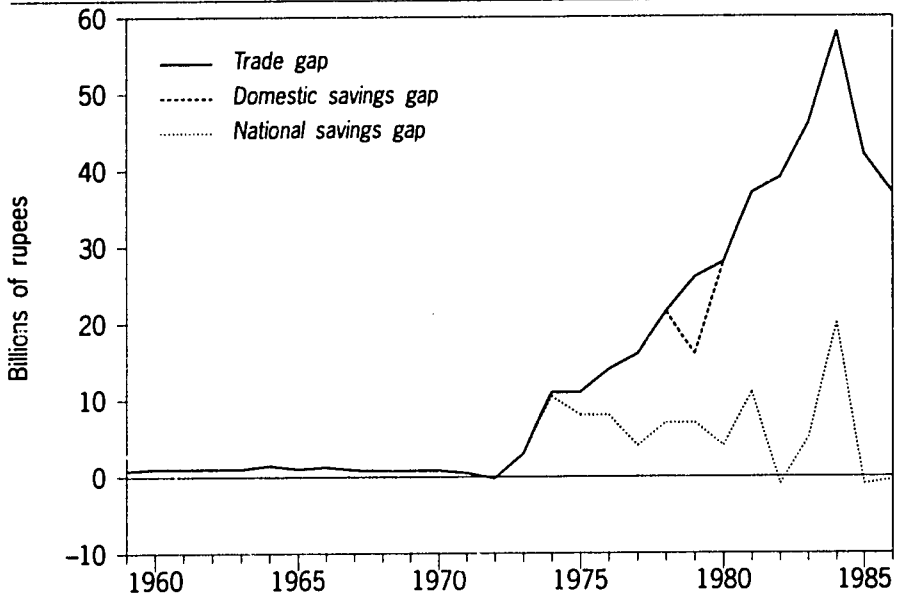
Third, there is also the question of how to include remittances from migrants working in the Middle East in savings. Most migrants left jobs in Pakistan, and their remittances were the primary source of income for their immediate families in Pakistan. Thus, including the entire amount remitted under foreign savings would greatly understate the domestic savings effort under the residual method of measuring savings. We have presented both the domestic savings rate (excluding remittances) and the national savings rate (including remittances) series for the entire period in Figure 3.6. If we ignore the nationalization years, 1973–75, the national savings rate has fluctuated between 13 and 18 percent, while the domestic savings rate has fluctuated between 5 and 13 percent. Between 1959 and 1973 the two savings rates were, for our purposes, equal. As remittances increased from 0 percent of GDP in 1969–70 to 11 percent in 1982–83, the domestic savings rate declined from 13 to 7 percent; as the former fell to 6 percent by 1986–87, the latter rose to 11 percent. It seems highly unlikely that during those years savings behavior has been prone to such large and arbitrary changes. Therefore, in our opinion the "true" domestic savings rate during this period, the rate that would have prevailed had there been no remittances, remained about the same as in the 1960s—in the 12 to 13 percent range (except for the abnormal years of 1973–75 and 1984–85). Remittances from abroad have added, on average, 2 to 3 percent of GDP to savings. The average investment rate since 1974–75 has been around 18 percent, and therefore foreign aid has raised the investment rate by about 3 percent.

During the entire period, Pakistan has followed an extremely restrictive trade regime, and although some liberalization has taken place in the last few years, the levels of effective protection still remain high. The government, while reducing nontariff barriers through exchange rate policy and imposition of across-the-board import surcharges, was able to prevent imports from increasing. Since 1979–80 Pakistan's total imports have remained constant in real terms at around $5.5 billion. This indicates that in the 1980s the binding constraint has been the availability of foreign exchange.

To sum up, in Pakistan during the 1950s, foreign aid laid the basis for subsequent growth by raising the technical skills and absorptive capacity of the economy. In the 1960s foreign aid supplemented domestic savings and made possible high rates of investment and growth. During the 1970s, because of the two oil shocks, foreign exchange was the primary constraint, and foreign aid (and remittances) bridged the trade gap and made possible what little growth did take place in that period. In the 1980s rapid growth resumed, but it is difficult to evaluate the contribution of foreign aid. The savings rate remained low, not rising above the level reached in the 1960s, and the trade gap also seemed to be binding (see Figure 3.7). Net transfers, however, contributed little to imports (8 to 11 percent) or to investment (9 to 14 percent).

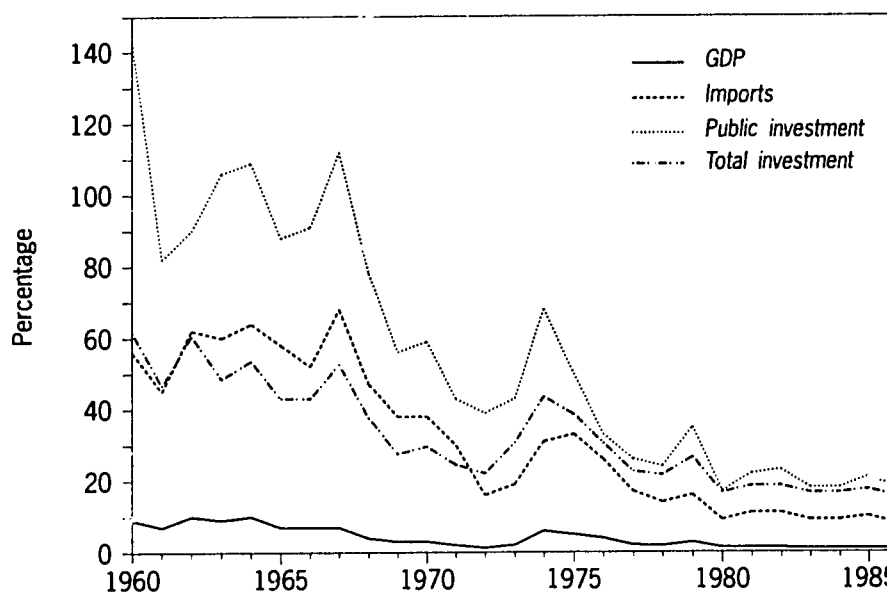
Before concluding the discussion on the role of foreign aid, it is necessary to highlight one important function it has had in Pakistan, namely, as a supplement to government resources for public investment. In the first half of the

FIGURE 3.7 Trade and Savings Gaps in Pakistan, 1959–86



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

FIGURE 3.8 Net Aid Transfers as Percentage of GDP, Imports, Public Investment, and Total Investment in Pakistan, 1960–86



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

1960s, net transfers provided 100 percent of government investment (see Figure 3.8). They declined to approximately 50 percent by 1970–71 and stayed at that level until 1975–76. This figure has since fallen to an average of around 18 percent in the mid-1980s. At the same time, however, undisbursed aid has increased from $2.8 billion in 1983–84 to $4.4 billion in 1985–86. An important factor in this buildup is that most of the aid commitments are for projects, and shortages of government complementary rupee resources prevents their full implementation. In this sense insufficient government savings have become the primary constraint on growth, and at this stage aid could be most effective if it alleviated this constraint.

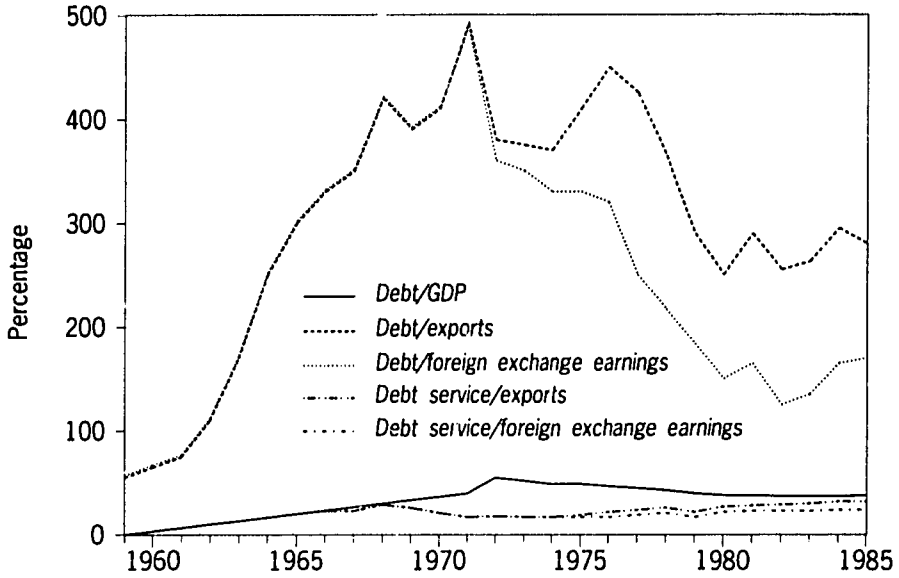
Pakistan's Debt Burden

Given the magnitude of the international debt crisis and the large amounts of foreign capital Pakistan has received, it is important to examine whether Pakistan faces a serious debt problem. Real debt outstanding increased rapidly from $386 million in 1959–60 (at 1979–80 prices) to $6,897 million in 1969–70. Since then the debt has grown much more slowly: by 1977–78 it had reached $9,004 million and in 1984–85 it was $9,224 million. In nominal terms, however, debt has increased from $150 million in 1959–60 to $3 billion in 1969–70, $7 billion in 1977–78, and $11 billion in 1985–86. The difference between these two series shows that inflation in the 1970s was reducing the burden of debt almost as fast as new debt was being incurred. Thus in real terms, Pakistan's outstanding debt has increased by only 50 percent in the last fifteen years.

Looking at debt outstanding as a percentage of GDP, exports, and foreign exchange earnings over the 1960–87 period sheds some more light on Pakistan's debt situation (see Figure 3.9). As a percentage of GDP, debt outstanding increased from 4 percent in 1959–60 to 35 percent in 1971–72. Because of the large devaluation of the Pakistani rupee in 1972, this figure jumped to 55 percent in 1972–73; since then it has declined steadily, reaching 30 percent in 1981–82. In 1982 Pakistan adopted a flexible exchange rate policy, and since January 1982 the rupee has been devalued against the dollar by over 70 percent, which has exerted an upward pressure on the debt to GDP ratio. This has countered the declining trend, and over the 1981–86 period this ratio has remained in the 30 to 33 percent range.

If we look at debt outstanding as a percentage of exports, we see similar trends, except that the exchange rate effect acts, if anything, in the opposite direction. Between 1960 and 1972, the debt as a percentage of exports increased from 50 percent to 490 percent. The devaluation of 1972 increased exports, and the ratio declined to 370 percent, where it remained for the next three years. The ratio increased in the next three years because of stagnating exports, and reached 430 percent in 1977–78. With the renewal of export

FIGURE 3.9 Pakistan's Debt Burden, 1959–85



SOURCE: Economic Affairs Division, Government of Pakistan, Islamabad.

growth it declined once again, reaching 290 percent in 1979–80, where it has hovered since.

Since remittances were of increasing importance in the 1970s and the early 1980s and have declined in the last few years, the debt to foreign exchange earnings ratio declined steadily from 360 percent in 1972–73 to 130 percent in 1982–83, but slowly increased to reach 170 percent in 1985–86.

On the basis of all three of these measures one would conclude that Pakistan does not face a serious debt problem. Debt outstanding as a proportion of GDP, exports, and foreign exchange earnings has declined over most of the period from 1970 to 1985.

Another aspect of debt is the burden imposed by principal and interest payments, which have increased over time in real terms. Principal repayments have gone up from $16 million in 1959–60 to $575 million in 1986–87. Similarly, interest payments have gone up from $8 million in 1959–60 to $296 million in 1986–87. In current prices the estimated principal plus interest repayments for 1985–86 was $906 million. The ratios of debt service to export and to foreign exchange earnings show the impact of the debt service burden. Between 1959–60 and 1968–69, the debt service to export earnings ratio increased from 4 percent to 26 percent. Because of debt rescheduling and diversion of trade between East and West Pakistan to international markets (resulting in an increase in measured export earnings of West Pakistan), the ratio declined to 16 percent in 1971–72. For the next five years it remained in

the range of 16 percent to 18 percent, and has since fluctuated around 20 percent without showing a significant trend. In 1980–82 it declined to 16 percent because of the second round of debt rescheduling. It then increased and was estimated at 22 percent in 1986–87.

As mentioned above, remittances have been an important source of foreign exchange for Pakistan since the early 1970s, making it appropriate to examine the debt service to total foreign exchange earnings ratio as well. This ratio shows a downward trend between 1972 and 1983 when it declined from 16 percent to 9 percent. Since 1983 it has been increasing as remittances have declined, and in 1986–87 it is estimated at 15 percent.

Thus we can conclude that on the basis of past debt service trends, the existing burden is not very high and in fact is about the same as it was in the early 1970s. The primary reason a debt problem does not exist is that very little of Pakistan's debt is from commercial sources. However, unless the government improves its resource mobilization (since the early 1980s almost the entire public development expenditure has been met from domestic and foreign borrowing) and undertakes a tariff reform to remove the existing bias against exports, aid requirements are likely to increase rapidly over the next decade. If Pakistan succeeds in borrowing abroad, from either commercial or official sources, there is a real danger of a rapid increase in the debt service burden.

Alternatives to Aid

According to World Bank estimates (1987), nearly 64 percent of Pakistan's external capital requirements between 1982 and 1986 were financed by aid. Thus aid played a crucial role in generating growth over this period. Furthermore, current projections indicate that aid's share in Pakistan's external capital requirements will increase to about 74 percent between 1986 and 1990, and to 87 percent between 1990 and 1994. On the other hand, ensuring flows of external, concessionary capital is likely to get more difficult. Moreover, as Pakistan has experienced in the recent past, there is considerable uncertainty attached to politically motivated aid. Pakistan, therefore, may have to seek alternatives to aid to sustain growth and to invest in the social sector. One alternative, remittances by Pakistani workers, has been important in the recent past, but they have tapered off and in the future are likely to be lower. Two other alternatives, improving domestic resource mobilization and increasing exports, are explored briefly below.

Improving domestic resource mobilization. Because of inadequate financial institutions and incentives, the domestic savings rate in Pakistan has been persistently low, and public investment has made up a large proportion of total investment (see Table 3.3). Budgetary expenditure as a proportion of GDP has been increasing, but mostly in the form of current expenditure. The

government has been unsuccessful in meeting planned targets for reducing wheat and fertilizer subsidies and increasing the tax base (agricultural incomes are not taxed and excise duties favor domestic consumption goods which reduce revenues).

In the previous section we saw that Pakistan's debt service ratio was not severe. Most of it, however, is incurred by the public sector, and interest payments on the external and internal debt (interest payments on the internal debt, at 15 percent, are higher than the marginal cost of domestic borrowing) constitute a large proportion of government expenditure. In this sense, Pakistan does have a debt problem. Moreover, Pakistan's defense expenditure, at about a third of total expenditure, is one of the highest in the world. These factors have combined to raise the budget deficit to approximately 7 percent of GDP and the internal debt to approximately 34 percent of GDP in 1986.

The projected trends are quite alarming. If Pakistan continues on its growth path and fails to reduce current expenditure and raise revenues, it is estimated that between fiscal years 1986 and 1995 the budget deficit will rise from 7.5 percent to 10.2 percent of GDP and the internal debt from 34 percent to 56 percent of GDP (World Bank 1987). This situation is likely to have at least three disturbing consequences: a further increase in debt to make higher interest payments, an increase in expenditure on tradable goods that might worsen the balance of payments, and government displacement of investment (the "crowding out" effect) because of a squeeze on domestic private credit. These consequences are likely to occur even if external flows continue to be available to support projected growth rates. The situation will be considerably worse if there is little reliance on external flows. Thus it is even more compelling for the government to increase revenues, by broadening the tax base and rationalizing the tariff structure, and reduce nondevelopment expenditure.

Increasing exports. Pakistan's exports have grown at a rate of 7.5 percent between 1978 and 1986—a little faster than the overall growth rate—and they now constitute about 12 percent of GDP. The prospects for more rapid growth are not very good, because of the heavy reliance on commodity exports (cotton, rice, and textiles), which suffer from both price and volume uncertainties. The international outlook for commodities is not encouraging: according to projections made by the World Bank, the commodity price index fell from 100 in the period 1979–81 to 73 in 1986 and is likely to rise slowly to 77 by 1991. The manufacturing value index will grow only slightly faster, from 113 in 1986 to 121 by 1991. Moreover, most of Pakistan's exports are affected by nontariff barriers, such as quota restrictions. For example, 51 percent of Pakistan's exports to the United States are subject to such restrictions, as are 53 percent of those to the EEC and 11 percent of those to Japan. These restrictions are likely to worsen, given the lackluster growth in international trade and the increasingly protectionist trade environment.

Pakistan competes with many other countries in the range of goods that it exports. Thus, given reduced world demand, Pakistani exports will grow only if they are cheaper than those of its competitors. In order to make this possible, exporters must be given incentives that include lower export taxes, lower import duties on intermediate goods used as inputs in export manufacturing, and a careful monitoring of the real exchange rate to maintain incentives for resources to flow into the tradable goods sector. These measures will go some way in enabling Pakistan to fully meet its allotted export quotas. Technological innovation is essential to move toward higher-value textile exports. Currently, unit values of various Pakistani textile exports to the United States and the EEC are substantially below the average of all developing country textile exports.

To sum up, as a strategy for Pakistan's economic development, trade as an alternative to aid does not appear to have a very bright future. For it to succeed, a considerable policy shift will be needed to carve out a larger share in the slowly growing volume of international trade, and there is little evidence that such a large policy shift is in the offing.

Concluding Remarks

In the early 1960s, Pakistan received large aid flows, which slowed in the 1970s and increased again in the 1980s. These trends, which have closely followed the political relations between Pakistan and its largest donor, the United States, lend support to the belief that aid to Pakistan has been largely politically motivated. Periods of rapid economic growth in Pakistan have also coincided with periods of large aid inflows. Moreover, it appears that donors have contributed not only directly by providing substantial resources, but also indirectly by influencing policy changes that have encouraged growth. This was particularly evident in the 1980s, when policy reforms were enacted that achieved growth rates comparable to those of the 1960s, even though real aid flows were below the 1960s level.

The technical assistance component of aid has been important in Pakistan. For example, the Harvard Advisory Group helped the government in formulating the development strategy of the 1960s. Important institutions that have shaped Pakistan's economy, such as the Water and Power Development Authority, Pakistan Industrial Credit and Investment Corporation, Pakistan Agricultural Prices Commission, and even the Planning Commission itself, have benefited from donor technical advice as well as financial support. Given this close relationship, it would not be wrong to credit the successes and the failures of economic policy in Pakistan to the partnership between the government and its major aid donors, the United States and the World Bank.

A glaring failure of the partnership in the 1960s, however, was the inadequate attention given to equity at both the individual and regional levels. In

the 1970s, donors wrung their hands but failed to come to Pakistan's rescue, missing a good opportunity to support Bhutto's promise of social reform and to use the leverage of aid to check the policy slide that disrupted Pakistan's growth. Only in recent years have donors focused on neglected social sectors by identifying the seriousness of the problem and by constantly reminding the government of the importance of a literate and healthy work force.

To maintain its growth through the 1990s, it appears that Pakistan will have to continue to rely on aid. This is a cause for concern because the international aid environment is getting tighter and because Pakistan may once again go out of political favor. Given current trends, alternatives to aid, such as an increase in exports and greater domestic resource mobilization, are not very promising. If Pakistan is to be less dependent on foreign aid, policy reforms must focus on increasing both public and private domestic savings and improving the quality of exports in order to make them competitive in international markets.

CHAPTER 4

NARONGCHAI AKRASANEE

Foreign Aid and Economic Development in Thailand

With a reputation as one of the fastest-growing and most successful developing countries, Thailand is in a prime position to become a newly industrializing country (NIC). The country has achieved solid growth over the past two decades, with annual per capita income growing by a rate ranging from 3.2 to 4 percent. The government has followed a careful development strategy, restricting its own investment to infrastructure, while strongly encouraging private investment. Although Thailand continues to rely upon foreign capital, it has also strictly limited the level of debt. As a case study, the experiences of Thailand show what can be achieved with a strategy that stresses exports, a strong private sector, and limited debt.

The economic development of modern Thailand had its origin in the early 1960s, when the government, under the leadership of Field Marshall Sarit, began to replace state capitalism with private enterprises. Investment incentives for foreign investors and local entrepreneurs were instituted, but when they did not meet the projected investment target, foreign aid bridged the gap. Early industrialization focused on import substitution, but when that policy foundered, Thailand turned in the mid-1970s to a strategy based on the export of manufactured goods.

The United States and Japan are Thailand's main sources of foreign capital. Foreign aid has played a favorable role in Thailand's development,

TABLE 4.1 Basic Indicators of Economic Development in Thailand, 1960–85

	1960–70	1970–80	1980–85
Annual growth of per capita income (%)	3.9	4.0	3.2
Inflation rate (%)	2.0	9.3	4.8
Percentage distribution of GDP on			
Consumption	79.2	76.2	78.3
Capital formation	21.4	24.0	22.8
Imports	19.9	25.9	27.5
Exports	17.8	21.8	24.5
Balance of payments (billions of US$)			
Trade	-0.3	-1.1	-2.8
Current account	-0.1	-0.7	-2.0
Capital account	0.1	0.6	2.1

SOURCE: National Economic and Social Development Board, Bangkok, and Bank of Thailand.

primarily by helping to establish transportation and communication infrastructures that have benefited the economy as a whole. Agriculture has also become significantly more productive with the help of foreign aid. In recent years, however, commercial loans have become more important in Thailand than concessional flows.

Thailand still faces several economic challenges. In spite of growth, poverty and social equity issues continue to present problems. Moreover, policymakers in Thailand place great importance on domestic savings as the source of investment funds and see as their great challenge overcoming the persistent gap between savings and investment.

This chapter will begin with an overview of Thailand's economic growth and development, looking at indicators such as growth, trade, investment, employment, and social equity. The next section will examine the pattern of aid and capital flows and the factors that influence these flows. The final section analyzes the relationship of aid to economic policy and performance.

The Thai Economy

Growth and structural change. In Thailand, economic growth has been the product of rising investment in the private sector, with the government playing a supporting role by developing infrastructure. Thailand has an enterprising private sector, with generous investment incentives, and businessmen and technocrats in the public sector support the importance of the private sector.

Until the global economic recessions of recent years, Thailand's impressive growth performance was accompanied by a moderate savings and investment ratio. With the oil crisis of the 1970s, growth rates declined somewhat and inflation rates rose (see Table 4.1). However, since the rate of population growth dipped to 2.8 percent a year, real per capita gross

TABLE 4.2 Sectoral Composition of Thailand's GDP in Selected Years, 1951–86 (percentage)

	1951	1960	1970	1980	1986
Agriculture	50.1	39.8	28.3	25.4	22.3
Industry	15.2	18.7	25.3	28.5	27.6
Manufacturing	10.7	12.6	16.0	19.7	21.3
Tertiary	34.7	41.3	46.4	46.1	50.1

SOURCE: National Economic and Social Development Board, Bangkok.

domestic product (GDP) grew at 4 percent a year despite double-digit inflation after 1973 and a brief recession in 1974–75. Beginning with the second oil crisis in 1979–80, annual real GDP growth began a general decline, even though the inflation rate was lowered from 20 percent in 1980 to only 4–5 percent two years later. In 1985, the rate was only 3.9 percent, the lowest annual figure in decades. By 1986, however, the Thai economy showed strong signs of recovery. Financial stability was achieved, and social equity began to gradually improve.

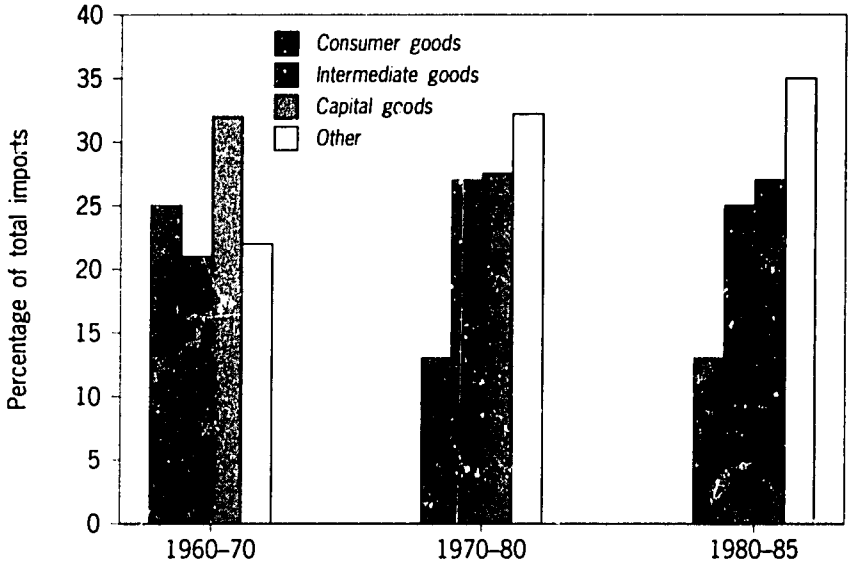
During the past few years, Thailand has been transformed from an agrarian economy into a next-tier NIC economy, with the contribution of manufacturing to GDP currently on the verge of overtaking that of agriculture (see Table 4.2). In the 1960s and 1970s, agricultural growth came mainly from the expansion of cultivated land and cultivation of new crops such as maize, cassava, and sugarcane. At that time land was relatively available and Thailand could export all surpluses at attractive world prices.

In the 1980s the agricultural sector appears to have shifted to a slower growth path. The slowdown is perhaps due less to the exploitation of the land frontier than to the sharp reduction in commodity prices, which has severely reduced incentives to invest in new production. However, the agricultural sector still grew at 3.8 percent a year during 1980–85, partly because of the diversified structure of primary commodities exports and partly because of government efforts to liberalize trade in agriculture.[1]

Thai farmers themselves play a major role in agricultural development. Given area constraint, growth in output of rice and other agricultural products must be achieved through yield increases. Future prospects for agriculture depend largely on improvements in farm technology. In addition, opportunities do exist for the expansion of livestock raising and aquaculture together with further development of agro-processing industrial projects.

The growth of the the manufacturing sector was aided by the government's construction of infrastructure and provision of investment incentives. The sector grew by an average of about 10 percent annually during the 1960–80 period. In the initial phase of industrial development, incentives and other policy measures promoted import-substitution industries; subsequently, however, the policy began to emphasize export-oriented industries. The impact of industrial policies on trade structure will be discussed below.

FIGURE 4.1 Structure of Thailand's Imports, 1960–85

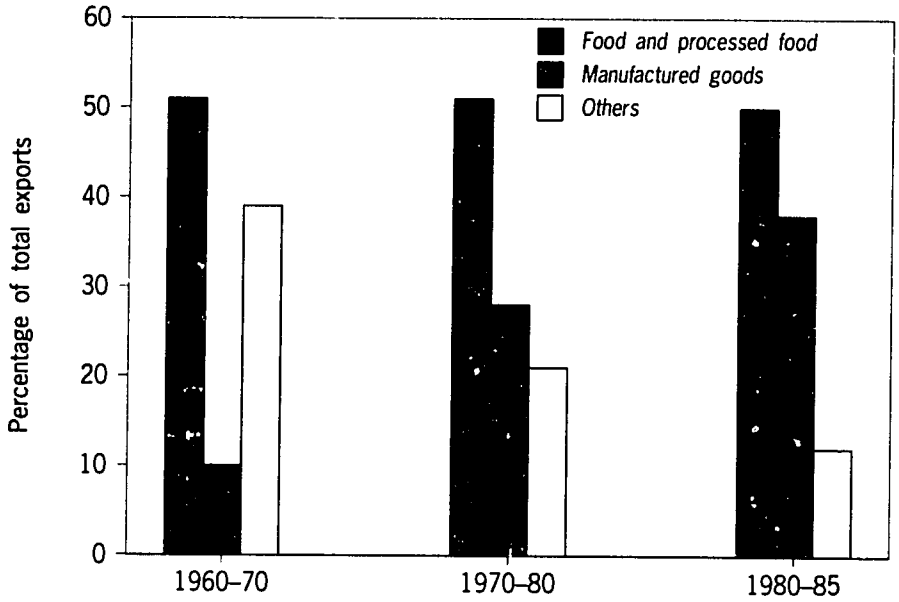


SOURCE: Bank of Thailand.

It should be noted that while tariff protection and investment incentives were extensively used to promote import-substitution industries, the exchange rate policy was by no means used for that purpose. Thailand has pursued a conservative exchange rate policy, and for most of the last thirty years until 1984, the value of the Thai baht had been fixed in terms of the U.S. dollar. There was no major divergence between the nominal and real exchange rates at least until 1973. By the mid-1970s, exchange rates were overvalued by about 15 percent and were from time to time adjusted, as evident in the brief switch to a floating rate system in 1978 and the devaluations in 1981 and 1984 (Torigoe 1987: 100–101).

International trade and payments. When Thailand adopted an import-substitution policy in the early 1960s using protective measures such as tariffs, quotas, and surcharges, consumer goods declined as a share of imports (see Figure 4.1). Although industrial output grew rapidly, the trade deficit kept widening, and capital and intermediate goods industries remained underdeveloped. The policy also brought low employment elasticity and inefficient production. It became obvious, in light of these problems, that such a policy would not be able to sustain long-term industrial growth. Therefore, in the mid-1970s, Thailand undertook a new trade policy based on promotion of export industries.

FIGURE 4.2 Structure of Thailand's Exports, 1960–85

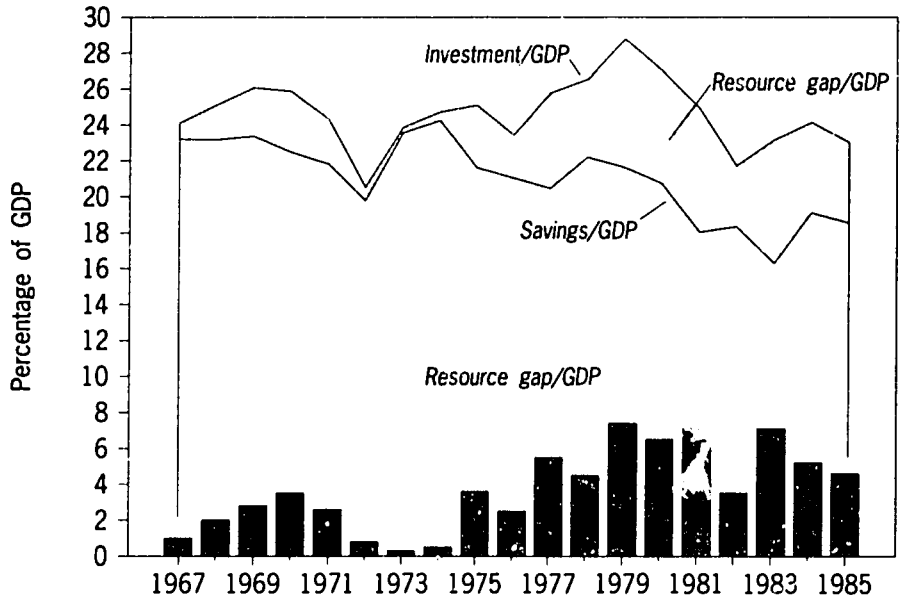


SOURCE: Bank of Thailand.

The changing structure of Thailand's foreign trade reflects the changes in the country's production structure. Over time, the predominant exports shifted from mainly primary commodities to processed commodities and other light manufactured products (see Figure 4.2). In the 1970s, the share of primary products, including raw materials, declined, while processed foods, such as sugar and canned fruits, and other manufactured products increased. Major manufactured exports include textiles and garments, precious stones, and integrated circuits: these items accounted for 16.7 percent of Thailand's exports during the 1980–85 period. For most manufactured products, Thailand's export growth began from a relatively low base, and its share in the world market is still small. Recent developments, however, indicate a potential for continued diversification in Thai manufactured exports and a capacity to produce goods that are competitive in international markets. Despite tariff and nontariff barriers to certain items,[2] the prospect for manufactured goods is bright, given the favorable domestic policy.

The trade deficit, however, has been persistent over time, increasing in the 1970s and becoming even more pronounced during 1980–85, when it averaged $3 billion annually. Fortunately, while the trade deficit was widening, the balance of payments was in surplus in most years. A substantial part of the trade deficit was usually offset by the surplus in services and net capital inflows. The latter will be further discussed in the section on aid and capital flows.

FIGURE 4.3 Aggregate Domestic Savings and Investment in Thailand as a Percentage of GDP, 1967–85



SOURCE: National Economic and Social Development Board, Bangkok.

Financial resources and investment. The imbalance between domestic savings and investment has been problematic for Thailand for over a decade. During the Fourth Plan (1977–81) and immediately after, economic development led to a widening gap between investment and domestic savings. While the gap averaged about 2.0 percent during the first half of the 1970s, it rose to an average of 5.5 percent in 1977–85 (see Figure 4.3).

The savings-investment gap tends to manifest itself in the current account deficit. Between 1976 and 1979 total investment in Thailand increased from 23 percent of GDP to 29 percent, while the savings ratio remained in the range of 20–22 percent of GDP. The savings ratio deteriorated further in the 1980s, and it was the poor level of savings, particularly in the public sector, that caused the overall deficit in the current account. In 1982 investment declined to 22 percent of GDP, the lowest ratio among Asian and Pacific countries in that period. To worsen the matter, the savings ratio subsequently declined to the 16–17 percent range, mainly because of the interest rate controls on savings deposits (Thailand Development Research Institute 1986: ch. 3).

It is important to distinguish the factors that may lead to a resource gap. A deficit in the current account caused by a low savings ratio is far more critical than a deficit caused by overinvestment. An increase in investment

can produce positive results in terms of greater future output. Likewise, consumption tends to increase when the economy saves sufficiently to service the national debt. In the case of Thailand, however, the deficit in the current account had been caused by a reduced savings ratio. Under such circumstances, foreign lending tends to replace domestic savings (Weisskopf 1972: 25–38), but it does not necessarily lead to a higher level of investment. Therefore, when GDP was growing at an annual rate of 7 percent during 1977–78 and the deficit was 8 percent of GDP, the economy was in a better position than it would have been with a 5 percent deficit and 4–5 percent growth rate.

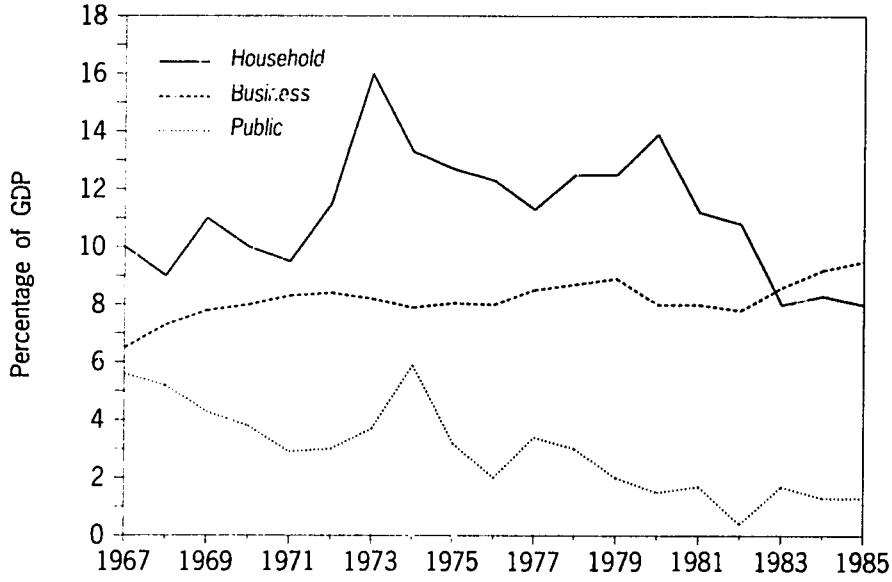
Between 1981 and 1985 accumulated current account deficits reached $9.4 billion (representing 5.3 percent of GDP). At the same time, total outstanding debt increased by $6 billion. At the end of 1985, long-term debt stood at $12.8 billion, out of which government debt and other public-guaranteed debt accounted for $9.4 billion. When one includes the short-term private sector debt of $3 billion, the external debt of Thailand reached $14.9 billion. This cumulative amount represents 39 percent of GDP or 149.6 percent of export revenue. The debt service ratio (that is, debt service/export revenue) jumped from 17.3 percent by 1980 to over 25 percent by 1985. Though this DSR may be small when compared to that of other debtor countries, the government decided to take precautionary measures to forestall the problem and reduce the growth of indebtedness. Thus it strengthened the Committee on Debt Creation and at the same time limited the level of new borrowing to $1 billion per year.

Thailand's challenge now is to reduce the savings-investment gap while continuing to grow. Steps must be taken to raise domestic savings. As depicted in Figure 4.4, until the end of the 1970s, household savings were distinctly larger than those of the business and public sectors but have since fallen markedly. Therefore, in addition to improving public resource management, with special reference to public borrowing and the collection of tax revenue, policy must focus on accelerating household savings (Thailand Development Research Institute 1986: ch. 5).

Furthermore, rather than allowing exogenous developments such as world commodity prices or a worldwide crisis in agricultural trade to force increased austerity on the Thai economy, Thai policymakers have fostered export-led growth, with an emphasis on manufactured exports. Thus, foreign exchange earnings from manufactured exports are expected to help bridge the resource gap.

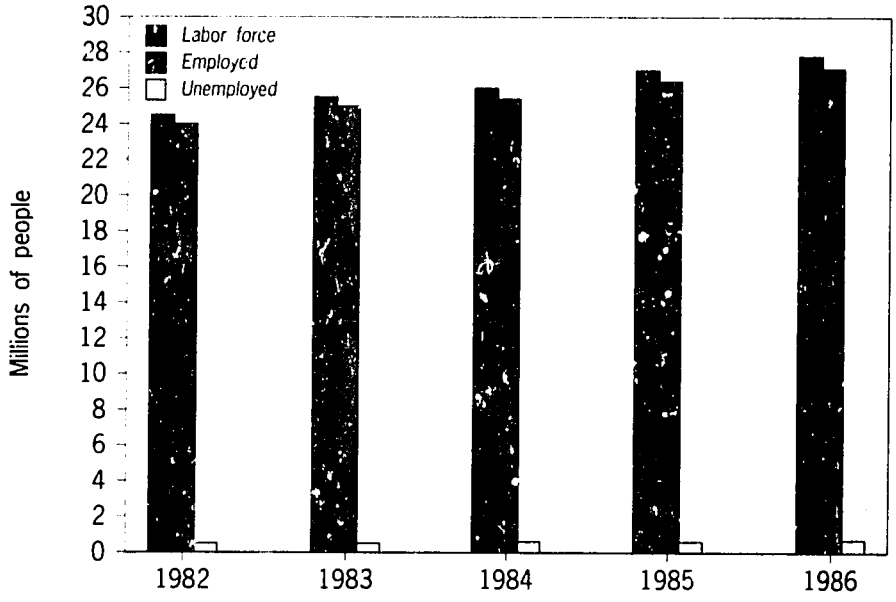
Employment. During the 1981–86 period, Thailand's labor force grew at an average rate of 3 percent per year, because of the previous high population growth rate. In 1986 the labor force was estimated to number 27.6 million persons or 53 percent of the total population; 98 percent of the total labor force was employed and the remaining 2 percent was openly unemployed (see Figure 4.5).

FIGURE 4.4 Sectoral Disaggregation of Domestic Savings in Thailand, 1967–85



SOURCE: National Economic and Social Development Board, Bangkok.

FIGURE 4.5 Labor Force, Employed and Unemployed, in Thailand, 1982–86



SOURCE: National Economic and Social Development Board, Bangkok.

Despite rapid industrialization, agriculture still accounts for a major portion of Thailand's employment (68 percent or 18.5 million persons in 1986). The growing manufacturing sector has not been very successful in creating new jobs. In recent years the increased rates of seasonal unemployment in rural areas and open unemployment among young educated people have emerged as a major socioeconomic problem. Although the government has given employment issues a high priority in the Sixth Plan (1987-91), the problem of unemployment and underemployment persisted for the remainder of the 1980s.

Social equity. In spite of its favorable economic performance, Thailand still faces problems of social inequity (Krongkaew 1982). The rapid economic progress has not necessarily brought a better standard of living for rural people in the agricultural sector. One-third of agricultural households (about 9 million people) remain below the poverty line, and their household income has improved only slightly since 1960. Three-quarters of poor Thai households (8 million people) live in the rural north and northeast of Thailand.

With efficient labor mobilization, low-income farmers tend to accept employment as unskilled labor as long as the new pay is higher than their farm plus nonfarm income. Although unskilled jobs have multiplied along with GDP since 1960, there are more low-income farmers than available jobs, and thus the real wage rate for unskilled labor has remained fairly constant over the past fifteen years. In Bangkok and other urban centers, low-income population (that is, population below the poverty line) has made up 9–13 percent of urban population since 1964. Since poverty has remained stable in urban areas while declining in rural areas, the proportion of urban poor has increased from 4 percent of total population in 1968–69 to 9 percent in 1975–76. Nevertheless, poverty in urban areas remains less severe than poverty in rural areas (except the central region). Real income from nonfarm activities has continued to grow. Urban residents with either capital or education tend to receive enormous benefits from economic growth.

It is generally believed that the growth-oriented strategy has been efficient in reducing the degree of poverty during the period of capital scarcity, because factors of production, especially labor, are free to move to the growing sectors of the economy. But as more local capital becomes more available, an equity-oriented strategy will be called for. Much still remains to be done to foster social equity and eliminate poverty.

Aid and Capital Flows

The pattern of aid and capital flows. Foreign capital inflows have been an important component in the economic development of Thailand. These flows include private direct foreign investment and loans, official development assistance (ODA), non-ODA, and grants. In 1960, total receipts net

TABLE 4.3 Capital Flows to Thailand, by Type, 1960–84 (millions of U.S. dollars)

Year	TRN	ODA	Non-ODA	Grant	Private investment
1960	173.8	42.8	125.6	2.3	3.1
1965	121.3	40.4	37.4	1.0	42.5
1970	481.5	61.9	282.6	1.1	53.7
1975	285.1	67.9	67.5	8.6	88.6
1976	183.1	71.4	28.5	3.6	79.6
1977	378.9	103.1	145.3	22.2	108.3
1978	598.4	199.5	317.9	25.2	55.8
1979	959.2	310.7	430.8	62.0	155.7
1980	927.1	333.5	284.7	72.1	236.8
1981	1,268.9	326.9	563.6	85.9	292.5
1982	1,037.7	269.2	459.9	93.5	215.1
1983	1,178.3	352.5	352.0	109.9	360.9
1984	1,451.9	366.4	516.8	117.3	403.5

SOURCE: Organization for Economic Cooperation and Development data on financial flows, and Bank of Thailand.

(TRN), including all of these sources, amounted to $173.8 million, which accounted for 6.5 percent of Thailand's gross fixed capital formation. The total resource inflow increased to $481.5 million in 1970 and $1,451.9 million in 1984, or 15.5 percent and 18.6 percent of gross fixed capital formation, respectively (see Table 4.3). The largest component of the TRN has always been non-ODA lending, especially from the official sector. Although ODA loans and grants were significant in earlier years, as the Thai economy has grown in terms of per capita income, Thailand has come to rely more and more on non-ODA loans. Foreign direct investment has not been an important source of capital flows into Thailand, except in certain sectors such as some areas of manufacturing and the oil and gas sector.[3]

There are three major sources of capital flows into Thailand—the United States, Japan, and the World Bank—and they have passed the leadership role among them over the years (see Table 4.4). Most recently, Japan has been the major source of capital flows to Thailand. The United States shifted its global

TABLE 4.4 Aid and Capital Flows to Thailand by Source for Selected Years, 1960–84 (millions of U.S. dollars)

	Largest bilateral donors					Multilateral donors						
Year	France	Germany	Japan	U.K.	U.S.	IBRD	IDA	IFC	ADB	EDF	IMF Trust	Total
1960	0.00	0.24	1.12	0.00	149.83	25.09	-2.44	0.00	0.00	0.00	[illegible]	173.83
1965	0.00	27.20	12.87	2.10	87.10	-8.00	0.00	0.00	0.00	0.00	0.00	121.27
1970	-1.72	10.12	215.20	47.18	132.18	50.86	0.00	22.99	4.71	0.00	0.00	481.52
1975	34.63	-4.44	121.35	-1.90	20.70	41.53	4.27	13.54	55.40	0.00	0.00	285.08
1980	1.05	115.84	274.74	71.49	190.00	117.18	4.13	30.00	75.96	2.10	44.65	927.14
1984	30.10	22.01	614.46	20.63	253.95	257.37	11.09	-5.16	107.47	14.05	0.00	1,325.95
1960–84	433.06	803.82	3,868.56	419.29	2,600.22	2,170.16	99.98	82.88	729.98	36.51	190.88	11,435.33

SOURCE: Organization for Economic Cooperation and Development data on financial flows.

TABLE 4.5 Aid and Capital Flows to Thailand by Sector for Selected Years, 1960–84 (millions of U.S. dollars)

Year	Agriculture	Industry	Power	Communication	Health	Education	Community and social development	Public administration	Other	Total
1960	31.6	4.3	45.7	31.5	11.9	10.5	8.3	14.9	15.1	173.8
1965	23.0	7.9	25.1	18.2	9.7	12.1	9.0	7.1	9.2	121.3
1970	144.0	13.9	117.6	65.8	23.0	30.1	37.0	21.1	29.0	481.5
1975	65.5	10.3	85.2	31.6	22.9	9.3	14.8	15.9	29.6	285.1
1980	344.0	16.7	185.1	106.0	13.9	96.7	92.1	52.1	20.5	927.1
1984	532.0	25.3	234.1	176.9	22.6	161.9	140.9	122.4	35.8	1,451.9

SOURCE: Organization for Economic Cooperation and Development data on financial flows, Bank of Thailand, and Department of Technical and Economic Cooperation.

interest to other regions of the world following its failure in the Vietnam War, and loans from the World Bank became less concessionary. At the same time, Japan developed a business interest in Southeast Asia and also had a capital surplus.[4] At present, with the fear of continuous yen appreciation, Thailand is shifting away from Japan as a primary source of funds and is now seeking financing from the international capital market in the form of syndication, usually with American and Japanese banks. Much of the capital flow into Thailand is now in the form of commercial loans.

The pattern of capital inflow by sector is determined by the type of inflow (see Table 4.5). ODA and grants have gone toward agricultural development, education and cultural development, and other social services. Non-ODA, on the other hand, has concentrated on transportation, telecommunications, and physical infrastructure. Agriculture and mining have also received a significant portion of non-ODA loans. Private flows, in the form of either direct foreign investment or commercial loans, have gone mostly into the manufacturing and the oil and gas sectors.

Factors influencing the pattern of aid and capital flows. Both the United States and Japan have played extremely important roles in determining the pattern of foreign aid received by Thailand, either directly in bilateral form or indirectly through the World Bank, the International Monetary Fund (IMF), and the Asian Development Bank (ADB). In the 1960s, when the United States was active in Southeast Asia and had abundant funds available, much American aid flowed into Thailand; between 1957 and 1971 economic aid amounted to $522.6 million and military aid came to $741.4 million (Caldwell 1974: 167, 171). The flows in that period consisted of project rather than program aid, and they were accompanied by many American technical experts. Large numbers of American personnel came to work with United States Operation Mission on sixty-one development projects, including highway construction, health care, rural development, and electrification. The World Bank was the second largest source of dollars, with loans to

Thailand of $346.9 million for the construction of fourteen infrastructure projects (Baldwin and Maxwell 1975: 26).

In the 1970s and the aftermath of the Vietnam War, when the United States started to focus its attention on other global regions and Thailand adopted a policy that stressed less dependence on the United States, aid to Thailand became more multilateral. The World Bank and the ADB began to satisfy Thailand's financial requirements. Thailand also had available more experts to work on development projects with the World Bank and the ADB. Like the United States, these two lending institutions offered project and not program lending in that period.

In the 1980s, Thailand shifted back to bilateral aid. Toward the end of the 1970s Japan experienced a large capital surplus and was able to offer loans to Thailand at very attractive concessionary terms: the loans carried a 3.5 percent interest rate and a thirty-year maturity period, including a ten-year grace period. Loans from Japan were used mostly to finance projects involving construction of physical infrastructure, with a high priority on the development of the eastern seaboard area. The Japanese government has also supported other major projects since Thailand's early period of development, including a gas-separation plant, ports, industrial estates, and water supplies (Embassy of Japan 1986: 3–5), and has increased aid flows to these projects in recent years.

Bilateral aid naturally carries with it certain conditions favorable to the donor countries. The conditions, which vary from one country to another, are generally designed to fulfill either commercial or sociopolitical objectives. Bilateral aid from the United States usually includes both types of conditions, while Japanese aid has emphasized conditions related to commercial objectives. Japan has been criticized for adopting practices and procedures aimed directly at increasing the level of Japanese exports of goods and services to Thailand. Such tied aid often involves the use of Japanese construction firms and the provision of Japanese technical assistance for feasibility studies and project designs. Other smaller donors such as Canada, Australia, and Germany generally base their aid on development considerations.

Availability of aid is usually related to the recipient's acceptance of conditions placed on funding. Thus Thailand may choose between a small amount of untied aid or a large amount of aid with conditionality. In the past, faced with the lack of domestic capital, Thailand was willing to accept conditions that came with aid. Untied aid is naturally preferred, however, and as Thailand obtains more local capital it will become more selective in accepting aid.

Program aid. As described above, most funding to Thailand to date has been in the form of project aid; the concept of program aid is relatively new there. Thailand's major program aid has consisted of two structural adjustment loans from the World Bank in 1982 and 1983. These packages included structural adjustment measures designed to expand infrastructural facilities

and implement institutional reform. A third loan was planned to improve the balance of payments, but since Thailand's balance of payments position is relatively strong, the third loan has been forgone.

The United States has provided aid to Thailand for two major programs, one on science and technology and the other on rural industrialization. Since both aid programs have just been introduced, it is too early to assess their impact.

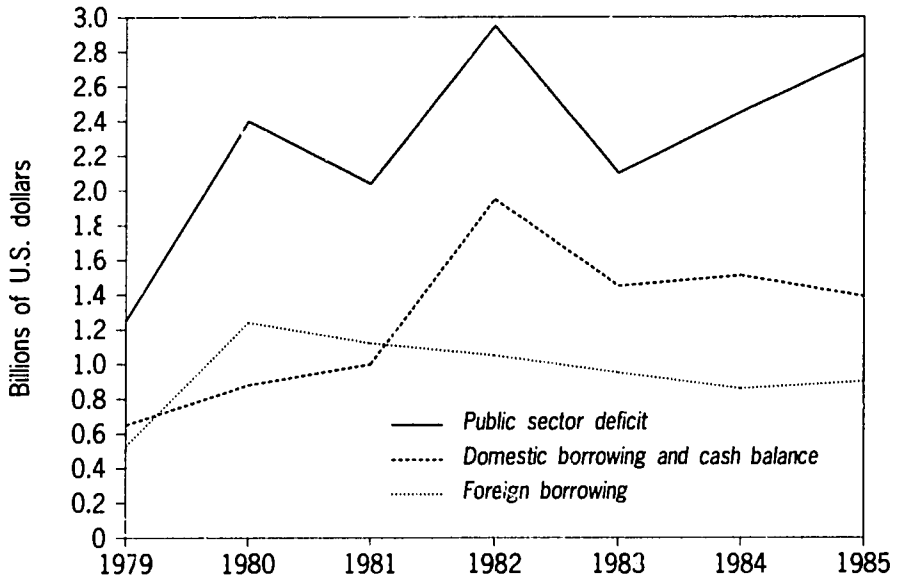
Japan has shown interest in supplying program aid to Thailand and other member countries of the Association of Southeast Asian Nations (ASEAN) to help increase the export-manufacturing capabilities of these countries. The program includes loans to finance physical infrastructure, investment promotion measures, technological assistance, and trade promotion measures. In 1985, the Overseas Economic Cooperation Fund (OECF) provided the first part of a two-step loan of Y3,825 million through the Industrial Finance Corporation of Thailand (IFCT) to finance the Export Modernization Program. The IFCT also contributed about Y1,148 million in counterpart funds. The program, designed to offer loans and technical assistance to export-oriented small and medium-sized industries, differed from usual lending to industry in that technical assistance was made available throughout the project cycle, that is, from the project's conceptual phase to its operational phase. By the end of July 1987, loans had been approved for seventy-two projects amounting to Y3,880 million. It appears that this lending has indeed contributed to the competitiveness of small and medium-sized Thai enterprises, and the OECF is now considering the second phase of the loan program.

Aid and Economic Policies

Aid and domestic economic policies. Foreign aid has played an important role in the domestic economic policies of Thailand, particularly in the 1960s and 1970s, but also in the early 1980s. Some of the major policy developments are discussed below.

Savings. Domestic savings are the most suitable source of capital to finance Thailand's development needs, and the need to maintain a high savings rate has been well recognized by macroeconomic policymakers. In most years during the last two and a half decades, the savings rate in Thailand was relatively high by developing-country standards (Asian Development Bank 1985: ch. 2). Since the late 1970s, however, the public savings-investment balance has been in deficit, and this deficit has been the principal cause of the high overall savings-investment gap of recent years (World Bank 1982: vol. 1, ch. 2; World Bank 1983: vol. 1, ch. 4). Until recently, foreign borrowing was often used as a means to create forced savings in order to push the savings rate to higher levels.

FIGURE 4.6 Thailand's Public Sector Deficit: Foreign and Domestic Borrowing, 1979–85



SOURCE: Bank of Thailand.

Foreign aid has influenced domestic savings policy only in terms of recommendations made to the Thai government by officials of the World Bank, the IMF, and the U.S. Agency for International Development. Only the IMF, however, has consistently recommended a high savings rate.

The pattern of borrowing used to fill the large public resource gap has changed in recent years. As policymakers at the Ministry of Finance, the Bank of Thailand, and the National Economic and Social Development Board (NESDB) have become concerned about the growth of foreign public borrowing, they have tended to seek a higher proportion of funds from domestic lenders instead (see Figure 4.6). In 1986 the government set an annual limit of $1 billion on foreign borrowing for the following few years, in an effort to impose fiscal discipline on public sector financing. Moreover, the Sixth Plan has clearly stated that only 16.7 percent of public capital expenditure shall be financed by foreign capital, compared to an actual figure of 21.7 percent during the Fifth Plan period (NESDB 1987: 63). Foreign capital sources, particularly the World Bank, are therefore declining in importance.

Investment. The World Bank and the United States played a crucial role in the changes in Thailand's investment policy in the late 1950s and the early 1960s. At that time a clear demarcation line was drawn between public investment in public utilities and services, and private investment in everything else. This investment policy has since been endorsed by the World

Bank, the United States, the ADB, and Japan. State enterprises providing public utilities and public services have continued to receive financial and technical assistance from both multilateral and bilateral sources. Thailand's Board of Investment, an agency that promotes private investment, has also received support from several foreign agencies. This strategy has allowed the private sector to take initiatives in investment and contribute to economic growth, while the public sector invests in public utilities and public services according to market demand.

The government, concerned about the performance of state enterprises, is currently moving toward privatizing them, as suggested by the World Bank and USAID.[5] There are indications that the financial performance of state enterprises has weakened since 1980, while at the same time they have grown increasingly important relative to the rest of the public sector. The Thai government has already taken some steps to liquidate, sell, lease, or contract out state enterprises and their activities to the private sector. Thus privatization initiatives under consideration in Thailand are wide-ranging, although so far few have been implemented. It is apparent, however, that resistance from management and labor within state enterprises will make privatization a formidable task.

Growth. Foreign aid and capital flows have contributed, to a certain extent, to the growth of Thailand's economy. Foreign governments and international agencies, preferring certain types of development to others, have introduced biases into Thai policy; because of the large amount of aid directed toward the agricultural sector, these biases have been especially favorable to rural development. Foreign aid, particularly technical assistance, has strengthened Thai agriculture by promoting research on seed varieties, improvement in livestock breeds, and agricultural economics research at Kasetsart University and within the government's own ministries.

In the 1970s foreign assistance focused on farm mechanization projects, which involved machine design and research and development activities, dominated by the Institute of Rice Research. After the widespread adoption of new farm machinery, foreign assistance began to flow to manpower and training projects in the 1980s. The Farm Mechanical Technology Development Project supported by the German government and the Post-harvest Technology Training Centre at Karnjanaburi funded by the Japanese government are examples of such projects.

Despite the positive contributions made by foreign aid on the whole, resources were very limited and were scattered among a large number of projects. The situation was exacerbated by the inadequate absorptive capacities of various government agencies and the poor coordination among them.

Only a small fraction of foreign assistance was made available to the industrial sector, mainly from Japan, Germany, and the United Nations agencies. Recently, the United States and Belgium have also shown interest in offering assistance to the industrial sector. All of these foreign resources were oriented toward the development of small- and medium-scale industries in

the rural areas. The strong performance of the industrial sector has been attributed largely to the quality of Thailand's infrastructural facilities, which received a high proportion of foreign assistance. A large number of projects related to road networks, electricity, and port facilities were financed by the World Bank, ADB, and some bilateral sources,[b] and have brought substantial benefits to industry.

Poverty alleviation. Foreign assistance for community development, education, and public health has so far been limited. Nonetheless, we can learn a great deal from the previous experience in related projects undertaken during the 1960s and early 1970s.

External assistance to community development in rural Thailand has been an extremely controversial issue. Community development projects have aimed to improve the living standards of relatively small and poor communities in rural and urban areas. In the 1960s, this aid was better known for its quantity than its quality. By late in the decade, community development aid had become a counterinsurgency tool, and villager-government relations became a central issue in the debate over aid. It has been strongly argued that Thailand's absorptive capacity for American assistance declined in this period (Caldwell 1974: ch. 6).

The picture changed in the 1970s. The concept of "growth with equity" was first introduced in the Third and Fourth National Development Plans, 1972–76 and 1977–81, respectively. Income distribution and social justice were then laid down as objectives of the development effort. Although some are skeptical about the real goals and effectiveness of development projects (Thandee 1985), it is nevertheless true that the rural-urban disparities have not worsened as skeptics predicted.

In the area of public health, foreign aid was effective in eradicating and controlling communicable diseases but has led to very little progress in providing health services to people in rural areas. Until recently, one of the major obstacles in public health development has been a shortage of personnel, especially physicians and nurses, in rural areas. Physicians who *are* in rural areas are concentrated in towns, leaving remote areas with an acute shortage of medical care. External assistance, unfortunately, has played a role only in medical research and lately in the operation of refugee camps along the border.

Finally, the progress of family planning programs is noteworthy. The Community and Population Development Association has been successful in contributing to the decline in the birth rates from about 3.5 percent in the 1970s to less than 2 percent in the 1980s.

Since the late 1970s a large number of the community development projects have been implemented by governmental as well as nongovernmental organizations. Unfortunately, not only the lack of coordination between agencies, but also differences in methodology and concepts of development projects have had adverse results (Tongsawate and Tips 1985).

Policy dialogue. Policy dialogue between the Thai government and major donors has always been an integral part of economic assistance in Thailand. In the 1960s, American advisers were actually working at the Thai planning agency and other government departments that received aid. Their influence over the formulation and implementation of development policy was far-reaching, and it was these advisers and the Thai technocrats at the time that set the course of the Thai private enterprise system.

During the same period the World Bank also had a profound impact on Thai economic policy. In 1959 the World Bank mission led by Professor P. T. Ellsworth prepared a blueprint for Thailand's first development plan (World Bank 1959).

Later, in the 1970s and 1980s, when the basic infrastructure was more or less completed, the policy dialogue between the Thai government and the World Bank and IMF helped contribute toward Thailand's financial stability and the further growth of the private sector. Each year the World Bank and the IMF sent missions to Thailand to discuss economic policy. While the IMF concentrated on monetary and fiscal policies, the World Bank emphasized general macroeconomic policy and industrial development policy. It was a World Bank mission led by Professor Bela Balassa in 1979 that strongly advocated the policy of export-led industrialization (World Bank 1980). Thailand adopted this policy in the Fifth Plan (1981–86) and still pursues it vigorously.

Until the early 1980s, an annual formal dialogue between Thailand and its major donors took place in Paris. This conference was attended by the secretary-general of the NESDB and other high-ranking government officials and was an important forum for the exchange of views between Thailand and its donors.

The discussion so far indicates that Thailand appears to have a rather benign and friendly view of the role of the World Bank, IMF, and United States in its development. This is simply because Thailand has not faced the serious economic problems experienced by other developing countries, and therefore the World Bank and IMF have not taken the harsh measures they have elsewhere.

Since Japan became the major donor to Thailand in the late 1970s, however, there has been very little policy dialogue between the two countries. Japan appears to have scant interest in Thailand's policy formulation. The dialogue has mostly concerned issues of trade relations, expanding in recent years to cover other aspects of economic relations, such as investment, industrial cooperation, and economic assistance.

Aid and the private sector. Until very recently foreign aid has not directly concerned the private sector. As discussed above, Thai policymakers believed that aid should play strong role in establishing infrastructure rather than in supporting the private sector and large-scale industry. Of course, the private sector benefited from the basic infrastructure constructed by aid

money, and from the fact that all donor countries and agencies strongly advocated the free enterprise system.

In the past few years, the United States, through USAID, started a program called Private Enterprise in Development, which has directly benefited the private sector. The program strengthens private business institutions, promotes public and private sector collaboration, and offers easier access to formal credit. Furthermore, in early 1987 USAID channeled financial assistance through Thai commercial banks for the first time. About $1 million has been used to finance a venture capital business. The project was sponsored jointly by USAID and six Thai commercial banks, led by the Siam Commercial Bank.

The World Bank and the ADB have provided loans to the private sector in Thailand through the Industrial Finance Corporation of Thailand, and these loans have so far amounted to $201 million. When foreign exchange was scarce in the 1960s, these loans were helpful, but at present, as the private sector and the IFCT are able to obtain foreign loans at comparable terms from commercial sources, the funds from the World Bank and the ADB cannot be treated as concessionary loans.

Several other donor countries, including West Germany, Japan, the Netherlands, and Belgium, have also given loans at concessionary terms to the Thai private sector through the IFCT.

The next phase of foreign assistance to Thailand is expected to involve the private sector much more directly than before, in response to the recognition that the private sector has an extremely important role in the development of the Thai economy.

Conclusion

Much experience has been gained since the 1960s on the interaction between aid and economic development in Thailand. Although foreign assistance accounted for only a small portion of total capital expenditure, it has contributed significantly to the growth of the Thai economy by establishing infrastructural facilities and social overhead such as roads, communications, and ports. In addition, evidence has shown the positive contribution, albeit quite limited, of foreign assistance in agricultural research and extension activities, community development, higher education programs, and family planning programs. Moreover, the efficiency of these investments tended to be increased by the organizational or technological know-how of foreign donors.

Since most aid goes to the public sector, it is worth asking whether the government develops a larger role in the economy at the expense of the private sector. As it turns out, the opposite has been true in the case of Thailand. The role of the private sector as the prime engine of growth has been widely recognized by government officials and businessmen. Every

effort has been made to create economic conditions favorable to private investment. In addition, external assistance has led to an improved functioning of markets and the private sector.

A recent trend in foreign aid has been the focus on private institutions and the public and private sector cooperation. Thailand can serve as a model for how aid to finance private ventures can be distributed through organizations such as development financial institutions or even commercial banks, rather than being channeled through government agencies.

Finally, aid and capital inflow will continue to play an important role in financing both public and private investment, but should not serve as a substitute for domestic savings. Thus foreign assistance is expected to be a complementary source of flows contributing to the development of Thailand.

CHAPTER 5

SURJIT S. BHALLA

Economic Policies, Foreign Aid, and Economic Development in Sri Lanka

Sri Lanka is ideal as a case study of foreign aid and economic development for several reasons. First, its small size allows almost any aid donor or program to have a substantial impact. At the end of 1985, its population was only 16 million. Thus, even a $100 million loan amounts to $6 per capita, which is almost three times what its big neighbor, India, receives. Second, since independence in 1948, Sri Lanka has had a democratic form of government, of which there are (or were) relatively few in the developing world. This fact is useful for analyzing the "political economy" of aid. In Sri Lanka, the government had to acknowledge domestic political realities when it implemented reforms, whether suggested by the donors or initiated internally, and the case of Sri Lanka therefore offers an interesting look at the relationship between domestic politics and aid policy.

Perhaps the most distinguishing aspect of the Sri Lankan experience is that since 1948 power has alternated between two political parties with very different political philosophies. Indeed the government has changed hands in every election.[1] The founding party, the United National party (UNP), has implemented pro-growth, market-oriented policies and has been supported

I would like to thank Manmohan Agarwal, Uma Lele, and Ijaz Nabi for their comments on an earlier draft of this paper.

by Western aid donors, while the Sri Lanka Freedom party (SLFP) has promoted pro-equity, government interventionist policies and has received aid from Eastern Bloc donors. This circumstance is extremely useful for helping to identify whether policies influence aid flows or aid flows influence policies. It also provides insights into the effectiveness of the two policy directions.

This chapter focuses on Sri Lanka's experience since 1965, though some analysis of the earlier period (1948–65), when aid flows were small, is presented as well. From a free trade economy under the UNP in 1948–56, Sri Lanka under the SLFP (1956–65) moved to a virtually closed economy, characterized by nationalization of companies and import substitution. When the UNP regained power in 1965, it partially opened the economy, cut costly food subsidies, and promoted rice production. Aid levels doubled, but the close ties between the UNP and Western donors may have had a hand in the UNP's election defeat in 1970.

The 1970–77 SLFP regime reversed the policies of the previous five years and increased food subsidies, import restrictions, and state intervention. Although aid also rose during these years, economic performance was worse than it had ever been, and the SLFP was voted out in 1977. Since then, the UNP has put in place a number of reforms aimed at liberalizing the economy. A large dependence on tree-crop exports and rice imports has been transformed into rice self-sufficiency and a substantially reduced share of traditional plantation or tree-crop exports. Subsidized food rations (mainly rice) were finally reduced in scope and expenditure in 1980.[2] Aid levels have fluctuated, but generally increased from $2 per capita in the 1950s to about $35 per capita today. Finally, the multiracial economy has faced ethnic strife in recent years.[3]

This chapter attempts to explain these transformations, with particular emphasis on the role of foreign aid. The first section documents the evolution of the physical magnitudes of aid flows into Sri Lanka. The next presents the political-economic history of Sri Lanka in four periods with special attention to aid flows and the economic policies pursued by the different governments. The following section presents a brief summary of the relationship between aid, investment, and growth. Finally, the chapter explicitly addresses the relationship between policy and equity, and looks at how living standards have responded to aid-supported policies favoring income growth versus policies emphasizing government spending on items such as food subsidies, health, and education. This analysis should be useful in assessing the effectiveness of aid, since both growth and equity have been and are important development objectives.

The Magnitude of Aid to Sri Lanka

As stated above, one reason Sri Lanka is an important case study is that it has received relatively large amounts of aid, presumed to have been correlated

with political regimes. Therefore, the first task of this analysis is to define the magnitude of foreign aid received by Sri Lanka.

Consistent data on aid transfers since 1970 are available from World Bank documents. Prior to this date, however, conflicting data are reported by various sources (Peebles 1984; Richards and Stoutesdijk 1970; Levy 1985). These inconsistencies arise because of difficulties in obtaining data and the lack of a single definition of aid. Various commodity agreements, food transfers under PL 480 funds, grants, and "liberal" (that is, lower than market interest rate) loans abound in the marketplace and may be included in a calculation of aid. In this chapter, data obtained from the Central Bank of Ceylon and appearing in Dahanayake (1977) are used through 1969, and World Bank data are used from 1970 onward.[4]

Several results emerge from examination of the data on aid in Table 5.1.[5] First, there is a marked jump in aid transfers in 1966 (unless otherwise stated, only transfers in current dollars are presently discussed; not much qualitative difference is obtained between the nominal and real series). These transfers almost double from a per capita level of approximately $2.50 in the early 1960s to around $5 from 1966 onward, because of the formation of the Aid to Ceylon Group under the leadership of the World Bank in 1965. The second important result to emerge is that notwithstanding the political complications (see section on aid and the economy, 1970–77), aid to Sri Lanka not only does not decline, but actually increases during the leftward tilt in foreign policy during the SLFP regime of 1970–77. Aid reached a peak of almost $400 million during 1975 at a time when Sri Lanka should have been benefiting from the commodity boom, but could not because of the

TABLE 5.1 Aid Flows to Sri Lanka, 1955–86

Year	Aid: Billions of rupees	Aid: Millions of US$	Aid per capita (US$)	Real aid per capita (US$)[a]	Aid from Aid Group (millions of US$)	Aid from centrally planned economies (millions of US$)
1955	4.8	5.3	0.6	1.8	n.a.	n.a.
1960	4.7	15.4	1.6	4.4	n.a.	n.a.
1965	4.8	29.5	2.6	7.4	n.a.	n.a.
1966	4.8	51.5	4.5	12.1	n.a.	n.a.
1970	6.0	92.2	7.4	17.9	68.0	24.2
1972	6.2	132.9	10.3	23.3	48.3	84.6
1975	7.0	376.8	27.9	42.9	249.7	60.2
1977	8.9	249.5	17.9	24.8	227.1	4.1
1978	15.6	400.1	28.2	36.2	377.6	10.4
1980	16.5	627.5	42.6	42.6	580.1	n.a.
1982	20.8	497.6	32.8	29.4	428.0	n.a.
1984	25.4	462.0	29.6	25.7	437.8	n.a.
1986	28.0	652.5	40.5	32.0	628.7	n.a.

NOTE: n.a. = not available. In Tables 1–7 of this chapter, data are given for selected years.
a. Aid in real terms is obtained by deflating the dollar value by the U.S. wholesale price index, equal to 100 in 1980.
SOURCE: Dahanayake (1977); World Bank, *Country Economic Reports*.

decline in tree-crop production subsequent to the Land Reform Laws implemented in 1972 and 1975 (for details, see Bhalla 1988a,b).

The third important swing in aid occurs after the installation of the UNP government in 1977. This jump was in the form of tied project aid for the Accelerated Mahaweli Development Programme (discussed below). This expansionary domestic investment program coincided with liberalization, or the attempt of the government to open up the economy. Aid for the nine-year period from 1978 to 1986 amounted to almost $5 billion, or $550 million annually. There has been much discussion of the large magnitudes of aid in this period (for example, Levy 1985), but it is interesting to note that in real per capita terms, aid during the bumper years 1978–86 was only 40 percent more than in the "lean" years, 1971–77. This increase is put in perspective when one notes that during 1971–77, Sri Lanka received more than 120 percent of the average level during 1965–70. Part of the reason aid levels during 1978–86 have been *perceived* as high is that such aid came on the heels of a large (100 percent) devaluation; hence, in terms of access to *domestic* resources, these aid levels *were* high (see section on aid and the economy, 1977–86, and Table 5.1).

Food aid. In contrast to the situation prevailing in some developing countries, food aid has *not* been an important component of aid for Sri Lanka. This has probably occurred for two reasons: first, Sri Lanka has been a relatively rich developing country, both in terms of living-standards indicators like infant mortality and in terms of monetary income[6]; and second, Sri Lankans mainly consume rice, while aid donors (like the United States and Canada) mainly provide wheat.

Table 5.2 reports on the available statistics for food aid to Sri Lanka. Although data prior to 1970 are not available, Richards and Stoutesdijk mention that:

> Food aid played a significant part in Western bilateral aid to Ceylon before 1965, forming about 35 per cent of total commitments. However, in terms of wheat arrivals, this amount, $36 million, of food aid would have covered only about 350–400,000 tons or from 2–3 years imports at the annual import level of the late fifties and early 1960's. The largest food donor before 1965 was Canada, which granted some $13 million worth of wheat flour. PL 480 deliveries accounted for nearly all of the $12.5 million of food aid supplied as loans (1970: 37).

Since 1965, food aid has also mainly consisted of wheat. Such aid has averaged roughly $40 million a year, reaching a peak of $64 million in 1984. As a share of total aid received, food aid has been around 15 percent, with less than an 8 percent share recorded in 1985 and 1986.

One final point: there is extensive discussion in aid literature on the negative effects of food aid on domestic production. However, since wheat

TABLE 5.2 Pattern of Food Aid and Food Imports in Sri Lanka, 1948–86

Year	Food aid: Millions of rupees	Food aid: Millions of US$	Food imports (millions of rupees)	Food aid as % of: Total aid	Food aid as % of: Imports	Food imports as % of total imports
1948	n.a.	n.a.	524	n.a.	n.a.	52.7
1960	n.a.	n.a.	747	n.a.	n.a.	38.0
1965	n.a.	n.a.	604	n.a.	n.a.	41.0
1970	154.3	25.9	1,056	28.1	6.7	46.0
1975	411.3	58.7	2,494	15.6	7.9	48.0
1977	417.9	47.1	2,146	18.9	6.9	35.4
1978	847.7	54.3	4,228	13.6	5.6	28.0
1980	623.3	37.7	6,415	6.0	1.8	18.9
1982	561.9	27.0	3,565	5.4	1.3	8.5
1984	1,628.0	64.0	4,992	12.9	3.4	10.5
1986	1,361.8	48.6	6,747	7.4	2.5	12.4

NOTE: n.a. = not available.
SOURCE: Central Bank of Ceylon, *Review of the Economy*; World Bank, *Country Economic Reports*.

is not produced domestically, and rice has been heavily protected, this issue is irrelevant for Sri Lanka.

Aid and the Economy

1948–65. Unlike several other developing countries, such as India, Sri Lanka relied little on aid until 1965. Three episodes, however, are useful for understanding the evolving relationship between Sri Lanka and aid donors.

The first involved the recommendation of the initial World Bank mission to Sri Lanka in 1951 (World Bank 1953) to drastically cut Sri Lanka's universal food subsidy programs, on the grounds that they drained the economy. The World Bank was echoing a concern that already existed in Sri Lanka, for Sri Lankan policymakers were cognizant of the problems entailed by food subsidies. As a proportion of government expenditure, food subsidies were 13.8 percent, 20.4 percent, and 10.7 percent during 1951, 1952, and 1953, respectively (Table 5.3).[7] The then UNP finance minister J. R. Jayewardene commented in 1953, "The government deficit was largely directed towards increasing consumption rather than towards developing the economy. . . . I know the solution lay largely in the elimination of the overall deficit created by the budget but it was not possible to take this step, without removing as well the subsidy on food" (Ponnambalam 1980: 25).

The rice subsidies were abolished in August 1953, and the price of rice tripled from Rs. 0.125 to Rs. 0.35 per pound. Riots ensued, and both Prime Minister Dudley Senanayake and Finance Minister Jayewardene were ousted. Even though rice subsidies were resumed, their share in government expenditure remained relatively low—less than 8 percent of expenditures—

TABLE 5.3 Subsidies and Rice Prices in Sri Lanka, 1948–86

Year	Food subsidies: Millions of rupees	Food subsidies: % of government expenditure	Budget deficit/ surplus as % of GDP	Rice prices (Rs/kg): Official consumer price[a]	Rice prices (Rs/kg): Effective consumer price[b]	Rice prices (Rs/kg): Farmer price	Rice prices (Rs/kg): Import price
1948	78.0	n.a.	n.a.	n.a.	n.a.	1.02	0.58
1950	36.0	5.7	-0.1	0.82	n.a.	1.03	0.57
1952	247.0	20.4	-5.7	0.97	0.54	1.03	0.82
1955	36.0	3.5	2.3	0.86	0.50	0.98	0.60
1960	193.0	10.6	-6.7	0.93	0.30	0.99	0.46
1965	261.5	11.3	-6.0	0.97	0.28	0.98	0.63
1970	327.4	9.1	-6.6	1.33	0.52	1.22	0.67
1972	529.9	11.8	-7.7	1.55	0.55	1.21	0.55
1975	1,230.0	17.1	-7.9	3.68	2.43	3.33	2.16
1977	1,424.0	16.2	-5.8	3.15	2.13	3.01	1.77
1978	2,162.0	12.2	-14.1	3.48	2.29	3.40	3.81
1980	2,226.0	7.7	-22.2	4.59	4.59	4.35	4.72
1982	1,919.0	5.4	-17.6	5.68	5.68	5.99	5.24
1984	1,901.0	3.7	-8.9	6.18	6.18	6.47	5.43
1986	1,883.0	n.a.	-12.1	6.64	6.64	6.94	4.87

NOTE: n.a. = not available.
a. The official consumer price of rice refers to the market price of rice in the presence of rice subsidies; that is, it represents the marginal cost of an additional kilo of rice.
b. The effective consumer price of rice reflects the cost per kilo of purchasing the first 4 pounds of rice. This cost obviously includes whatever costs have been incurred in purchasing subsidized rice.
SOURCE: Central Bank of Ceylon, *Review of the Economy*; Bhalla (1988a).

until 1960. For Sri Lankan policymakers the implications were obvious—rice subsidies were a strong but costly political weapon.

This first episode illustrates the dual role aid agencies play as technical advisers and as agents of aid. It also illustrates the difficulty of distinguishing between conditionality imposed on an economy and conditionality desired by the aid recipients themselves.

The second major incident concerns the beginnings of the closing of the Sri Lankan economy in the late 1950s by Mr. S. W. R. D. Bandaranaike's MEP/SLFP government.[8] Under this administration, the economy moved from free trade toward import substitution, import controls, protection, and nationalization. Implicit tariff rates[9] on imports averaged 18.5 percent in 1959–60 compared to only 12 percent during 1957–58. These increased to 63 percent in 1963 and 76 percent in 1965 (Table 5.4).

At the time of the elections in 1956, the MEP election manifesto had advocated the "nationalization of all essential industries, including foreign-owned plantations, transport, banking and insurance." Furthermore,

> in contrast to the laissez-faire policy of the previous government, the MEP pursued a transformational policy in agriculture and an interventionist policy in industry and the service sectors of the economy. Its aims also included establishing new industries in the public

TABLE 5.4 Trade Balance, Import Tariffs, and Terms of Trade in Sri Lanka, 1950–86

Year	Nominal exchange rate (Rs/US$)	Trade balance: Millions of rupees	Trade balance: Millions of dollars	Trade balance: Share of exports (%)	Implicit tariff on imports[a] (%)	Price terms of trade[b]
1950	4.8	396.0	83.0	25.3	n.a.	94.1
1952	4.8	-200.0	-42.1	-13.3	n.a.	137.5
1955	4.8	480.0	100.8	24.7	13.3	94.7
1956	4.8	106.0	22.1	6.1	17.6	100.0
1957	4.8	-123.0	-25.8	-7.3	11.5	117.6
1958	4.7	-6.0	-1.3	-0.4	12.5	105.9
1959	4.7	-321.0	-67.7	-18.3	21.6	105.9
1960	4.7	-135.0	-28.4	-7.4	15.2	105.9
1961	4.8	105.0	22.0	5.8	40.9	112.5
1965	4.8	475.0	99.5	24.4	76.4	137.5
1970	6.0	-262.0	-44.0	-12.9	53.1	188.2
1972	6.2	-183.0	-29.5	-9.1	78.2	211.8
1975	7.0	-1,227.0	-175.1	-30.9	117.6	337.9
1976	8.4	-62.0	-7.4	-1.3	161.9	258.8
1977	8.9	509.0	57.4	7.7	110.4	196.4
1978	15.6	-1,907.0	-122.2	-14.4	56.8	200.0
1980	16.5	-16,347.0	-988.7	-92.9	109.0	344.4
1982	20.8	-20,492.0	-984.6	-95.5	59.2	477.4
1984	25.4	-10,194.0	-400.7	-27.3	17.8	301.2
1986	28.0	-20,542.0	-733.1	-60.3	29.1	470.8

NOTE: n.a. = not available.
a. The implicit tax rate has been estimated via an import demand equation. See Bhalla (1988a) for details.
b. The price terms of trade reflects price of imports/price of exports, 1956 = 100.
SOURCE: Central Bank of Ceylon, *Review of the Economy*; Bhalla (1988a).

> sector. . . . Basic heavy industries like iron and steel, chemicals, cement, fertilizers, textiles and sugar were reserved for the government (Ponnambalam 1980: 32–33).

This inward shift in trade policy was most likely due to an ideology of self-sufficiency and nationalism, rather than to a burgeoning trade deficit.[10] Trade balances during the three years 1956–58 were as follows (negative sign denotes deficits): $22.1 million, –$25.8 million, and –$1.3 million. At its local peak in 1957, the trade deficit was only 7.3 percent of exports. In 1959 and 1960, this ratio averaged -13 percent and since 1966 this share has been consistently negative (except for 1977) and generally larger.[11] Nor was there a significant increase in the price terms of trade (price of imports relative to price of exports). This index was at 111 in 1954, 100 in 1956, and 106 during each of the three years from 1958 to 1960. Finally, the Ten-Year Plan issued by the National Planning Council (of which Prime Minister Bandaranaike was chairman) stated: "It is, in principle, easy to commence industrialization on the basis of a domestic market because in this case conscious policies like

protective tariffs could play a more effective role in mitigating difficulties" (Ponnambalam 1980: 34).

Under Bandaranaike, a policy of nationalization proceeded in tandem with import substitution. In 1957, road transport was nationalized; in 1961, insurance; and in 1962, petroleum distribution. The latter, however, met with resistance from the United States, which terminated aid, as required by the Hickenlooper Amendment, since compensation to American companies (for example, Caltex and Esso) was only offered in local bonds.[12] The World Bank followed suit and did not resume aid until the United States did so in 1965.

This cut-off—the third major episode—illustrates the relationship between Sri Lankan political leadership and aid donors. The SLFP had an adversarial relationship with the United States (and by implication, with its allies). This conflict was to recur a decade later when the SLFP was reelected. The other leading political party, UNP, on the other hand, was "allied" with the Western donors and followed their recommendations during the periods it was in power, 1965–70 and 1977 onward. This distinction is useful in understanding the aid flows, and the sources of such flows, to Sri Lanka.

1965–70. In 1965 the UNP inherited a closed economy and soon attempted to reverse the earlier policies (although it did try to expand state control and nationalization). Foreign companies were compensated for their nationalized assets, and under the leadership of the World Bank an Aid to Ceylon Group was formed. This organization became the basic forum for discussions and planning of both multilateral and bilateral aid to Sri Lanka. With the formation of the Aid Group, aid levels doubled from their previous amounts to $50 million annually, and (presumably) aid conditionality was initiated. Cuts in food subsidies and a devaluation occurred in 1967.

An analysis of food subsidies in Sri Lanka is complicated, because such subsidies involve transfers to both high-cost producers and consumers. Since food imports were in the range of 30 to 50 percent of total consumption (Table 5.2), and domestic producer prices were often 60 to 100 percent above international prices (Table 5.3), the subsidy was not in the form of a consumption price below the import price, but rather in the form of a consumption price below the producer price. This issue is discussed in detail in Bhalla (1988a,b); for now, it is important to note that the *effective* consumer price of rice[13] had been at its lowest nominal level ever during the SLFP regime of 1961–65 (the pattern of the effective consumer price is discussed below). This price was Rs. 0.125 per pound or Rs. 0.28 per kilo; the import price was around Rs. 0.52 per kilo and the farmer price around R. 1 per kilo.[14]

As noted earlier, the previous UNP government in 1953 had faced riots and the resignation of both the prime minister and finance minister over the issue of rice subsidies. In the mid-1960s as well, both domestic and international considerations created pressure to cut food subsidies. Although there was a trade surplus of $100 million in 1965, this was the result

of a decline of more than 35 percent in import volume since 1960 rather than to an increase in exports. On the other hand, food subsidies had consistently accounted for approximately 15 percent of government revenue during 1961–65, and budget deficits had averaged around 6 percent of gross domestic product (Table 5.3).

The international analysis of the economic problem was perhaps best expressed by the World Bank in its report *Foreign Exchange Problem of Ceylon* (1966: 1):

> Basic to the foreign exchange crisis is the fact that for nearly ten years Ceylon has lived beyond its means. It has done so not because the standard of living has risen to a level of comfort and luxury, but because the standard of living was permitted to rise at all during a period when real national income per person fell as a result of declining prices and slow growth of domestic production.

Thus, for all these reasons, the government felt compelled to reduce expenditure on food subsidies. At the same time it wanted to minimize the domestic political costs. It found a novel way out of the dilemma, through "expenditure illusion": instead of obtaining four pounds per capita per week at a paid price of 12.5 cents per pound, consumers were now eligible to obtain two pounds completely free; the rest had to be purchased at the market price of 56.5 cents per pound. If a consumption level of four pounds is considered the norm, consumers end up losing with "free rice" since the expenditure level increases by 131 percent, that is, from Rs. 0.5 to Rs. 1.13. However, since free rice was available for the first time, a potentially unpalatable increase in the price may have been perceived as acceptable.

The government created a complementary policy that provided further incentives to rice production. In November 1967, the procurement price of rice rose from Rs. 12 per bushel of paddy rice (a price unchanged since 1952) to Rs. 14—an increase of almost 17 percent. Expenditures on irrigation almost doubled from Rs. 61 million in 1965 to Rs. 107 million in 1967. These policy changes had their desired effect—rice production increased at an average annual rate of 12 percent per year during 1965–70. In contrast to the earlier five-year SLFP period (when expansion of cultivated area was dominant), yields increased, reaching a level of 2,645 kilograms per hectare in 1968–70 compared to 1,700 kilograms per hectare in 1963–65. The 1970 yield level was not to be bettered for another seven years.

Other economic reforms followed. In November 1967, the government devalued the rupee by 20 percent and made the move acceptable by stating that it was "tied" to the devaluation of the British pound, which had been devalued by 14 percent some time earlier. In May 1968, the Foreign Exchange Entitlements Certificate (FEEC) scheme was introduced. The main objective of this scheme was "to promote diversification of Sri Lanka's exports and to liberalize, gradually, the imports so that their flow could be regulated through the market mechanism" (Dahanayake 1977: 118–19). By allowing a

preferential exchange rate for nontraditional exports and "necessary" imports, the FEEC scheme (with the support of the International Monetary Fund) in effect acted as a large tax on Sri Lanka's traditional exports of tea, rubber, and coconut products.[15] (In the reforms of 1978, this mistake of penalizing one's comparative advantage was not repeated; see section on aid and the economy, 1977–86.) Another policy change was the open general license (OGL) system, allowing goods to be more freely imported. These policy changes sharply reduced effective import tariffs to an average of 54 percent in 1969 and 1970, after the 82 percent average of the previous two years.[16]

There is no doubt that Sri Lanka witnessed a mini-liberalization during 1965–70. Nor is there any doubt that these policy reforms corresponded with the ideas of Western aid donors and multilateral institutions like the World Bank and the IMF. However, it is difficult to conclude that explicit conditionality was involved, since these policies were predictable from the UNP's stance during 1948–56. Furthermore, by continuing the policies of nationalization and state expansion (three new state industrial corporations were established in 1967) the new government was not toeing the IMF line. Also, as mentioned above, the UNP government increased taxation (and decreased profitability since international prices showed little movement) of the export crops—again a policy contrary to the supposed recommendations of the donors.

There is evidence that causality indeed worked in reverse: the electoral victory of the UNP in 1965 suggested to Western donors that with aid, policy reforms would be forthcoming. This was implied by the chairman of the first Aid Group meeting in 1965: "As you are no doubt aware, the Bank has not made a loan to Ceylon during the last four years because we are not satisfied that the government's economic and financial policies were conducive to economic growth and proper use of resources" (World Bank 1986: 43; Levy 1985). With the UNP in office, the World Bank found, in the short span from 1967 to 1970, seven projects to finance. One of these projects was the massive Mahaweli Ganga Water Master Plan, aimed at the development of about 900,000 acres of irrigable land in central and northern Sri Lanka over thirty years and the installation of some 500 megawatts of hydropower. An appraisal for this project was written in December 1969.

In May 1970, even though the UNP won a plurality of the votes (37.9 percent of the votes compared with 36.8 percent for the SLFP), it lost the election by a large margin of seats (11.2 percent of the seats compared with 60.2 percent for the SLFP).[17]

It is important that analysts of the Sri Lankan polity and economy give due recognition to the confounding role played by the electoral system. A recent World Bank report on aid (World Bank 1986) concluded the following regarding the 1965–70 episode: "The second UNP government, while attempting to restore growth by encouraging private enterprise, was unable to solve the country's inflation and unemployment problems, and lost the 1970 elections." However, since inflation was averaging 4–5 percent during

1965–70 (and at the time of the elections was only 3.5 percent) and the 14 percent unemployment level was little changed from seven years earlier, it is unlikely that these factors were major causes of electoral loss. Further, the previous five years had witnessed an annual average gross domestic product (GDP) growth rate of 4.5 percent, which was considerably higher than the 0.7 percent recorded in the previous ten years of SLFP rule (1956–65). Although detailed analysis of the election is beyond the scope of this chapter, the plurality of votes obtained by the UNP suggests that the answer to the paradox of losing by winning lies more in the nature of Sri Lankan politics and political institutions than in economic events.

Several of the policy reforms and initiatives of the UNP government were brought into question in the 1970 election campaign. The alleged cozy relationship between the UNP and Western donors was condemned by the SLFP coalition called the United Front. The Front

> pledged that it would follow the non-aligned path, oppose imperialism, colonialism and racism while supporting national liberation struggles, extend diplomatic relations to the German Democratic Republic, the Democratic Republic of Vietnam, North Korea and the Provisional Revolutionary Government of the Republic of South Vietnam . . . and also suspend relations with Israel (Wilson 1974: 148–49; Levy 1985).

The UNP cut in rice subsidies was also an election issue, and Mrs. Bandaranaike promised to restore the rice subsidies even if it meant getting "rice from the moon." In the new regime, the state sector was to be supreme and the UF manifesto declared that the private sector was to play only a subsidiary role in the advance toward a "socialist society." Thus on both political and economic grounds, the SLFP-backed United Front offered a distinctly different alternative to the electorate—and a promise to continue with the policies of the 1960–65 period.

1970–77. The new SLFP government fulfilled almost all of its election promises. Food subsidy expenditures almost doubled in 1971 from their level of Rs. 327 million in 1970 as the government proceeded to restore the rice subsidies. This costly "reform," however, was short-lived. Expansion of state control was implemented—the open general license system was abolished, quotas reinstituted, and several import items banned—and effective import tariffs rose from 53 percent in 1970 to 80 percent in 1971.

Rice production had traditionally been a UNP priority. In contrast, while consumer subsidies were raised, the SLFP government allowed the real producer price of rice to decline by 14 percent in two years (1969–71). Tree-crop producers also lost out, with a Land Reform Law that transferred tree-crop land to the state sector in two stages, in 1972 and 1975 (for details see Fernando 1980).

However, the SLFP met with a mishap on the road to socialism almost before it could embark on the journey. In April 1971, less than a year after it assumed power, the government faced an insurgency led by students belonging to the Janatha Vimukti Peramuna (the JVP or the People's Liberation Front). Although this Front had supported the SLFP during the elections, they now felt that the government was not socialist enough. The JVP uprising was crushed, an estimated 5,000 youths and students were killed, and a state of emergency was declared—and remained in force until 1977.

The diplomatic and economic initiatives were to have an effect on some aid donors, clearly implying a link between policies and aid. However, it is a moot question whether aid would have decreased from some Western donors had the political departures from earlier policy not been made.[18]

Reactions of aid donors. The actions of the new government strained relations with the World Bank, at least until 1974. The SLFP government cancelled three previously approved projects. Also, "a 1970 IFC [International Finance Corporation] investment was cancelled after the Government withheld investment approval for the company concerned." These acts, together with the anti-American policies noted above, probably caused "the Bank's management to declare Sri Lanka no longer eligible for IBRD loans because of high debt service obligations and uncertain export prospects. In 1971 and 1972, IDA allocations to Sri Lanka were cut drastically" (World Bank 1986: 43–44).

Although World Bank commitments stopped completely in 1971 and 1972 (from $29 million in 1970), reactions from bilateral donors appeared in a staggered fashion. American lending declined sharply to $7 million in 1973 while that of the United Kingdom declined from $16 million in 1971 to $100,000 in 1972. Even nonaligned India provided no aid in 1972, from a level of $7.2 million in the previous year. The apparent shunning of Sri Lanka in 1972 is also revealed by the aggregate figures for the Aid Group countries—their commitments declined to only $48 million from a level of $87 million in 1971 (Table 5.1).

Coincidentally, aid from the centrally planned economies was the largest amount ever in 1972. Such aid exploded to $85 million that year, causing aggregate aid to Sri Lanka to increase in 1972 to $133 million. Yet in 1973 World Bank and Aid Group funding increased to 1971 levels—and aid from centrally planned economies declined to zero. This aid pattern is being documented in detail because it is striking in its correspondence with politics. A political equation may be a necessary condition for non-negligible aid flows. Conditionality of economic policies comes considerably lower in the "pecking order," and even that, as discussed earlier, suffers from an identification problem.

From 1973 onward, aid continued to grow, reaching a peak of $377 million in 1975, when Sri Lanka was suffering from both domestic policy failure and high international prices for its imports of food, oil, and other

TABLE 5.5 Selected Macroeconomic Statistics for Sri Lanka, 1955–86

Year	Consumer price index[a]	Food price index	Money supply (M3, millions of Rs.)	Real GDP[b] (millions of Rs.)	Saving as % of GDP	Investment as % of GDP	Aid as % of GDP
1953	69.9	73.8	99	5,135	9.0	13.5	n.a.
1955	68.6	72.5	150	5,966	18.0	9.8	0.4
1960	74.9	75.1	357	6,580	11.1	14.6	1.1
1965	82.2	80.5	608	8,155	12.9	12.9	1.7
1970	100.0	100.0	1,179	11,401	16.2	17.9	4.2
1972	119.7	120.2	1,541	11,779	16.1	15.0	5.6
1975	210.3	238.3	1,706	12,803	8.3	14.4	10.3
1977	243.8	272.2	3,492	14,083	19.0	14.5	6.4
1978	269.9	292.9	5,698	15,305	16.1	21.1	15.4
1980	422.3	453.9	11,970	17,456	12.0	33.5	16.7
1982	570.8	592.6	20,342	19,644	12.4	31.9	10.9
1984	760.0	786.6	28,186	22,707	21.8	28.2	8.4
1986	841.1	843.8	31,750	25,215	16.9	26.4	11.2

NOTE: n.a. = not available.
a. The consumer price index reported is the official index adjusted for underestimation. See Bhalla and Glewwe (1985) and text for details.
b. Real GDP estimates use GDP deflator 1959 = 100.
SOURCE: Central Bank of Ceylon, *Review of the Economy*; Bhalla and Glewwe (1985), and Table 5.1.

items.[19] In that year both the Aid Group and the centrally planned (CP) economies provided large amounts of aid ($250 million and $60 million, respectively), although 1975 also marks virtually the end of aid from the CP economies (Table 5.1).

The unraveling of the economy. The fact that Sri Lanka received large amounts of aid in 1970–77, and that such aid was double the annual real average received during the "foreign aid dependence" years of 1965–70 did not prevent Sri Lanka from experiencing a dismal economic performance. The years 1970–77 represented an unraveling, and the Sri Lankan economy did not quite recover (until the reforms in the late 1970s) from the self-inflicted wounds and external shocks of that period. Budget deficits, money supply, inflation, and import tariff rates soared. For example, money supply increased by 173 percent from 1970 to 1977 (after increasing by 31 percent during the previous seven-year period), consumer prices increased by 144 percent, and food prices increased by 172 percent (see Table 5.5).[20] Import tariff rates reached 162 percent in 1976[21] and investment goods reached a low of 10 percent of imports, from 24 percent in 1970. There was no money available for "nonessential" imports, notwithstanding the increase in aid. Import volumes reached their lowest postindependence level in 1974 when the index (1978 = 100) plummeted to 42. Indeed, this index had already started declining in 1971 in response to the new import control policies.

The growth of the economy was also affected; per capita GDP grew by 1.3 percent per year, in comparison with the 3 percent per year registered in

1965–70.[22] Rice production exceeded its 1970 level only in 1977; tea production was stagnant, with large declines in 1974 and 1976. Purchasing power parity figures (Summers and Heston 1984) suggest that real incomes declined at an average rate of 1.1 percent annually during 1970–77, in comparison with a small growth rate (0.2 percent annually) during 1965–70.

Simply put, 1970–77 was in all likelihood the worst economic period in Sri Lankan history. Two causes have been mentioned: domestic mismanagement and external shocks, mostly in the form of the oil price increase in 1973. Although it is tempting to attribute the economic decline to oil shocks, this would in large part be erroneous, for not all developing countries went through a parallel crisis stage. Further, analysis of a household survey conducted before the oil price increase in October 1973 can help identify the major cause of failure. According to this Consumer Finance Survey undertaken by the Central Bank of Ceylon in January-February 1973 (that is, ten months before the oil price increase), unemployment had reached 24 percent, from 14 percent in 1969–70. Real food and total expenditures had both precipitously declined by about 20 percent in the two and a half years since 1969–70. Bhalla and Glewwe (1985, 1986) contend that during election years 1969–70 consumption levels were artificially high because the government ensured that large amounts of food, especially rice, were available, but adjustment for this transitory consumption still implies a sharp decline of about 15 percent in per capita consumption by early 1973. Though survey data are not available, it is likely that the situation had deteriorated further after the oil shock of October 1973.

It is important to understand the economic situation in these years in order to appreciate the nature of the "inevitable" reforms that followed the UNP's victory in 1977. As indicated below, it is probably not the case that aid donors largely determined the post-1977 reforms. Rather, reforms were an internal demand, voiced by the people through their provision of a large electoral mandate to the UNP. They wanted an end to policies that led to significant declines in income.[23]

1977–86. Parliamentary elections were held in July 1977. The SLFP government had been in power for seven years, rather than the usual five, because of constitutional changes in 1972. Further, a state of emergency had been in force from April 1971 (the date of the JVP insurrection) to February 1977. Thus the SLFP, under the leadership of Mrs. Sirimavo Bandaranaike, entered the election campaign with a record of political and economic emergency. The UNP entered the campaign alone, without any alliances, and under the leadership of J. R. Jayewardene who had held office as finance minister in the early 1950s.

Given the economic changes that were about to be introduced, the electoral strategy of UNP is of interest. The SLFP record of mismanagement, and the consequent lack of essentials for the consumer, were obvious drawing cards for the UNP. But the strength of "perceived" ideology is indicated

by the fact that the UNP promised to change the course of the economy, but pledged to do it under the veneer of "democratic socialism." As events would soon show, the UNP was pledging to stop at nothing short of major surgery. Nevertheless, the UNP Manifesto stated,

> In implementing socialism, we do not intend to fit the government into the place of the private capitalist. We do not intend to concentrate and centralize production, distribution and financial power in the hands of the government, a privileged class or a few families.... We emphasize the fact that our policy is not socialism alone but democratic socialism (Ponnambalam 1980: 142–43).

When the election results came in, the voters signaled the need for change. Coalitions, multi-parties, and the first-past-the-post system (that is, the person with a plurality of votes wins, even if the share of the vote is paltry) could not prevent an overwhelming victory for the UNP. It gained a majority of the votes cast—50.9 percent—the first such occurrence in Sri Lankan history. Out of 154 seats contested by the UNP, it won 140. Thus, out of a total of 168 seats in the parliament, the UNP won 85 percent of the total. The SLFP still managed to win 30 percent of the vote (it is not clear which socioeconomic group became relatively or absolutely better off during 1970–77), though it gained only 8 seats. The rejection of the SLFP, and presumably its policies, was nearly complete, with only two cabinet ministers (including Mrs. Bandaranaike) out of twelve surviving the landslide.

Economic policy reforms since 1977. The first cabinet meeting, on August 19, 1977, was indicative of the nature of the changes that were to come. Foreign exchange, equivalent to Rs. 700 million, was released for "liberalized" imports. Further, an increase in the food ration was announced as planned for the near future (as shown below, this was not to be). And this is how Finance Minister Ronnie de Mel outlined the economic policies of the UNP to the British press in October 1977:

> My government welcomes trade, aid and foreign investment. These are the cornerstones, the very foundations of our economic policy. It is our objective to maximize foreign investment in Sri Lanka by giving foreign investors the necessary incentives and the necessary guarantees and safeguards consistent, of course, with our national sovereignty and economic goals. We expect aid and support from the World Bank and IMF and also from the countries of the Aid Group. . . . We shall give the private sector its due place in our economy.... The basis of a free and just society, in my opinion, is a free and just economy. We will accordingly move away from restrictive policies and controls of the last seven years to a more liberal economic policy (Ponnambalam 1980: 144).

There is no doubt that such statements were welcomed by the international agencies and the Aid Group, but there is little to suggest that these policies were planned because Sri Lanka was now "at the beck and call of the IMF and the World Bank" (Ponnambalam 1980: 145). As indicated earlier, there was a confluence of views, with the initiative in the hands of the Sri Lankan policymakers. At the same time, it cannot be denied that the support of the Aid Group helped achieve the transformation.

The economic changes (several of which were announced in the first budget in November 1977) were sweeping:

1. The multiple exchange rate system (FEEC) was scrapped, and the rupee devalued (the official non-FEEC exchange rate was changed from Rs. 7.9 to Rs. 5.76 to the U.S. dollar) and allowed to float.
2. The system of exchange control was abolished, as were all import controls (licenses and quotas). Cuthbertson and Khan (1981) estimate that the effective protection rate in Sri Lanka in 1979 was only 26 percent. The volume of imports doubled in the short space of three years—the levels for 1977 to 1980 are 73, 100, 123, and 140.
3. New exports (other than tree crops) were promoted, and export free zones, where production was exclusively for export, were set up. Foreign investment, ideologically unpalatable before, was now welcome.
4. Real producer prices for tree crops were allowed to increase, signaling the end of long-run stagnation.
5. Private participation in previously state-controlled areas (e.g., trade in imports of oil, fertilizers, yarns, textiles; passenger bus transport and local shipping) was now permitted.
6. Interest rates were raised and the financial market made more competitive.

The list goes on, but the policies generally reflected one goal—economic liberalization, a broad-based decontrol of the economy. One major policy reform deserves special attention—the dismantling of the universal food rationing system that had been in existence since 1943. As mentioned earlier, Jayewardene had lost his job as finance minister when he had advocated a cut in food subsidies in the early 1950s. This time the cut was made in three stages. First, in February 1978, the free rice ration was limited to families whose annual income fell below Rs. 3,600, thereby excluding almost half the population from the welfare scheme. Second, in September 1979, the ration scheme was abolished altogether, and replaced by a food stamp scheme for the eligible households. According to this scheme, approximately Rs. 95 per household or Rs. 18 per capita were transferred to recipient households per month (for a detailed analysis of the food stamp scheme, see Edirisinghe 1985). At the prevailing rice price of Rs. 1.63 per pound, this amounted to an implicit free ration of 2.5 pounds per person per week—the largest free

amount in Sri Lankan history. But the third prong of the policy meant that such largess would be short-lived: the nominal level of food stamps would be frozen. Consequently, the benefit has declined over time and in 1986 was equivalent to 1.4 pounds of free rice per capita per week.[24]

The Accelerated Mahaweli Development Programme. As in the late 1960s, the newly elected UNP government proceeded to increase rice production as it simultaneously sought to decrease rice subsidies. This time the principal instrument was the Accelerated Mahaweli Development Programme (AMDP), a much shorter scheme than that envisaged a decade earlier. Over a six-year period, it aimed to irrigate about 320,000 acres and construct six major reservoirs and five power stations with a total capacity of 400 megawatts.

Several factors conspired to make a program like the AMDP inevitable. First, the economy had inherited high unemployment—as high as 25 percent in 1975. Second, the government had decided to reduce food subsidies, so jobs were needed to replace welfare. Third, the planned tariff reductions (especially on long-suppressed consumer goods) would entail a large outgo of foreign exchange (import expenditures increased from $575 million in 1976 to almost $1 billion in 1979). And fourth, increased rice production would lower the large expenditures on rice imports, which had averaged $110 million annually in 1975–76.

Levy (1985) contains a detailed and useful summary of the politics and economics of the AMDP. First, he points out that this program was very much a Sri Lankan initiative. The Sri Lankans negotiated and obtained "additionality" from the Aid Group, stipulating that resources for the program would be additional to other aid. From the Sri Lankan point of view, the tied and additional nature of the aid meant that it would have been extremely foolish not to continue with the program, especially given its macroeconomic benefits for foreign exchange and employment. Second, as Levy documents, although the program was hurried, it nevertheless received overwhelming support from non–Aid Group donors. By the time of the Aid Group meeting in 1979,

> the British already had a Resident Project Officer for the Victoria headworks in place in Colombo; and the Federal Republic of Germany had already made allowance in its budget for a commitment of $230 million, the largest commitment Germany had ever made anywhere for a single project at its inception, according to the German delegate (Levy 1985: 26).

Third, the Netherlands Economic Development Council (NEDECO) made its feasibility report public in September 1979 and estimated an internal rate of return of 10.5–11 percent (World Bank 1988: 81), basing its estimate on oil prices before they doubled in 1979 and international rice prices before they were halved in 1984–85. Fourth, in terms of aid commitments, AMDP has

received more than $1 billion since 1979, accounting for approximately a third of the total aid package.

The Mahaweli program has undoubtedly been expensive and occasionally wasteful. It has also deservedly been severely criticized, *ex post*. Such criticism, however, invariably fails to include the externalities associated with the project. Furthermore, an *ex post* rate of return analysis on the entire project remains to be conducted. The completion report on one component of the project (part of System H)[25] estimates the economic rate of return (ERR) to be 1 percent. However, using the rice prices projected at appraisal, the ERR becomes quite high at 16 percent. Using the rice prices projected in mid-1985 when credit was closed gives an ERR of 7 percent. Nevertheless, "it should be noted that only benefits from agricultural production were included in the analysis, as at appraisal. However, part of the investment costs, particularly in road construction, will also result in benefits in other sectors of the economy of the project area" (World Bank 1987: 31). Given that international prices have now recovered, the rate of return is also likely to rise. The perception of whether the Mahaweli program or its components have been worthwhile depends to a large extent on international rice prices (and on the beholder).

Aid and Growth

There has been considerable discussion in aid literature on the effects of foreign aid on growth and equity (for example, Lavy 1986). This section briefly summarizes the impact of aid on investment and growth. The following section will examine the question of how aid and the differing economic policies in Sri Lanka have affected the important objective of equity.

It is important to emphasize that the models estimated in this section are rough and at best suggestive. Several important questions, such as the issue of simultaneity between aid and growth, are ignored in the analysis. Although qualitative evidence has been offered regarding the exogeneity of aid in Sri Lanka in that policies came first and commitments were generally not related to performance, the econometric identification of this result remains an open question. Another question ignored pertains to specification; namely, no attempt has been made to specify the models fully. Finally, the data have been taken at face value and, given the problems encountered with official data on consumer price inflation, the data on nominal and real GDP may be questionable for some of the years. These important shortcomings emphasize that the analysis is no more than broadly suggestive.

Table 5.5 reports on data for several variables, such as savings, investment, and aid as percentages of GDP, as well as inflation and GDP. Some broad conclusions may be drawn from the data. First, savings rates fluctuate around a mean of 14 percent for the period from 1956 to 1986. The virtual constancy of this series suggests that this result might be data-related.

Second, investment rates stay constant at 14 percent for the ten-year SLFP period between 1956 and 1965 even though it is the early industrialization, heavy import-substitution phase. An increase to 16 percent is observed for the miniliberalization period of 1966–70, but a decline to 14.6 percent is recorded for 1971–77.

Third, an average GDP growth rate of 4.3 percent is recorded for 1956–86. From a political economy standpoint, there is a remarkable relationship between political regimes and the economic growth rate. For the seventeen years the SLFP was in control, the growth rate averaged 3.08 percent; for the fourteen years the UNP was in power (data from 1965 to 1986), growth has averaged 5.85 percent.

Finally, in per capita terms, aid to Sri Lanka has been significantly higher than to most other developing countries (Table 5.1). From 1978 to 1986, aid averaged $34 per capita annually in real terms (nominal levels deflated by the U.S. wholesale price index, 1980 = 100). What is surprising is that this aid level is only 40 percent higher than aid levels during 1971–77. The nominal aid levels, however, would show that per capita aid had increased by 156 percent.[26] It is partly because of this large nominal jump that the conventional wisdom on aid to Sri Lanka (see Levy 1985; World Bank 1986; Ponnambalam 1980) is that aid increased exorbitantly with the UNP's coming to power and initiating donor-supported liberalization policies and investment in Mahaweli.

When data from 1956 to 1986 are analyzed through two simple models (see the appendix to this chapter) the elasticity of investment with respect to aid is shown to be fairly high at 0.94 percent. In addition, a 10 percent increase in the share of aid in income is likely to increase the growth rate by 1.5 percent. Since the share of aid increased from 5.9 percent in 1971–77 to 13.9 percent in 1978–86, a crude calculation would suggest that aid caused the growth rate to increase by 1.1 percent. The actual increase in growth rates between the two periods was 2.78 percent (5.66 percent minus 2.88 percent). But before any major conclusions are drawn, it should be emphasized that the aid share increased by 2.04 percent during 1971–77, but the growth rate *declined* at an approximate rate of 2.5 to 3 percent per year.[27] In other words, aid may have some impact, but the real engine of growth is domestic policy.

Economic Policies, Growth, and Equity

Along with growth, the "twin" goal of economic development is equity. The previous sections have attempted to document in detail the nature of aid flows and the economic policies pursued by the different policy regimes in Sri Lanka. This documentation has almost exclusively centered on economic growth, with virtually no analysis of the equity effects of policies. This omission must be addressed for two important reasons. First, there seems to have been a trade-off between the growth and equity objectives of different

governments in Sri Lanka. At the risk of oversimplification, one summary of the Sri Lankan political-economic scene is that the SLFP is a left-of-center party emphasizing distributional goals through nonmarket means, and the UNP is a right-of-center party emphasizing production through market means. This dichotomy is fortuitous for policy analysis; given the consistently democratic nature of the polity, a more precise experiment of the effectiveness of different policy regimes is difficult to imagine. Thus, with concentration on only one aspect of policy, namely growth, the analysis has been biased against equity-oriented policies.

The second important reason an analysis is needed is that the liberalization funded by the Aid Group, particularly the cut in food subsidies, has been questioned on equity grounds by recent research (Sahn 1987; Anand and Kanbur 1987). Given that this important policy move had been in the making for over twenty-five years, and that it was "symptomatic" of the new liberal policies, the issue of the decline of food subsidies and the corresponding presumed increase in inequities needs to be explicitly addressed. The important question of the relative merits of direct intervention policies and indirect growth-related policies is discussed below.

Food subsidies and consumer welfare. Both Sahn, and Anand and Kanbur single out liberalization and the cut in government food subsidies as policies that have increased malnutrition and decreased equity in Sri Lanka. Sahn argues that

> while it was not possible to put forth a counter-factual argument as to what would have been the consumption and nutritional consequences if a change in policy regimes had not taken place in 1977, the data available on employment and wages, like the information on nutritional status, calorie intake, and real expenditure levels show that the three lowest expenditure deciles have seen a decline in their food energy intake (1987: 824).[28]

Anand and Kanbur echo Sahn but are more concerned with what they consider to be the major cause of this decline—the reduction in government food subsidies. They state that "between 1979 and 1982 real per capita government expenditure on food subsidies fell from Rs. 62.29 to Rs. 20.72. While it would be difficult, given the many other forces in play, and the data available, to establish a clear and unambiguous link between this cut and food consumption in the population—the results are at the very least suggestive" (Anand and Kanbur 1987: 20).[29]

There is one aspect of the cut in food subsidies that should be mentioned before any analysis is presented: universal rationing or subsidization of food is likely to entail a considerable amount of transfers to the nondeserving, nonpoor group. Thus, a cut in food subsidies that affects only the nonpoor (as the Sri Lankan reform attempted to do and, according to Edirisinghe 1985, broadly succeeded in achieving) should normally not

have deleterious consequences for equity.[30] One problem with the Sahn and Anand-Kanbur analysis is the assumption that government food subsidy expenditures *determine* consumer welfare. To examine welfare, one must look at real incomes on one hand and real consumer *prices* on the other. Clearly, government subsidies can influence the latter, but, as shown below, movements in this variable can be extremely misleading. Food subsidies in Sri Lanka have involved imports of rice at a low price and procurement from domestic farmers at a high price, with the consumer price always below the procurement price but above or below the import price depending on budgetary pressures. Movements in these nonconsumer prices could have had an impact on the subsidies, *without* affecting the real price to the consumers, and thus their welfare. Thus, the presumed link between government expenditures on food subsidies and food prices, let alone food consumption, is misleading, if not fallacious.

Published data on an *effective* consumer price of rice are not available.[31] Published data allude to either market price or ration shop price. Both prices are misleading. As discussed in the section on aid and the economy, 1965–70, the computation of an effective consumer price is akin to an index number problem; in other words, what is the "normal" quantity purchased? Consumer surveys suggest that a consumption level of four pounds per capita per week is normal; hence, the effective price is calculated as the cost of the *first* four pounds of purchase. This price series along with other variables is reproduced in Table 5.3.

Table 5.6 presents data on some additional variables: one of these variables is the effective price of rice for *poor* consumers. This price is identical to the price for all consumers until 1979; after that date, the impact of the food-rationing program has to be taken into account. In late 1979, the universal food-rationing program was replaced by a selective food stamp program targeting approximately half of the population. The average value of food stamps per recipient household is reported by Edirisinghe (1985) to be Rs. 95 per month, or Rs. 17.9 per capita per month.[32] Consequently, the price of rice for recipient consumers after 1980 is defined as the average expenditure per pound on the basis of four pounds (or 1.814 kilos) of purchase of rice per week after deducting the value of food stamps (Rs. 4.11 per week).

Also reported in Table 5.6 is the effective subsidy/tax rate on consumption,[33] and the real prices of rice deflated by the national account deflator (1959 = 100 as used by Anand and Kanbur for deflating food subsidy expenditures).

Two sets of results confirm the misleading nature of the food subsidy variable. First, the correlation between per capita real food subsidy expenditures and the effective real price is *positive* at 0.35 for the period 1951–86, although one might have expected that an increase in real food subsidies would decrease consumer prices and thereby increase consumer nutrition. Second, the presumed Sahn and Anand-Kanbur link is further weakened

TABLE 5.6 Rice Prices for the Poor and Food Taxation in Sri Lanka, 1952–86

Year	Effective rice price to the poor (Rs./kg)	Real effective rice price to the poor[a] (Rs./kg)	Real effective rice price to all consumers (Rs./kg)	Real per capita food subsidy expenditures (Rs.)	Tax on rice consumption[b] (%)	Real GDP per capita (Rs.)
1952	0.54	0.62	0.62	35.9	-35.0	659
1955	0.50	0.53	0.53	4.4	-16.0	684
1960	0.30	0.30	0.30	19.2	-33.6	665
1965	0.28	0.28	0.28	23.6	-56.2	731
1970	0.52	0.44	0.44	21.8	-21.7	911
1972	0.55	0.43	0.43	31.8	0.6	916
1975	2.43	1.17	1.17	43.9	12.3	948
1977	2.13	0.82	0.82	39.5	20.4	1,010
1978	2.29	0.82	0.82	54.7	-39.8	1,079
1980	2.31	0.61	1.20	39.6	-2.8	1,184
1982	3.40	0.67	1.13	25.0	8.4	1,293
1984	3.90	0.58	0.91	18.0	13.7	1,456
1986	4.36	0.61	0.93	16.4	36.4	1,564

NOTE: All real values have been obtained using the GDP deflator, 1959 = 100.
a. The rice price to the poor is the same as the effective rice price for all consumers, until 1980; from that year, food stamp receipts were subtracted from the cost of purchase of rice for the poor (i.e., the food stamp recipients). The deflator used is the adjusted consumer price index, 1985 = 100.
b. The tax on rice consumption is derived as the percentage deviation of the effective consumer price from the import price. See Table 5.3 and Bhalla (1988a).
SOURCE: Central Bank of Ceylon, *Review of the Economy*; Bhalla (1988a).

by noting that "true" food subsidies to consumers (defined as the percentage difference between effective domestic and international prices) ended not in 1978 but in 1972; rather than being ended by liberalization, food subsidies had stopped six years earlier, *prior* to the commodity price boom. Thus, during 1971–77, consumers, instead of receiving subsidies, were taxed at an average rate of 13 percent per year. Nor did this movement from subsidies to taxation come at a time of increased incomes, for as documented in Table 5.5 the 1971–77 period was economically the worst in Sri Lankan history.

Pattern of the effective consumer price of rice. After a period of extremely low prices in the early 1960s, the effective price began to rise after the reforms of the UNP government in the mid-1960s. Starting in February 1973 (when nominal market [noneffective] prices for consumers rose by 60 percent), consumers began to face historically high effective rice prices. Also revealing is that real annual per capita government expenditures *increased* from Rs. 22 in 1970 to Rs. 40 in 1977; for the same period, the real price to consumers *increased* from Rs. 0.44 per kilo to Rs. 0.82 per kilo. Thus, while real food subsidy expenditures were peaking, so were real consumer prices.

The pattern of real effective prices since 1977 is also revealing. These prices increased during 1980–82, but for 1984–86 they have remained at almost the same level as in 1976–77—Rs. 0.92 per kilo. In other words, the

TABLE 5.7 Monthly per Capita Food Consumption in Sri Lanka, 1969–70 to 1985–86 (by sector and year)

Item	Urban areas				Rural areas				Estate areas			
	1969–70	1973	1980–81	1985–86	1969–70	1973	1980–81	1985–86	1969–70	1973	1980–81	1985–86
Rice (lbs.)	15.2	14.8	16.6	15.8	17.7	16.2	21.1	20.0	15.9	16.5	19.8	22.6
Wheat flour (lbs.)	1.6	1.9	1.2	1.2	2.3	2.3	1.2	1.2	10.5	12.1	7.2	11.1
Bread (lbs.)	5.7	5.1	6.3	6.5	1.3	2.9	2.8	3.4	0.5	1.1	1.6	1.7
Coconuts (no.)	7.1	6.3	6.2	6.5	7.7	7.1	7.7	7.7	6.1	6.5	5.8	6.9
Sugar (lbs.)	3.6	2.2	2.0	3.3	3.2	2.0	1.6	2.6	2.6	1.8	1.3	2.4
Meat (lbs.)	1.1	0.7	0.8	0.9	0.4	0.2	0.3	0.9	0.5	0.2	0.2	0.4

NOTE: For 1985–86, the data are preliminary; further, the data in the preliminary survey report are on a household basis. They have been converted to per capita estimates using the respective household sizes by sector in the 1980–81 survey.
SOURCE: Department of Census and Statistics, Sri Lanka, *Socio-Economic Surveys* for 1969–70, 1980–81, and 1985–86; Central Bank, *Consumer Finance Survey*, 1973.

consumers seem to be considerably better off since liberalization: real incomes have increased, and rice prices have stayed approximately the same. Food subsidy expenditures have been drastically reduced, from Rs. 55 per capita in 1978 to only Rs. 16 per capita in 1986—a catastrophic decline if the link between government subsidies and consumer welfare was an operational one.

The poor are facing the same real effective price they did almost twenty years ago—it has been Rs. 0.58–0.67 during *each* year from 1980 to 1986. And these prices are considerably below the high government subsidy years starting in 1973 (when the price was Rs. 0.74 per kilo). Figures on employment and incomes also suggest that real incomes have gone up, at least since 1973. Thus, it is somewhat difficult to accept the Sahn conclusion that welfare of the bottom 30 percent of the population has deteriorated.

There is some *direct* evidence to support the contrary view that welfare, in narrow economic terms, has improved for the poor since liberalization. Table 5.7 reports on average consumption levels of major food items for the years 1969–70, 1973, 1980–81, and the preliminary data on the *Socio-Economic Survey* of 1985–86 (Department of Census and Statistics 1987).[34] The data are reported according to place of residence; estate residents (primarily Tamil migrants working on plantations) are among the poorest people in Sri Lanka. These estate residents had lost in relative terms during the preliberalization period, and in a major targeting mishap, they have not been covered by the postliberalization food stamp program. However, the decision to increase real output prices of the export crops has allowed wages of estate workers to increase since 1978. For example, the male wage index for the preparation of tea land increased from 100 in September-October 1978 to 348 in 1986; the female wage for tea plucking increased to 366 (data from Central Bank of Sri Lanka, *Price and Wage Statistics*, July 1988). The adjusted consumer price index rose to 311 in the same time period. Thus

real wages rose by 11–18 percent, an impressive rise given the decline during the preliberalization days.

According to the preliminary 1985–86 data, the growth in wages has translated into increased food consumption for estate residents. Their rice consumption rose by 14 percent and wheat consumption by 54 percent since 1980–81. Their nominal food expenditures increased from a level 3 percent lower than those of rural residents in 1980–81 to 34 percent higher in 1986.

Although the poor are better off, it is important to sound a cautionary note. As appealing as the indicator of food consumption might be for welfare purposes (as argued by Anand and Hariss 1986 and used by Bhalla and Glewwe 1986) during times of food scarcities, it is a considerably less meaningful indicator at other times. The estate residents are still quite poor, and any overall food and nonfood indicator would still indicate that fact. The food consumption indicator could mislead one into thinking that the estate residents were considerably richer, or considerably less poor, than the non-estate residents of Sri Lanka in 1986. In other words, research has yet to evolve a better indicator of poverty status than that yielded by permanent total consumption estimates.

Unfortunately, annual data on sectoral or household food consumption are not available. Table 5.7 can only present a snapshot for those years, and these snapshots (as in the case of the 1969–70 and 1980–81 data) can be misleading. However, aggregate equity data in terms of such indicators as infant mortality *are* available, and the impact of income growth intervention on these variables is examined next.

Living standards: intervention versus growth. There has been a continuing debate on the relative merits of direct intervention (that is, explicit expenditure policies) and indirect intervention (that is, growth) in achieving improvements in the living standards of the population. Bhalla (1989a) used a cross-country framework to reach the conclusion that in spite of considerable direct intervention, the Sri Lankan record in achieving improvement in living standards was average. This cross-country model is used by Anand and Kanbur (1987) (hereafter referred to as A-K) for an individual country, namely Sri Lanka. The conclusion they reach is a worrying one, namely, that for three social indicators (crude birth rate, crude death rate, and the important distributional one of infant mortality) income growth was *insignificant* in explaining the achievement of living standards in Sri Lanka for the period 1952–81; in contrast, direct interventions like health expenditures were highly significant. The authors conclude that "income growth alone would not have achieved for Sri Lanka its enviable basic needs indicators—the role of direct intervention has been significant" (p. 33).

This result suggests that the aid donors' and UNP's concentration on growth may have been at the expense of equity. Notwithstanding the fact that the growth-versus-equity debate is an old one, the Anand-Kanbur conclusion constitutes important new evidence. And given that the authors

TABLE 5.8 Estimating the Effects of Growth on Living Standards in Sri Lanka

	Infant mortality results		Death rate results		Birth rate results		Education enrollment
	A-K	Bhalla	A-K	Bhalla	A-K	Bhalla	(Bhalla)
Intercept	38.79	28.89	23.31	9.97	30.65	37.88	39.77
	(4.8)	(2.90)	(2.90)	(1.0)	(6.06)	(7.21)	(3.63)
Health expenditures	-0.38	-0.46	-0.58	-0.65	0.25	0.28	
	(3.91)	(3.73)	(6.05)	(5.29)	(3.58)	(3.58)	
Food expenditures	-0.005	0.015	0.02	0.03	0.027	0.017	
	(0.31)	(0.72)	(1.23)	(1.40)	(3.00)	(1.72)	
Income	-0.080	-0.67	-0.036	-0.60	-0 125	0.20	0.94
	(0.30)	(2.26)	(0.14)	(2.04)	(0.76)	(1.32)	(2.91)
Time	-0.017	-0.010	-0.01	-0.001	-0.014	-0.018	-0.02
	(3.37)	(1.61)	(1.98)	(0.19)	(4.31)	(5.75)	(3.25)
Education expenditures					-0.121	-0.076	0.34
					(2.45)	(1.43)	(4.35)
F-value	122.81	99.13	68.75	46.90	126.70	100.90	6.43
R^2		0.93		0.86		0.95	0.36
D.W.		1.19		1.16		1.84	0.76

NOTE: Blank cell indicates not applicable. The data, data specification, and estimation for all equations excluding educational enrollment are as reported in Anand-Kanbur (1987). The two sets of regressions should be identical; it is unclear why differences are occurring. My results (Bhalla) were achieved using T.S.P. 6.0. Time period of estimation is 1952–1981. Absolute values of the t-statistics are reported in parentheses. Health, food, education, and income variables are in log per capita terms. All dependent variables are in log form. For educational enrollment the dependent variable is the (log) share of actual enrollment in schools (excluding university) in the potential enrollment. The latter figure is obtained by estimating the population in the 6–18 age group.
SOURCE: Anand and Kanbur (1987); Surjit Bhalla.

used *individual* country time-series data, their conclusion carries additional weight.

Anand and Kanbur estimate essentially a cross-country model for an individual country. As discussed briefly in the appendix to this chapter, there are serious problems with such an approach, in terms of both specification and estimation. Nevertheless, given the important nature of their conclusions (that is, lack of significance of income growth), their model with their data[35] was reestimated and the results are reproduced in Table 5.8.[36] Also reported are the results for a living standard variable *not* examined by A-K, namely educational enrollment in primary and secondary education.[37] Two important conclusions emerge from examination of the figures in Table 5.8. First, and most worrisome, is the finding that the equation results reproduced in Table 5.8 do not match those reported by Anand-Kanbur—in particular, in contrast to the A-K results, income *is* a significant determinant in explaining achievements in terms of infant mortality and the crude death rate. Given that the data used are *identical* to those reported by A-K, and that the estimation procedure is straightforward (that is, ordinary least squares), no straightforward explanations for the mismatch are available. A possible explanation is that the results reported by A-K are for a specification different than that described in their text and tables. Thus, the debate has to shift to

the merits of different specifications before one accepts the surprising A-K conclusion that income growth is an insignificant determinant of achievement in living standards in Sri Lanka.

The second conclusion emerging from Table 5.8 is that income *is* a significant variable in explaining achievements in three of the four variables considered: infant mortality, crude death rate, and educational enrollment. Further, for the important infant mortality variable, income growth had a larger effect than direct health expenditures. And for educational enrollment, the effect of income was almost *three* times as large as the effect of educational expenditures.

It should be noted that the significance or nonsignificance of intervention variables like health expenditures is not at issue. It is hoped that such expenditures do have a significant impact (although this argument does not apply to inappropriate variables like government food subsidy expenditures). But the growth-equity debate is concerned with the relationship between growth *per se* and improvements in equity. And in that context, it does appear that growth is positively related to improvements in living standards.

The conclusion therefore on the relative merits of direct and indirect policies (direct expenditure versus growth) is that growth, independent of direct expenditures, has a positive effect on living standards. (However, as emphasized in the appendix, this conclusion is not robust, for it is based on a specification—and estimation—which can be improved.) These econometric results, in addition to those reported earlier, are consistent with the hypothesis that the relatively high-growth periods in Sri Lanka (which have coincided with the economic policies of the UNP) have also been periods of improving equity.

Conclusion

This chapter has attempted to answer the following two questions: First, has aid worked in Sri Lanka; in other words, what is the impact of aid on economic development in general and income growth and equity in particular? Second, what evidence is there of aid conditionality, or to what extent have domestic policies been dictated by aid donors?

The first question, "does aid work?" should actually read "do policies work?" and "does policy X work?" As far as the Sri Lankan case is concerned, it *is* the policy mix that matters. And the policy mix, even in a small, vulnerable country like Sri Lanka, is decided by the national government. No answers are available to suggest how donors can win over and influence governments.

Sri Lankan governments have both sought aid and thwarted it. Consequently, too strong a causality from aid donors to governments is unlikely. What is likely is that governments, having decided on a particular course of action, will seek to maximize aid flows. It is at this point that aid agencies

can influence events. According to this analysis of Sri Lanka, aid at the right time, and extra aid if necessary, can be quite influential.

Regarding aid conditionality, the experience of the early 1970s suggests that aid recipients can play the "divide and rule" game. As in other economic spheres, cartels often break down. They do so in the aid game because each donor has a private, and public, equation with each country. These historical relationships are generally not severed due to transitory disagreements. Consequently, as in the early 1960s and early 1970s, donor governments may want to "stand on principle" and attempt to affect policies by cutting off aid, but overall aid or aid effectiveness is unlikely to be affected by individual donor behavior.

The question remains, do policies work? Can "good" policies be identified? Sri Lankan history over the last forty years is perhaps a unique experiment in policy swings. Two distinct sets of policies have been followed—an inward-directed, closed, consumption-oriented, "direct" government interventionist policy (1956–65 and 1970–77) and an open, less government interventionist, production-oriented, "indirect" economic policy (1948–56, 1965–70, and especially 1977 to the late 1980s). Interestingly, for both growth and equity, the latter set of policies seems to have worked better.

APPENDIX TO CHAPTER 5

Model for the Impact of Aid on Investment and Growth

If aid flows are assumed to be exogenous, then the following simple models can be used to assess the impact of aid on investment and growth:

$$I/Y = a + b\,(S/Y) + c\,(A/Y) + e$$

and $$GR = a + b\,(S/Y) + c\,(A/Y) + e$$

where I is investment, S is savings, A represents aid levels (in domestic currency), Y is income, and GR is real growth rate.

Estimates for the 1956–86 period result in the following:

$$I/Y = 8.87 + 0.3\,(S/Y) + 0.94\,(A/Y) \quad R^2 = .60$$

$$(2.29) \quad (1.1) \qquad (6.6)$$

and $$GR = 3.74 + -0.02\,(S/Y) + 0.15\,(A/Y) \quad R^2 = .05$$

$$(1.71) \quad (-0.16) \qquad (1.92)$$

The Anand-Kanbur Model

The model used by Anand and Kanbur (1987) is the cross-country regression model outlined in Bhalla (1989a,b) and Bhalla and Glewwe (1986). This simple model postulates that a measure of living standards, H_t is related to direct intervention expenditures E_t, income Y_t, and a term capturing country specific time-invariant fixed effects. Since the last term is irrelevant in the case of an individual country study, Anand and Kanbur estimate the following time-series model for three indicators (infant mortality, crude death rate, and crude birth rate):

$$LH = a + b\,LHexp + c\,LFexp + d\,LInc + f\,t + e$$

where *LH* is the log of the living standards indicator, and *LHexp*, *LFexp*, and *LInc* represent the log of real per capita health expenditures, food subsidy expenditures, and income, respectively, and *t* represents the influence of time.

The right-hand side variables (except time) are all entered in log-linear form. Further, to explain the crude birth rate, the authors add a per capita educational expenditure variable, as also done in Table 5.8. The time periods of estimation are 1952–81 and 1960–78, the latter to correspond with the results contained in Bhalla (1989a) and Bhalla and Glewwe (1986). Since the broad nature of the results is unaffected, only the results for the log-log model for the 1952–81 period are reported here.

There are problems with the above specifications: investment and maintenance expenditures are not distinguished, appropriate lags have not been tested, and the food expenditure variable is (according to the reasoning outlined earlier) particularly inappropriate.[36] Further, with several trending variables on the right-hand side of the equation, one has to be cautious in interpreting the statistical significance of the variables (see Stock and Watson 1987).

CHAPTER 6

ARTHUR HAZLEWOOD

Foreign Aid and Economic Development in Kenya

Kenya is one of the few African countries to have performed well economically not only by African standards, but by those of developing countries generally. Since independence in 1963, gross domestic product (GDP) has tripled in real terms, despite a rate of growth that has fluctuated, largely in response to external shocks. Kenya's economic growth, however, has been offset by one of the highest population growth rates in the world: the population increased by some 206 percent between 1969 and 1985. As a result, per capita economic growth has been only satisfactory, and future prospects are shaky at best.

During the past twenty-five years, the Kenyan government has proven to be a good crisis manager. Yet, although the government has exercised sound economic management in responding to the successive external shocks, it has not been as successful recently in managing the economy during normal times. Government spending, for example, was in line with revenues until the late 1970s, but this changed after the export boom of 1976–77. When revenues fell with the collapse of the boom, the government maintained its level of spending, and external borrowing quadrupled between 1976 and 1985. The share of government expenditure devoted to debt service rose sharply, and there were large balance of payments deficits. From 1980 to 1985, external debt service charges in relation to the value of exports rose from less than 6 percent to 16 percent. While some policies encouraged

business development and welcomed multinational companies, others promoted intervention, control, and protection. Recently, proposed policies have advocated abandoning these restrictions, but practice lags behind.

The case study of Kenya provides important lessons on the use of foreign aid in economic development. Since independence, foreign investment and assistance have been welcomed, as has technical assistance. Inflows of aid from both bilateral and multilateral sources have been both large and increasing over time.

The overall impact of both program and project aid, including technical assistance, has been positive for Kenya's economic development. Aid has increased the resources available to Kenya in terms of both foreign exchange and skilled manpower. It has stimulated rather than replaced the investment of domestic resources. Project aid has helped improve Kenya's road system and assisted in land transfer and settlement schemes.

Aid to Kenya, however, has not been without its problems. It has often been administered inefficiently, and many projects have been poorly designed and suffered from a lack of infrastructure. Program aid has had little direct impact on economic performance, which has largely been determined by factors outside the control of the government. Yet Kenya's economic situation has undoubtedly been better with aid than it would have been without.

Currently, the major threat to progress is found in the growth of population relative to the supply of cultivable land. Perhaps the greatest contribution that donors can make toward the alleviation of future poverty is to assist in the success of the family planning program. The finance of land transfers from large landowners to smallholders would also be a valuable use of aid funds.

This chapter analyzes Kenya's experience with foreign assistance since gaining independence in 1963. It first presents a historical overview of economic and social development in Kenya. Next, it focuses on changes in the economic environment and an evaluation of the policy responses, particularly in the areas of foreign trade and government expenditure. The following sections consider the history of foreign aid, first describing the kinds of foreign aid Kenya received and the level and role of each, and then discussing foreign aid policies from the perspectives of both the donor and Kenya. There is also an analysis of the performance of both program and project lending. The final section considers Kenya's economic prospects in light of the existing constraints and provides recommendations for overcoming these obstacles.

Economic Growth

Although Kenya has a large land area, only 20 percent is arable. Much of the land is arid or semiarid and is occupied by nomadic pastoralists, who have

been increasingly squeezed by agriculturalists expanding into these areas. Kenya's population is shifting from rural to urban areas. At the time of independence in 1963 the urban population was less than 10 percent of the total; it is now approaching 15 percent, and may be as high as 25 percent by 2000. The economy of the rural population remains primarily one of small-scale farming, and many activities, including much of the food production, are outside the money economy, which is foreign-trade oriented. Exports plus imports equaled 60 percent of GDP in 1964 and 52 percent in 1985. Crude oil, which is processed both for local use and for export, accounts for a high proportion of imports.

Kenya's economic history since independence can be divided into periods largely defined by external changes or shocks:

- Period 1: 1964–72, the postindependence period, with transfer of land to African farmers and recovery from preindependence recession
- Period 2: 1973–75, the first oil price rise and its major impact
- Period 3: 1976–77, the coffee boom
- Period 4: 1978–79, the collapse of the coffee boom
- Period 5: 1979–82, the second oil price rise and its effect
- Period 6: 1983–85, signs of recovery

The growth of the economy fluctuated considerably from one period to the next. In the first ten years of independence, GDP grew at an annual rate of 6.6 percent, and by 1973 GDP in real terms was 89 percent higher than its 1964 level. Kenya was then badly hit by the rise in the price of oil, because of its dependence on oil imports both for domestic needs and for substantial exports of petroleum products. Consequently, the rate of growth fell from 5.6 percent in 1973 to 1.2 percent in 1975. The economy soon recovered, and with a boom in coffee prices and a smaller boom in tea prices, the growth rate of GDP rose to 8.8 percent in 1977. Between 1978 and 1982, with the collapse of the coffee boom, the second oil price rise, and the world recession, the economy suffered once again. From 1980 to 1985, the average rate of growth fell drastically to 2.6 percent. Finally, in the mid-1980s, despite a year of drought, the growth rate improved to over 4 percent. By 1985, GDP in constant prices was almost exactly three times that of 1964 (see Table 6.1).

These growth statistics suggest a rather successful response to the successive shocks to the Kenyan economy and a reasonably satisfactory level of growth since independence. The picture looks distinctly less rosy, however, when the aggregates are converted to per capita terms. Over time, population growth has outpaced economic growth. From 1964 to 1973, economic growth more than kept in step with an annual population growth rate of 3.6 percent, and there was a rise in annual per capita GDP of nearly 3 percent. But since 1973 such growth has not been achieved. In 1975, for instance, when GDP grew only 1.2 percent, per capita GDP fell by 2.5 percent.

TABLE 6.1 Kenya's Economy in Selected Periods, 1967–84

	1967–73	1974–78	1979–81	1982–84
GDP by sector (% of GDP)				
Agriculture	34.3	37.3	33.0	32.6
Manufacturing	11.8	11.9	13.0	15.4
Infrastructure	15.0	12.8	14.2	9.1
Share of trade in GDP (%)				
Share of exports	28.5	32.0	26.8	26.5
Share of imports	30.0	35.5	35.6	29.3
Composition of trade (%)				
Exports				
Agriculture	74.7	66.1	56.6	61.9
Manufactures	12.5	13.1	12.5	11.8
Fuels	12.0	19.9	28.5	24.0
Imports				
Agriculture	9.5	8.8	8.2	10.5
Manufactures	78.4	66.3	58.8	51.5
Fuels	10.8	23.5	31.7	36.7
Indicators of economic performance (%)				
Real GDP growth rate	8.5	4.7	4.2	1.8
Investment to GDP ratio	22.3	23.5	27.0	21.2
Total saving ratio	20.8	20.0	18.2	18.3
Current account deficit to GDP ratio	3.6	6.2	10.5	4.7
Debt service to exports	4.7	6.4	14.3	20.9
Inflation rate (GDP deflator)	3.3	14.5	9.0	9.6
Real growth rate of agriculture output	5.4	4.1	1.5	4.4
Real growth rate of manufactures output	14.2	6.6	5.5	3.0
Real growth rate of exports	3.1	2.0	-1.3	2.9
Real growth rate of imports	4.0	7.8	-9.9	-6.4
Borrowing from the Central Bank (% of GDP)	1.0	3.6	6.0	10.4

SOURCE: Lele and Meyers (1989: pt. 1, Tables 2, 3, 4, and 7).

Consumption has followed suit. In 1985, private consumption at constant prices was 43 percent above its 1972 level, but dropped 15 percent in per capita terms. To date, save for 1978 and 1979, annual per capita private consumption has been lower than its 1972 level. In the 1980s the growth of GDP has barely matched the increased rate of population growth.

When there are large swings in the terms of international trade, changes in per capita GDP do not accurately measure changes in real income, for the relative prices of exports and imports have an effect on per capita income growth. For instance, the unadjusted growth of per capita GDP in 1977 was 5.1 percent; when adjusted for terms of trade effects, it was a very substantial 15.9 percent. But more often, changes in the terms of trade have worsened per capita income growth. In both 1978 and 1979, the adjustment turned

modest increases in per capita GDP into decreases, and in every year but one since 1980, changes in the terms of trade reduced real incomes.

Progress in providing social services has been varied. Education, for example, has seen a great increase. The number of pupils enrolled in primary education in 1985 was nearly five times its preindependence level. From 1969 to 1979, while the population in the age group of 5 to 14 years increased by 43 percent, enrollment in primary schools increased by nearly 200 percent. The health services, in contrast, have not been as strongly promoted. While the number of doctors and nurses increased relative to the population, the number of hospital beds declined. Although infant mortality fell from 112 to 77 per 1,000 live births between 1960 and 1982, there is evidence of increasing malnutrition; the health services probably made no more than a marginal contribution to these changes (Tostensen and Scott 1987: 67–69).

Components of Change and Policy Responses

The weather. The weather is an economic variable of major importance. Kenya's recovery of the early 1980s was interrupted by a serious drought in 1984, which pushed GDP growth to less than 1 percent. Although the weather's effect is not often as dramatic as in 1984, agriculture, and hence the whole economy, has often been adversely affected by too little, or too much, rain.

Foreign trade. The importance of the three major exports—coffee, tea, and petroleum products processed from imported crude oil—relative to total exports varied mainly as a consequence of international price changes, though the overall trend was an increase in the production of many exports.[1] Coffee accounted for 16 percent of total export value in 1975, 43 percent in 1977, and 22 percent in 1980. Tea accounted for 10 percent of total export value in 1976, and 17 percent in 1978, but then declined to 12 percent in 1980. By the mid-1980s, the contribution of tea rose to 25 percent while that of coffee rose to 30 percent. Petroleum products accounted for 13 percent of total exports in 1973, 22 percent in 1974, and 27 percent in 1975. Thereafter, its contribution declined until 1980 when it jumped to 33 percent. By 1985 petroleum products had fallen to 14 percent of total exports.

In 1985, the total value of exports in Kenyan pounds was nearly 2½ times its 1976 total, because, even though the quantity declined between these years, the export price index rose by more than 2½ times. Between 1980 and 1985, the value of exports increased by 60 percent, although volume was down by 10 percent. But a drastic devaluation of the Kenyan shilling in 1985 pushed its value to roughly half that of earlier years, in terms of U.S. dollars.

For a number of reasons, the value of imports also increased steadily from 1972 until 1985. Between 1972 and 1974, with the rise in the price of

crude oil, the total value of imports nearly doubled. Import demand increased with the onset of the coffee boom, and from 1975 to 1978, the value of imports grew by 80 percent. From 1979 to 1980, imports increased by 55 percent, largely because of a rise in the price of oil. The 1985 devaluation, however, caused the value of imports to decline by 40 percent in dollar terms.

In the same period, the volume of imports fluctuated, rising from 1972 to 1974, falling in 1974, and rising by 42 percent between 1975 and 1978. Except for a drought-related increase in 1984, the volume of imports declined during the 1980s. By 1985, import volume had dropped to 60 percent of its 1980 level.

As a percentage of imports, crude oil has with few exceptions played an increasing role over time. Crude oil accounted for 8 percent of the total value of imports in 1971, 26 percent in 1975, 18 percent in 1978, 37 percent in 1981, and 31 percent in 1985.

The structure of trade makes the terms of trade highly sensitive to price changes in a few commodities. Moreover, the importance of trade in GDP in turn makes economic growth highly sensitive to changes in the terms of trade.

The terms of trade (1964 = 100) changed little during period 1 (1964–72). In period 2, with the rise in the price of oil, the terms of trade fell to 90 in 1973 and to 72 in 1975, when the coffee boom began. The export prices of both tea and coffee had been moderately stable until the early 1970s, but by the end of period 3, in 1977, the prices of both commodities were at record highs. The price of coffee was nearly 6 times that of 1972 and the price of tea was 2½ times its 1965 level. These price changes increased the terms of trade sharply from 72 in 1975 to 84 in 1976, and to 110 by 1977. After 1977, with the fall in coffee and tea prices and the second oil price rise, there was a steady decline, with terms of trade reaching a low of 56 in 1985.

Public finance. Since independence, government expenditure's claim on resources as measured by its percentage of GDP has risen. Current and development expenditure was some 20 percent of GDP in the 1960s, 25 percent in the 1970s, and over 33 percent by 1980. By the mid-1980s, however, the proportion had fallen to less than 30 percent.

Until the late 1970s, government revenue kept pace with the growth of expenditure. After that, high expenditures stimulated by the short-lived coffee boom continued, but without a corresponding growth in revenue. Although an export duty on coffee was introduced during the boom, it was small and no other revisions in the tax structure were made. The result was a limited increase in revenue. Although revenue rose by 47 percent in 1977–78, well above the expenditure increase of 39 percent, the trend did not continue. In 1979, revenue rose only 8 percent, compared to a rise in expenditure of 21 percent. During most of the early 1980s, expenditure increased by more than revenue, particularly in the 1980–83 period.

TABLE 6.2 Components of Kenya's Government Expenditure, 1974–75 and 1984–85 (percentage)

	1974–75	1984–85
Public administration	17	19
Economic services	40	35
Defense[a]	7	10
Education	24	24
Health, housing and community welfare, and social welfare	12	12
Total	100	100
Above components when debt service included	88	74
Debt service	12	26

a. The comparison over ten years conceals a marked rise and fall in the proportion devoted to defense, as large as 17 percent in 1968–69 and 1969–70, in response to political problems of the period.
SOURCE: Republic of Kenya, Central Bureau of Statistics, *Economic Survey*, 1978, Table 6.6, and *Economic Survey*, 1986, Table 6.8, Nairobi.

From 1967 to 1981, the central government's current account was in surplus, providing a contribution to development expenditure. Revenue exceeded expenditure by slightly less than 10 percent on average, although the surplus rose to 15 percent in 1977–78. In 1980–81, the current account surplus fell sharply to 2 percent and thereafter the current account was heavily in deficit.

An increase in external borrowing helped to finance this growing deficit in the early 1980s. Between 1979 and 1983, external grants and loans rose from 40 percent to 85 percent of development expenditure. Before 1980 external borrowing financed less than—and often much less than—10 percent of total expenditure. Between 1980 and 1985, the percentage rose, varying between 13 and 14 percent, falling to 6 percent in 1985–86.

The growing external debt and the consequent rise in service payments had an important effect on the structure of government expenditure. In the 1974–85 period, the proportion of expenditure devoted to particular functions and services, other than debt service charges, remained fairly constant (see Table 6.2).

Even in earlier years, when there were radical changes in the education system, proportional distribution was not much affected. Although expenditure on education increased from 14 to 18 percent between 1969 and 1971, this was largely the result of the transfer of responsibility for primary education from the County Councils to the central government; it did not represent an increased claim on resources. The introduction of free primary education increased government expenditure by only 1 percent, despite a jump in enrollment of over 50 percent. When debt service payments are introduced, however, it is a different picture. Expenditures devoted to government services fall to 88 percent of total spending in 1974–75 and to 74 percent in 1984–85.

Economic policies. A World Bank report in 1975 defined Kenya's economic policy as "a pragmatic blend of laissez faire capitalism and African socialism." In practice, this meant a policy of freedom for capitalist accumulation by Kenyans, often in association with multinational companies, combined with widespread government intervention through boards and corporations operating in produce marketing, investment finance, and other spheres of the economy. It involved a vigorous Africanization of employment and management and a formal commitment to greater equality.

Although the government intervened in many spheres of economic activity, controls were often formal rather than effective. For instance, the controlled prices of consumer goods did not diverge widely from those that would have existed in the absence of controls. Export crops, such as coffee, were subject to centralized marketing, but producer prices were close to world prices. On the other hand, maize marketing was centrally controlled, movement of the crop between districts by farmers was illegal, and the marketing and pricing arrangements imposed costly inefficiencies. Local industry was protected by licensing and various quantitative restrictions in too indiscriminate a fashion, even for supporters of protection.

This was the policy environment in which the satisfactory economic performance of the first decade of independence took place. Much of the success of that period resulted from land redistribution that moved land into intensive smallholder production, the introduction of high-yield crops, and protected access for industry to the markets of Tanzania and Uganda, as well as of Kenya. Extension of the fiscal system enabled revenue to keep up with increasing expenditure.

Weaknesses in the policies of the first ten years of independence included failure both to undertake any radical reform of the agricultural marketing system and to move industrial development away from import substitution toward export processing and from capital-intensive to labor-intensive activities. There was also a failure to limit capital expenditures to a level for which the running costs and maintenance expenditures could be paid.

By the mid-1970s, the effects of land redistribution and other factors responsible for the agricultural growth had begun to lose their force, and the collapse of the common market with Tanzania and Uganda adversely affected the market for manufactures. For a time the difficulties were concealed by the coffee boom, but as the new decade approached, deficits in both the budget and the balance of payments became severe. International institutions began to take an increased interest in Kenya's problems and policies, and Kenya, responding to their proposals, formulated policies to deal with the changing situation.

The Development Plan for 1979–83 stressed the need for efficient use of resources, for the further development of agriculture, and for the promotion of export processing rather than import substitution. It noted the importance for all these objectives of adjusting tariffs and other prices to reflect economic

scarcities. The plan focused on government expenditure changes, public sector inefficiencies, and inadequacies of financial control.

Policies for the second half of the 1980s were designed to remedy the deficiencies of the previous ten years. The Development Plan for 1984–88 proposed to tackle the increasing cost of the external debt by reducing the claim on resources by the public sector. It called for a substantial reduction in public sector current and investment expenditures, "privatization" in what were deemed nonessential activities, and increased employment of "user charges." Budgetary policy required a contribution to development finance from current income, lower public sector borrowing to make more funds available for private investment, and restrictions on external borrowing. The aim was to raise the ratio of government revenues to GDP to 25 percent by the end of the century. The distribution of government expenditure would change, with the more directly productive services taking a larger share of the total, and other activities, including formal education and health, taking a correspondingly smaller share.

These policies were intended to encourage and enable the private sector to take a larger part in development. They would entail a smaller public sector labor force and a major expansion in employment, for all educational levels, in the private sector.

The Kenyans hope that support for these policies would be acknowledged by aid donors through the financing of recurrent costs and the provision of aid as grants rather than as loans.

External Borrowing and Aid

After the collapse of the coffee boom in 1978, as government revenue's share of total expenditure financing declined, external borrowing increased. Between 1972 and 1985, the value in dollars of debt outstanding increased eight times. Debt service charges in relation to the value of exports of goods and services increased from less than 6 percent in 1980 to 16 percent in 1985.

Until 1973 the current account balance of payments was only marginally in deficit, with credits amounting to more than 90 percent of debits (see Table 6.3). In 1973, however, they covered only 85 percent of debits and in 1974, just 78 percent. Recovery was rapid, however, and the current account recorded a small surplus in 1977. The 1978 collapse followed, and current account credits soon amounted to little more than 72 percent of debits. From then until the mid-1980s, credits remained at a low level, and the current account deficit high.

The collapse in current account financing in 1978 was matched by a rise in capital inflow on the government account from 5 percent to 13 percent, followed by a decline after 1980. The contribution of private capital (apart from a couple of "outliers") has varied between 5 percent and 10 percent since the 1960s, falling to the low end of the range in the 1980s.

TABLE 6.3 Kenya's Balance of Payments, 1970–84 (millions of K£)

Year	Current account balance	Net long-term capital balance			Basic balance of payments
		Government	Private	Total	
1970	-17.5	16.0	14.9	30.9	13.4
1971	-39.9	-1.8	17.0	15.2	-24.7
1972	-24.3	14.9	15.3	30.2	5.9
1973	-46.8	16.8	31.3	48.1	1.3
1974	-112.0	29.4	41.6	71.0	-41.0
1975	-80.6	42.6	15.3	57.9	-22.7
1976	-51.9	28.4	62.3	90.7	38.8
1977	11.4	35.9	48.0	83.9	95.3
1978	-252.5	81.0	76.4	157.4	-95.1
1979	-186.3	112.0	77.5	189.5	3.2
1980	-328.7	147.7	55.4	203.1	-125.6
1981	-326.2	108.8	72.9	181.7	-144.5
1982	-260.6	72.1	64.5	136.6	-124.0
1983	-89.0	72.0	62.0	134.0	45.0
1984	-146.6	70.3	77.0	147.3	0.7

SOURCE: Republic of Kenya, Central Bureau of Statistics, *Economic Survey* for various years, Nairobi.

Between 1960 and 1984, Kenya's total receipts net (TRN) from the main bilateral and multilateral sources amounted to $7,197 million (1980 dollars) in real terms. In the same period, official development assistance (ODA) amounted to $2,842 million. These sums, particularly ODA, increased over the years, especially after the mid-1970s. ODA increased fairly steadily from below 4 percent of GDP in 1970 to an average of 7 percent for the 1980s. TRN averaged slightly over 6 percent in the early 1970s, increased sharply to 12 percent in 1976 and 12.8 percent in 1977, then declined to slightly under 9 percent in the 1980s. TRN has generally been larger than the commonly existing excess of gross domestic investment (GDI) over gross domestic saving (GDS). Only in 1980 did it fall short by a large amount.

Until 1970, the United Kingdom was the major source of TRN and remained the largest single donor in most years until 1982. The U.K. contribution declined in importance largely because of increased flows from Germany, the Netherlands, Sweden, and the World Bank. Occasionally during the 1960s the United States was a significant source; between 1971 and 1981 it was relatively unimportant. The World Bank Group made only a few significant contributions during the 1960s. In the 1970s its contribution was large, and sometimes in excess of that of the United Kingdom. The source breakdown of ODA is much the same as for TRN.

Not only the United Kingdom but also the other main sources have become relatively less important over the years. The three main donors of TRN—the United Kingdom, the United States, and the World Bank—contributed 63 percent of total TRN in 1970–72 but only 38.5 percent in 1982–84;

TABLE 6.4 Aid Statistics for Kenya, 1970–84

	1970–73	1974–78	1979–81	1982–84
Average annual TRN (millions of 1983 U.S. dollars)	312.3	469.7	568.8	516.1
Average annual ODA (millions of 1983 U.S. dollars)	178.6	217.1	379.1	429.6
Multilateral TRN (% of total TRN)	32.1	26.9	23.0	35.7
Multilateral ODA (% of total ODA)	17.3	20.2	22.5	21.9

SOURCE: Cancian (1986).

the main ODA donors—the United Kingdom, the United States, and West Germany—gave 52.6 percent of total ODA in 1970–72 and 30.7 percent in 1982–84. The general increase in aid has been characterized by particularly large increases from smaller donors. Between 1970 and 1984 the flow of TRN from the top ten sources increased by 63 percent and the flow of ODA grew by 117 percent, compared to increases of 232 percent and 378 percent, respectively, from the other sources.[2]

ODA from all sources as a proportion of TRN has increased over time. In the 1970–84 period, it averaged 61.7 percent, rising from roughly 60 percent in the early 1970s to some 80 percent in the 1980s. The proportion varies widely among donors and is generally high for the smaller donors and low for the larger ones: 99 percent for Denmark, 94 percent for Sweden, 39 percent for the United Kingdom, and 30 percent for the World Bank (Cancian 1986: 38, 77).

The distribution of aid between bilateral and multilateral donors has also varied (see Table 6.4). The proportion of ODA provided by multilateral sources increased from about 17 percent in the early 1970s to about 22 percent in the early 1980s. The multilateral portion of TRN declined from 32 percent to 23 percent between 1979 and 1981 and increased during the next three years to an average of nearly 36 percent. These changes in TRN would be the expected consequence of the jump in private inflows in the late 1970s.

In terms of commitments by sector, non-ODA heavily supported transport, while ODA was directed mostly toward agriculture, forestry, and fishing (according to the reputedly unreliable Organization for Economic Cooperation and Development data for 1974–83). Agriculture and social services accounted for nearly half of the grants.

Until mid-1986, 25 percent of the combined cumulative lending of the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA) was devoted to agriculture and rural development and almost 50 percent to infrastructure; 14 percent went for nonproject purposes (Lele and Meyers 1989: pt. 2, Table II.3). From 1963 to 1984, more than half of total U.S. Agency for International Development (USAID) obligations were distributed to agriculture. Industry and infrastructure each claimed only 9 percent, and social services and

education received 12 percent. There were marked changes in the pattern of U.S. aid during this period. Agricultural education and training increased its share from 10 percent to 25 percent and then decreased to 10 percent. Infrastructure was first unimportant, then important, and later unimportant once again (Dijkerman 1986).

Aid Policies

Donor policies. The policies of aid donors have a great deal to do with the success of aid in Kenya. To examine these policies, it is useful to look at donors' motives for lending, the sectors they choose for project aid, the role of technical assistance, policy advice, conditional aid, and coordination among donors.

Motives. Donors provide aid for a mixture of altruistic, political, and commercial reasons. The composition of the mixture changes with time, generally reflecting political changes, and varies for different donors and recipients. Substantial motivational differences exist among donors to Kenya, though some of the major donors are increasingly following the policies of the World Bank.

In the early years, when Britain was the major donor, aid reflected the requirements of colonial policy and then of the independence settlement. Kenya's relative political stability, its "Western" political orientation, and its strategic location have all been attractive for donors. It provided a favorable location for aid to "work," where policies supported by major donors would not face ideological objections. Direct commercial benefit, given the small size of the Kenyan market, cannot have been a determining factor as far as the amount of aid. The United States' interest in Kenya can be explained on a similar basis.

Changes in U.S. policy toward developing countries as a whole have sometimes been less appropriate for Kenya than they may have been elsewhere. In the 1970s, U.S. policies had both a positive and negative impact on Kenya. The U.S. focus on the equitable impact of aid was advantageous, while the lack of U.S. involvement in infrastructure projects and higher education was detrimental. Moreover, it is possible that "the current strong emphasis on liberalizing markets can even set back the cause of market-oriented development in Kenya" (Dijkerman 1986: 183).

In the case of World Bank lending, results have also been mixed. Although the purpose of the World Bank is to offer loans for development, in the 1970s lending for reasons of internal politics sometimes overcame lending for development. Consequently, World Bank loans were disbursed with inadequate attention to the institutional capacity to employ loans productively, the likely success of particular projects, and the need for preliminary project investigation.

Sectors for project aid. The distribution of project aid among economic sectors reflects more than just policy. For example, the emphasis on transport twenty-five years ago resulted not only from the belief that inadequate transport was a major constraint on growth, but also because it was known how to spend money on roads, railways, and harbors. Aid to small farmers, however, suffered. But all has changed in recent years. The proportion of World Bank loans and credits devoted to transport fell from 66 percent in 1970 to 27 percent by 1980. Moreover, there has been growing realization of the importance of small-scale farming, as well as of other agricultural activities. As a result, ideas—not always usefully applied—have been developed about ways of supporting it.

A donor's priorities can often be seen in the way projects are designed. This is clear, for example, in several transport projects aided by the World Bank. The Third Railways Project focused on the development of a cost-based tariff, in conformity with the Bank's general policy of trying to "get prices right." The concern with agriculture was reflected in the inclusion of feeder roads—"tea roads" and "sugar roads"—in highway projects, often at the insistence of the World Bank.

The most important change in the distribution of aid, however, relates not to its distribution among different economic sectors, but in the increased importance of program aid.

Program aid. Although projects remain by far the largest claimant on funds, the shift in distribution of funds from project aid to program aid, or macroeconomic support, became significant with the economic crisis of the late 1970s. The World Bank structural adjustment loans (SALs) are the main form of program aid, but program aid is also important for USAID and other donors who adopt conditions similar to those of the World Bank.

The advantages claimed for program aid are the speed with which it can be processed and the relatively small demands it makes on the management resources of the recipient—and, for that matter, of the donor. Neither of these claims is entirely valid. Certainly, Kenya has at times reached the limit of its capacity for absorbing additional project funding. In these cases, program aid may have been a necessary alternative to restricting aid because of Kenya's inability to administer additional projects. But the administrative and political resources needed to implement the policy changes attached as conditions to program aid are scarce for both the recipient and the donor. When USAID shifted toward program lending and "policy dialogue," it assumed less of its staff would be required. In fact, however, it is becoming apparent that program aid requires not fewer but differently qualified staff people, who are scarce in the agency (Dijkerman 1986: 178n.). Inadequate implementation of the conditions of the SALs (see below) reflects not only a less than wholehearted belief in the policy changes, but also the administrative difficulty and political dangers faced in implementing them, as was the case with proposals for a new tariff and for the abandonment of controls on maize marketing.

Moreover, the speed of program lending is limited. The World Bank's second SAL took over three years from initiation to final disbursement. Nor does program aid provide directly for the preparation of projects or the improvement of project design. The real advantage of program aid, unless we count the leverage of donors over recipients, would seem to be that it provides foreign exchange without requiring associated capital expenditures and use of local funds. Project aid, therefore, is likely to remain the major form of financial aid transfer—not entirely a matter for regret.

Technical assistance or cooperation. Technical cooperation is an important part of U.K. aid to Kenya, providing for both U.K. personnel working in Kenya and Kenyan students and trainees in the United Kingdom. USAID also provides training in the United States, particularly for agriculturalists. Support for building expansion and staffing of Kenya's Egerton Agricultural College has played an important role in U.S. aid.

Policy advice. The introduction of policy advice or influence by donors is often related to technical cooperation programs. For example, students and trainees frequently absorb ideas reflecting the ethos of the country in which they study, depending on the range of attitudes they encounter and their own receptivity. Potentially more direct is the advice tendered by the nationals of donor countries who are employed in institutions of the recipient. In Kenya, this advice has sometimes reflected the government policy of the donor country; more often such advice has been independent of it, and even in opposition to it.

Donors' advice on the negotiation of specific projects is not always sound. In some cases, where financing proceeded without implementation of the donor's policy, the government of Kenya was prudent not to comply.

Generally, the advice of donors in project negotiations has focused on technical issues such as road design, although broader economic issues, such as pricing policy, have occasionally been introduced. The larger issues of policy, however, have been more readily addressed in the policy dialogues accompanying program lending. It is here, also, that the most politically difficult issues have been raised. The liberalization of maize marketing has been one such issue. Although government statements have repeatedly proclaimed agreement on this policy,[3] it has not been implemented. In fact, it is not likely to be implemented, because of the potential effect on vested interests, existing skepticism regarding the efficiency of free markets, the political risks of market failure, and the fear of market domination by non-Africans (Dijkerman 1986: 117–18).

Conditionality. Conditionality is attached, implicitly and explicitly, to both project and program aid. It is implicit in a loan, which has a requirement to repay, and in the offer of aid for a selected project: aid will be provided for this project but not for that. Conditionality becomes explicit for project

aid when provisions about the way a project is to be undertaken are attached, and for program aid, when conditions on policy are attached. In project aid conditions may be associated with the transfer of funds—particular accounting procedures must be followed, for instance—and with the way the project is carried out—equipment must be purchased from the donor, a road must be constructed to this particular standard, the recipient must pay capital and recurrent "local costs," and so on. Program aid is given to "buy the conditions," and to help the recipient afford the costs imposed by meeting them.

The distinction between conditionality and advice is often a fine one. Conditions in effect become advice when the transfer of funds occurs even though the conditions are not met.

The conditions attached to project aid, as a broad generalization, have become less severe over the years. After 1975, for example, all U.K. aid was provided as grants. There has also been some increase in donors' willingness to cover local costs. Procurement tying, or the tying of funds to donor sources of equipment, has occasionally been relaxed. The extent to which Britain has been the usual source of a high proportion of Kenya's imports must reduce, though not remove, the restrictiveness of source-tied aid. For World Bank projects, procurement tying is specifically prohibited. Technical assistance, which has always been an important part of the U.K. aid program, can in reality be a form of provision for recurrent costs. The Swedish aid agency readily finances recurrent costs.

There is no doubt that procurement tying, unwillingness to meet local and recurrent expenditures, and other components of project conditionality have imposed costs on aid recipients in terms of increased administrative burden, delayed drawings on aid, more expensive imports, and a confusing and costly mixture of equipment. To some extent these costs subtract from the benefits of the aid, but in Kenya it is doubtful whether the costs have been great, with few exceptions. In fact, the government in Kenya seems to have accepted procurement tying as normal and to have arranged matters so as to minimize its constraining effect; it has therefore not imposed serious limits on the preferences of the Kenyan government. Fungibility between aid donors must have been substantial, and there were probably few projects Kenya wanted that could not be pursued because of project conditionality. Although conditionality imposed an undesirable bias toward import-intensive projects and toward using new equipment instead of maintaining the old, the Kenyan government, it seems, has not found such biases particularly objectionable.

The conditionality associated with program lending raises greater problems (Duncan and Mosley 1984: 47–51). In project conditionality, conditions are usually directly related to a desired outcome: this condition will benefit the donor's exports; that condition will enable the road to carry a particular volume of traffic. In program conditionality the relationship between conditions and outcome is much more theoretical and even ideological; its mode of operation is far less clear; and its effect subject to long delays and uncertainty.

Moreover, implementation of program conditions is less likely, as they often encroach on the sovereignty of the recipient government. It seems equally unlikely that aid would be permanently suspended as a result of noncompliance, though the whole aid process could be pointlessly disrupted. These dangers become greater as donor "coordination" increases, as described below.

The case of maize market deregulation in Kenya is an example of the problems associated with program conditionality. Although donors have insisted on deregulation, there is no certainty that it will result in agricultural development. Consequently, the government of Kenya, while formally agreeing to these deregulation conditions, does not accept the risk and chooses not to meet the conditions.

Coordination. The lack of coordination among donor activities has created substantial difficulties; in the case of water development, for example, there are eighteen different types of water pumps performing the same function in rural water supplies, resulting in problems in stocking spares and training staff. Projects in which several donors are involved have faced problems of incompatible procedures and conflicting conditionalities. For project lending as a whole, the lack of coordination was manifest in the absence of any mechanism to keep the number of projects to a total that could be handled by local finance and management. A number of coordination measures have been introduced, including donor specialization, both by sector and by region, and improvements in budgeting and management. To some extent the World Bank is a leader in this area, with its procedures followed by others.

Not all participants in the aid process, however, are enthusiasts for coordination: donors sometimes have a national interest in going it alone; spending ministries do not welcome restraints imposed by the Treasury in the name of coordination. The government of Kenya has an interest in being able to deal with donors one by one, rather than as a coordinated group, for coordination can lead to "ganging-up" by donors to close escape routes from conditionality. Restraint on the part of donors is needed to prevent coordination from being a brake on aid rather than a way of increasing its effectiveness.

Kenyan policies. Kenya's aid policy has been as pragmatic as its economic policy as a whole. On some matters the Kenyans had strong views and ensured that they prevailed; on others they were prepared to accommodate donors to maximize aid. Foreign investment has been welcomed along with aid.

The government has been willing, even eager, to accept technical assistance. When, some years ago, Britain proposed reducing the number of aid-supported teachers, the Kenyan government resisted the idea. However, too great a concentration of foreign personnel can create difficulties. One

project received only lukewarm support from the administration, because, among other reasons, it had a staff made up largely of expatriates and was viewed as a foreign intervention.

Nearly twenty years ago it was observed that Kenya had rejected "plaque hanging" and "turnkey" projects that did not stand up to cost-benefit analysis. There had been a tendency, however, to tailor projects to attract donors and to eliminate "unattractive" programs from development plans. On the whole, though, the government's record in project selection was judged to be good, and that is broadly true of the succeeding years, at least as far as avoiding undue influence of donors is concerned.

Although the Kenyans pursued their own policies on matters about which they felt strongly, the pressure from a multiplicity of donors and aid offers had a distortive effect on development expenditures, on the administration of aid, and on the process of economic management. Large capital- and import-intensive projects have been more prominent in the development program than is desirable, though it is not clear whether, in the absence of aid, the program would have been better balanced, or just smaller. Too many projects have been pursued, requiring proliferation of technical assistance personnel to prepare the projects, swamping approval and evaluation procedures, and causing local finance, which would have been better devoted to recurrent expenditures, to be allocated as counterpart funds for capital projects. Procedures within the Kenyan administration for the procurement of supplies and the payment of suppliers have imposed long delays, made worse by the complex and various accounting procedures required by different donors. The normal practice of reimbursement by the donor to the Treasury after expenditures had been incurred by operating ministries resulted in a failure to claim some aid funds, as the operating ministries did not always provide the Treasury with the documentation necessary to make a claim.

Growing realization of the importance of these problems has led to a new emphasis on policies to increase the coordination of different ministries, to reform budgeting, to exert greater control over the acceptance of projects and over public expenditure, and to develop procedures to make such control feasible. Despite the unwillingness to abandon the regulation of maize marketing, there have also been moves to reduce the role of the government, which is the full or part owner of well over 200 parastatal organizations. The report of a Working Party on Government Expenditure recommended that government should do "less of what past experience suggests others can do better" (Ndegwa Report 1982: 18).

The Performance of Aid

Project aid. Although project aid to Kenya has in some cases suffered from poor project design and implementation, it has also achieved notable success

TABLE 6.5 Selected World Bank Projects in Kenya

Project	Cost (millions of US$)		Loan amount (millions of US$)	Economic rate of return (percentage)	
	Appraised	Actual		Appraised	Audit
Oil pipeline	82.92	113.02	20.00	31	19
Highway maintenance	18.10	18.90	12.84	33	< 10
Highway III	36.34	54.40	23.50	18	9
Highway IV	39.75	60.75	22.00	19	10
Highway V	31.96	62.07	29.00	20	15
Nairobi Airport	46.30	78.30	29.00	15	5.5

NOTE: Appraised = *ex ante*; audit = *ex post*.
SOURCE: Duncan and Mosley (1984).

in certain areas. In particular, its impact on transportation, land transfer and settlement, and agriculture has been significant.

Transportation. In general, the transportion projects aided by the World Bank took much longer and cost much more to complete than planned (see Table 6.5). Although the transportation system, to which aid moneys contributed, has undoubtedly been improved, there were serious deficiencies in project implementation and sustainability during the twenty years or so after independence.

The pipeline for white oils between the coast and Nairobi was successfully completed and, even though the design was not adapted to take account of a fall in the use of fuel in response to the oil price increases, appears sustainable. It struck a major blow, however, at the sustainability of the railways, which lost profitable traffic. Construction of the new Nairobi airport terminal was based on unrealistic traffic forecasts, and the decision to invest was made without investigating cheaper ways of providing increased capacity.

The highway system has certainly been improved (as no one who traveled the road to Uganda in earlier days will doubt!). Yet highway projects often suffered from serious inadequacies in design. Some plans made unrealistic assumptions about the volume and nature of traffic and the likely adequacy of maintenance. It is, of course, difficult to forecast traffic volumes, but to assume that vehicles will not be overloaded and that roads will be fully maintained betrays an inexcusable ignorance of local circumstances.

Some deficiencies in implementation could have been avoided if route surveys had been more thorough, so that project designers knew in advance the availability of suitable construction material, the characteristics of the subsoil, and the actual rainfall in the area. In principle, the marginal rule should apply: expenditure on preliminary investigation should be increased until it equals the additional savings that would result. It seems certain that in Kenya survey expenditure was well below the margin, and it is probable that project designers do not even think in the appropriate terms.

Land transfer and settlement. A high proportion of all aid to the Kenyan government in the early years of independence went to finance the transfer of farms from European to African occupation and operation. The aid funds were in the form of both grants and loans. Although the loan terms were not harsh, the requirement to service the loans, which was passed on to the African farmers, had an unfortunate effect. The need to "make settlement pay" led to a preference for larger farms than were common among the African population, because they were believed likely to yield the greatest financial return. Thus fewer farmers got land than if settlement had been on smaller farms, which are now thought to be more productive. There was also a concentration of agricultural extension services in the settlement areas, when they would probably have been more productive spread evenly among the farming population as a whole.

Nevertheless, land transfer and settlement was a considerable success. It provided for an orderly takeover of European farming, with far less disruption of production and destruction of assets than would have occurred with expropriation and unplanned settlement.

Agriculture. The conditions for agricultural development have become unfavorable, and as a result agricultural projects have performed poorly in recent years. The expansionary forces of the earlier period—the transfer of land to smaller farms, the shift to higher-value crops, the introduction of higher-yield maize, and the extension of cultivated land associated with population growth and the takeover of grazing land—could not be sustained. In 1984 the World Bank assessed its twelve current agricultural projects; one faced only minor problems, while seven were considered to have major problems.

Important examples of aided agricultural projects are the SRDP (Special Rural Development Project) and the IADP (Integrated Agricultural Development Project). The goal of the SRDP was to develop ways of increasing rural incomes and employment opportunities. Its concern was not simply agricultural; it also embraced programs for rural industrial development, ranching, and family planning. The agricultural component involved introducing a system of "group extension" to farmers of average capacity and performance in contrast with a focus on individual "progressive" or "master" farmers. The SRDP was not pursued with energy and enthusiasm by the Kenyan government, and thus had no chance of success.

The IADP aimed to improve the provision of credit and other facilities to small farmers. This program also failed, largely because of inadequate management and administration. Yet a program like IADP is sorely needed. Fertilizer for maize and cotton spraying have both been proven to offer high returns; the cost of doing without is substantial. The lesson, therefore, is that better marketing, storage, supply of inputs, and training, along with simple management structures, are needed before credit can be of much use.

The Mumias sugar project was an entirely different kind of development scheme. A sugar factory, supplied with cane by outgrowers and by a nucleus estate, was established with aid from Britain. It was a successful semi-commercial enterprise, providing an alternative to imported sugar, demand for the produce of small farmers, and wage employment. Mumias was an attractive project for a bilateral donor: it was large and visible with a large proportion of imported equipment, and its commercial nature increased the chance that it would be well run. If Britain had not provided the money, it is very likely that other donors would have.

Program aid. The changes proposed in the Fourth Development Plan were the basis for an SAL from the World Bank (IDA) in 1980. A World Bank loan and credit to support a second structural adjustment program were approved in 1982.

The first structural adjustment program focused on reducing industrial protection and promoting exports. Other components included forward budgeting and structuring of interest rates. The second program concentrated on the pricing and marketing of basic food crops, including the politically delicate issue of maize marketing, the management of agricultural projects, the registration of individual title to land, the increase of domestic energy supplies, and the promotion of family planning.

At the start of the first structural adjustment program the Kenyan government was quick to reduce quantitative restrictions on imports and replace them with tariffs, and to reduce the gap between tariffs on industrial outputs and on inputs. Despite the nominal commitment of the authorities to the liberalization of imports, however, events were against them. The new import regime was introduced in November 1981; in mid-1982 it was suspended when there was a sharp fall in foreign exchange reserves. Restrictions resumed and were maintained until late 1983, when a regime similar to that of 1981 was reintroduced.

The World Bank concluded that the program was a success, based on the fact that the government met most of the loan conditions, although with considerable delays. Nevertheless, the results were very different from the Bank's expectations. It had confidently expected that the liberalization of imports and the provision of export incentives would have a rapid effect on external trade. Industry would become "outward-looking," with its sales efforts directed to export markets once its home market ceased to be so heavily protected. In actuality, exports declined, including the nontraditional exports that had been expected to lead the field. The policy changes produced no measurable impact on exports, and there was no tangible response to the incentives provided.

The decline in exports does not in itself demonstrate the ineffectiveness of the structural adjustment measures, but it does show that they were too slow and not enough. It is true that the changes coincided with a world recession, and that the removal of protection from manufacturing was not

carried out fully or rapidly. But even if the environment for the program had been more favorable and the changes more fully implemented, the reduction in protection and provision of export incentives would still have been inadequate. The most formidable constraint on the export drive was the inability to produce exportable goods in sufficient quantity and of sufficient quality. Increasing manufacturing's share of exports requires new production capacity and new labor and management skills; "getting prices right" is not enough. With the difficulty of stimulating manufacturing by opening it to competition, manufacturing's role in external trade appears to be declining, and the share of industrial exports is unlikely to increase even in the longer term. Growth in exports will need to be based on agriculture.

In summary, although the government introduced many of the measures proposed in the structural adjustment program, improving the efficiency of the administration, the economy did not respond as planned. Economic performance was largely determined by factors outside the control of the government and was not susceptible to speedy remedy.

Aid and Development

It is useful to divide development into two components in examining the influence of aid: growth and inequality.

The influence of aid on *growth* cannot be satisfactorily exhibited in a statistical relationship because of the unknown delay in the effect of aid, its varying incidence, the extent to which aid is a response to growth, as well as a possible determinant of it, and the dominating effect of other influences. Any effect must be deduced from the way the economy, and the aid mechanism, have operated.

A high proportion of total resources, including those provided by aid, has been invested: 19 percent in 1964, 27 percent in 1967, and a peak of 29 percent in 1971. It remained above 20 percent in every subsequent year except one, and was above 25 percent in half the years. It seems likely that without aid, not only the proportion but also the total would have been smaller. Indeed, it would have been better for growth if more resources had been devoted to recurrent expenditures.

The direct effect of aid may be seen in terms of the success of the aided projects. The aided development projects that have been cited above give the impression, in contrast with the evidence of a generally good growth record since independence, that the investments have not been outstandingly successful. Inadequacies in assessment procedures may be partly to blame. The results of a project are difficult both to forecast and to express quantitatively soon after the project's completion (Tostensen and Scott 1987: 141–44). However, the results of evaluations cannot be completely dismissed on these grounds, and they have indicated a decline in rates of return for recent projects as compared with those in earlier years. This is hardly surprising, as

the national and international environment has become less favorable for development projects, and more of them have been in the difficult area of rural development. Donors have undertaken innovative and risky projects, and have continued to support projects despite evidence of failure. It has been argued that donors as a whole have financed marginal projects and have been induced to participate in unsatisfactory projects that the Kenyan government wished to pursue for political reasons (Lele and Meyers 1989: pt. 2, 71–72; Holtham and Hazlewood 1976: 198).

But there have been success stories. The land transfer and settlement program sustained production during the transition from colonial rule and laid a foundation for Kenya's subsequent development. Nor is the failure of the IADP the end of the story; it holds lessons for future development schemes in an important field. Main highways are less risky than rural development, and while highway projects have often been inadequate in execution, the road network has been greatly improved and has added to development potential.

Despite the generally development-enhancing effect of aid, it is important to draw attention to inadequacies in execution and planning in order to emphasize the scope for improvement. The efficiency with which aid is used and administered can be improved. Failures can be reduced by more thorough preinvestigation. Delays in the delivery of supplies to projects can be diminished. Later projects can be made to benefit from the experiences of similar earlier ones, which some World Bank highway projects singularly failed to do. USAID's institutional memory could also be improved. In the end, however, it is worth asking whether projects would have been more successful in the absence of aid, including technical assistance. It does not seem likely.

Aid has also had more general effects on the economy and on public administration. Aid undoubtedly increased the resources available to Kenya both of foreign exchange and of skilled manpower. The shift from loans to grants increased the resources provided, and in any case, particularly when the effect of inflation is allowed for, the grant equivalent of loans is high: for example, in the 1963–73 period it equaled 87 percent of gross U.K. aid.

Domestic saving was high during the period from independence until 1973, amounting to approximately 20 percent of GDP and financing some 80 percent of investment. In the 1979–82 period, it remained at around 17 percent of GDP. Thus it does not appear that aid replaced the domestic financing of investment, allowing a fall in savings and an increase in consumption. As aid met only part of the cost of a project, domestic funds were drawn away from current expenditure into investment, and technical assistance made it possible to spend resources that would otherwise have been devoted to current purposes on development projects instead (see Tostensen and Scott 1987: ch. 1; Holtham and Hazlewood 1976: ch. 6).

Doubtless too much aid was accepted at times for the smooth and efficient operation of the administrative machinery. Other sources, public

and private, domestic and foreign, could have been mobilized as a substitute for aid, but at a cost that could well have outweighed any benefit. It is probable that private investment was stimulated by aid—through the improved provision of infrastructure, for instance—rather than discouraged, so that it is a complement of aid, not a substitute. Higher rates of taxation would not have been cost-free, even if they fell entirely on private consumption. Marginal shifts might have been beneficial, but higher taxation would also have imposed an administrative burden. A lower dependence on aid might have enabled Kenya to negotiate better deals with donors, although given the government's ability to avoid or evade donors' conditions, this consideration seems of little importance. And for the resources needed to deal with balance of payments emergencies, it is implausible that Kenya could rely on increased domestic mobilization.

The constraints imposed by the overburdening of the administration and by conditionality cannot seriously be taken as reasons for believing that growth would have been faster without aid. Nor is it reasonable to argue that donor intervention in project design and economic management has hindered development. In general, donor intervention, including technical assistance, has effected improvements. Projects could doubtless have been better designed, to use more appropriate methods and factors and to have a greater impact on inequality, but it cannot be assumed that without aid things would have been done better.

Donor views on macroeconomic policies have been influential, when they did not clash with powerful interests in Kenya. The Kenyan government had no ideological objections to the proposals that are now fashionable for structural adjustment and so adopted them in principle and implemented them in practice—at least whenever circumstances, economic and political, did not make it impracticable or inconvenient.

Donors, despite general declarations of policy, have given little attention to the reduction of *inequality*. In one sense, inequality is implicit in development. If part of the population, but not all, becomes less poor, inequality is likely to increase. To the extent that aid has contributed to such development, it has contributed to inequality. The land transfer program, by not providing for the establishment of very small farms, helped the poor, but not the very poor. It made some people a lot better off, but it might have helped more through a different pattern of settlement. The improvement of the road system benefits the rich who have cars; however, it can also reduce the cost of the distribution of basic consumption goods and facilitate travel by those who are not rich. Inequality is a concept that must be handled with care; it is better to think in terms of helping the poor.

Unfortunately, there is no firm evidence of the effect of aid projects on poverty. Donor evaluations do not provide the data, and the authors of a study on the matter concluded: "We must regretfully report that we do not know what effect aid has had on poverty in Kenya" (Duncan and Mosley 1984: 9n.).

It is, it must be said, extraordinarily difficult to design development for the very poor. Social services can be improved, but to develop income-earning possibilities is far from easy. The recent emphasis on rural development and the arid lands may show the way, but success has not yet been achieved. In the provision of energy and water, far more attention needs to be given to appropriate technology to serve the poor. Schemes to foster the urban informal sector are also important, and aid could be used to help financing institutions, such as ICDC, cater to much smaller borrowing needs than has been the practice. Perhaps the greatest contribution that donors could make toward the alleviation of future poverty is to assist in the success of the family planning program.

The Future

Kenya's economic and political future, so far as it can be seen today, is dominated by population growth and land.

Kenya's population growth rate has been rising since independence. Between the censuses of 1969 and 1979 the annual rate was 3.3 percent, and was some 3.8 percent by the end of that period; in the mid-1980s it was about 4 percent. In 1969 the population totaled 10 million; in 1985 it was 20.6 million, and is projected to be nearly twice that figure by the end of the century.

The Kenyan government has a population policy, reflecting official recognition of the dangers of the current rate of growth. It aims to do no more than reduce the annual rate of increase to 3.3 percent through a reduction in fertility. It proposes to achieve this by the combined effect of education, improved status for women, lower infant mortality, the creation of a more favorable attitude toward smaller families, and the encouragement and facilitation of contraception. The end is not to be easily and quickly achieved. Evidence suggests that low infant mortality rates are not immediately associated with lower fertility, that contraception is not widely practiced (80 percent of Kenyan women know of a contraceptive method but only 15 percent of those aged 15 to 49 use it), and that the favorable attitude toward large families persists, not only among the poor and uneducated.

It is not only future population size that poses a major problem for economic policy; the labor force will approximately double by the end of the century, as those already born grow to working age.

The rapid growth of population will impose increasing strains on the education and health services, making it difficult to shift government expenditure toward shorter-run productive activities; changes in the age structure will increase the number dependent on those of working age; to the extent that population moves from the countryside to the towns, the problems of providing urban housing and other services will become greater; it will become more difficult to meet the demand for food from domestic sources;

and the expansion of income-earning activities to match the increase in the labor force will become increasingly difficult. Most of these problems are aspects of the changing relationship between population and the supply of land.

No more than a small part of the increased supply of labor is likely to be provided with formal sector employment or with income-earning opportunities in the informal sector. Although nonfarm income is of great importance for rural households and will remain so in the future, small-scale farming offers the greatest opportunity for absorbing labor—if the land is available.

In the past agriculture was the "sponge" (Livingstone 1986b) that absorbed the growing labor force and prevented an explosive growth of the urban unemployed. It is likely that the limit to the absorptive capacity of this sponge is approaching. In smallholder farming, some 30 percent of holdings are less than one-half hectare and more than 50 percent are less than one hectare. Although it is now thought that small farms are the most productive, a high proportion of them must be at the limit of productive subdivision.

At the time of the immediately pre- and postindependence land transfer programs, larger holdings were believed to be the more productive, and large-farm land was transferred to small farmers in holdings of between ten and fifteen hectares, varying according to the scheme being implemented. If, as has been argued, holdings of two hectares are a "respectable" size (Livingstone 1986b) and should be used in the future as the planning unit, there is clearly room for further "natural" subdivision of these holdings—meaning in this case subdivision with no administrative constraint rather than with positive action to transfer tenure. More than half of the land transferred in the past under the various programs and through private sale was from large farmers to large farmers, so land for further transfers from large farmers to smallholders clearly exists.

A land transfer program in the 1980s would have taken place, however, in a very different context from those of a quarter of a century earlier. At that time, transfers on a willing-seller basis were facilitated by the fact that most of the sellers wanted to be rid of their land and leave the country. Today the situation is different. Many politically influential Africans own large farms, and their ownership of land is an expression and reinforcement of their wealth, power, and influence. It is difficult to imagine the transfer of large areas over a short period on a willing-seller basis, and acceptance of any other basis cannot be envisaged. Prices would have to be high enough to tempt unwilling sellers, making land transfers costly. Aid could play a vital role in financing such transfers.

Whether Kenya can maintain its satisfactory economic performance depends, therefore, on how it meets these challenges related to a growing population and a limited amount of land. Aid, well planned and efficiently administered, could make an important contribution to Kenya's economic future.

CHAPTER 7

PAUL COLLIER

Aid and Economic Performance in Tanzania

Tanzania has received more aid per capita than any other significant country and its economic growth performance has been among the least successful. Either it is *sui generis* or it conveys a disturbing message. This central question has only been addressed partially: neither the Cassen (1986) nor the Krueger-Ruttan (1983) collections included Tanzania as a case study. Not only has aid literature largely omitted analysis of this extraordinary observation, but even in the less specialized literature there has been little analysis of Tanzania's macroeconomy. Rather, Tanzania's hallmark has been its distributional policies. Even here, however, while the policies themselves have received much attention, their effects have only recently been researchable. This chapter will focus upon the macroeconomic and distributional consequences of aid, since these are both central and neglected.[1]

Perhaps the reason for past neglect is that the database for the analysis of Tanzania has been less than ideal. As Cassen (1986) noted, "It is now difficult even to quantify Tanzanian performance, since local data gathering has itself fallen victim to the traumas of 1978 onwards." However, the data situation is now considerably improved. At the micro level there are four large-scale rural household budget surveys covering the years 1969, 1976–77, 1979–80, and 1983 (two of which were conducted by the author); at the macro level the National Accounts have been heavily revised and appear more

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credible, and detailed terms of trade series have recently been constructed. There are, of course, still lags in data, and therefore it is not yet feasible to study the effects of the recent structural adjustment agreement. Since analyses of Tanzania, however, have generally focused on whatever happened to be the current stages in a continuing crisis, perhaps the more valuable contribution is to take the longer perspective from the period of President Nyerere's Arusha experiment (a government commitment to egalitarian objectives by socialist means), launched at the end of the 1960s, to 1984.

This chapter first investigates the outcome of the Nyerere experiment for living standards. The following section reviews salient features of macroeconomic performance that contributed to this outcome. After this is a brief quantification of aid flows and a discussion of their determinants. The final section considers the extent to which aid exacerbated or alleviated the unsatisfactory economic performance.

The Decline of Living Standards since 1969

Changes in living standards of major socioeconomic groups generally form an important criterion of economic performance. In the case of Tanzania, this criterion is particularly appropriate, since it is broadly the one by which policymakers would have wished to be judged at the time key decisions were taken (the Arusha Declaration of 1967 was primarily concerned with wide participation in the benefits of development). The measurement of changes in living standards in Africa is frequently infeasible, but in Tanzania the data now exist for a defensible estimate.

There are three different data sources on trends in living standards: National Accounts estimates of per capita private consumption; household budget surveys covering 1969, 1976–77, 1979–80, 1982–83, and 1983–84; and mean earnings as reported in the Employment and Earning Surveys. Whichever source is used, incomes must be corrected for inflation using a consumer price index (CPI) as a deflator, which is problematic in Tanzania. The official CPI, apart from being an inevitably noisy estimate of the price level, is liable to systematic bias for three reasons. First, it observes only urban prices, yet it is likely that rural prices have risen more rapidly than urban as the transport network has deteriorated. Nonfood consumer goods must reach rural areas via the towns, so an increase in transport costs raises the price of these goods for rural consumers. There has been little reverse flow of food to the towns, however, for the urban population is fed primarily by imports and subsidized domestic food; hence, higher transport costs do not correspondingly raise the urban relative price of food. Second, the availability of consumer goods has deteriorated substantially, especially since 1978. Not only were many goods only haphazardly available, but the range of choice was narrowed as goods were added to the list of zero-quota imports. Both of these effects constitute technical regress in the mapping from expenditure

TABLE 7.1 Rural Living Standards in Tanzania, 1969–83 (Tanzanian shillings)

	1969	1976–77	1979–80	1982–83
Nominal per capita income	303	930	734	1,490
Official CPI	100	226	348	724
Real income index	100	136	70	68

SOURCE: Bevan et al. (1988).

to utility. Third, the black market that emerged during the late 1970s is probably underreported by official enumerators. Each of these three biases suggests that deflating by the official CPI overstates living standards. Estimates derived from the CPI therefore represent the upper bound rather than the mean of the range. Unfortunately, only the first and third biases can be quantified. Using price data gathered in 1983, Bevan et al. (1988) estimate that between 1976 and 1983 the rural cost of living rose by around 290 percent against the official CPI estimate of 220 percent, so that rural living standards in 1983 were some 20 percent lower than implied by the CPI. Their correction is itself quite fragile and is best treated as corroborating the a priori belief that the official CPI will produce a substantial overstatement of incomes.

The comparison of living standards across budget surveys is always problematic because of differences in methods, concepts, and samples. Fortunately, in this case such difficulties are somewhat less severe than normal.[2] The rural living standards implied by the four surveys have been compared in Bevan et al. (1988), and the key results are shown in Table 7.1. Over the fourteen-year period from 1969 to 1983, rural real living standards declined at an average annual rate of 2.5 percent.

The living standards of urban households can be estimated from surveys for 1969, 1976–77, and 1983–84. Bevan et al. (1988) suggest a decline in real income from 100 in 1969 to 85 in 1976–77 and 39 in 1983–84. This decline corresponds very closely to the real mean nonagricultural wage series derived from the Employment and Earnings Survey and shown in Table 7.2.

Table 7.3, based on an annual population growth rate of 3.27 percent, shows a decline in per capita real private consumption of 43 percent since 1973, an average annual rate of 5.0 percent.

Thus, household-based rural and urban budget surveys, firm-based wage surveys, and the National Accounts all point to very large declines in living standards. The smallest estimate is a 32 percent fall in rural household incomes since 1969, and the greatest is a 65 percent fall in urban wages since 1970, while the urban household surveys find a 61 percent fall since 1969 and the National Accounts, a 43 percent fall. Further, we know that all of these are liable to underestimate the decline in living standards because they use the biased national CPI as the deflator. Probably this is about as far as it is wise to take the data. Technically, it is possible to discuss divergences between the series and to derive changes in the rural-urban

TABLE 7.2 Urban Living Standards in Tanzania, 1970–83

Year	Real mean nonagricultural wage index
1970	100
1971	100
1972	93
1973	88
1974	117
1975	89
1976	85
1977	80
1978	72
1979	86
1980	71
1981	60
1982	51
1983	35

SOURCE: Government of Tanzania, *Survey of Employment and Earnings*, various years.

TABLE 7.3 Private Consumption in Tanzania, 1973–84

Year	Nominal private consumption (millions of Tanzanian shillings)	CPI	Index of real per capita private consumption
1973	9,259	33.6	100
1974	11,818	40.1	104
1975	14,171	50.8	95
1976	16,345	54.3	99
1977	18,296	60.5	97
1978	23,711	67.5	109
1979	25,632	76.8	100
1980	33,556	100.0	97
1981	37,596	125.6	84
1982	47,108	162.0	79
1983	52,443	205.8	67
1984	62,355	279.5	57

SOURCE: Government of Tanzania, *National Accounts*, and IMF, *International Financial Statistics*.

income distribution. Any results, however, would be fragile, whereas the key result, that both rural and urban living standards declined massively between the end of the 1960s and the early 1980s, is robustly supported by all our distinct data options. The magnitude of the decline (from levels that were already among the lowest in the world) is virtually unprecedented outside the context of war or natural catastrophe, and suggests that Tanzania was indeed experiencing revolutionary change. It also appears that most

of these changes occurred after 1975, and so we pay special attention to this period in our subsequent analysis.

Causes of the Decline in Living Standards

The decline in living standards was not due to a shift from private consumption to other uses of resources; by 1984 private consumption was over 82 percent of gross domestic product (GDP), a higher share than at any previous time. Rather, it was due to a collapse in production. Although it is not possible to decompose this decline quantitatively into its constituent causes, three processes each probably had substantial and direct effects upon production: import compression, deteriorating resource allocation, and government preemption of resources. Each of these processes was determined partly or entirely by policy, and each was at least indirectly affected by aid. We first consider the three processes in turn.

Import compression in manufacturing. Between 1978 and 1984 the manufacturing sector declined by 63 percent. This decline is usually attributed to an intensifying shortage of imported inputs caused by worsening terms of trade. However, for the economy as a whole during this period the volume of intermediate imports declined by only 6 percent. Manufacturing was indeed constrained by a lack of intermediate imports, but the main culprit was the deteriorating efficiency with which these inputs were allocated. Recent unpublished work by Mporogomyi shows changes in manufacturing output can be explained by imported intermediate inputs lagged one year and a negative time trend. Since a declining quantity of inputs was available for a rapidly increasing manufacturing capital stock (see below) and labor force, had inputs been allocated with constant efficiency, output should have declined by less than inputs. The negative time trend shows that the allocation system was deteriorating so rapidly as to more than offset this effect.

Two types of input misallocation seem likely. First, both voluntary and involuntary inventories may have been accumulated. In response to scarcity, firms may have inflated their requests and hoarded any excess resulting from good fortune, and the one-year lag in manufacturing output noted above suggests that this is indeed what happened. Firms also accumulated involuntary inventories, because bureaucrats in the Central Bank and the Cabinet who allocated imported inputs did not account for all the complementarities among inputs. Second, the capital formation associated with the Basic Industries Strategy probably changed the composition of industry toward more import-intensive activities. Thus, even a neutral allocation across industries would increasingly direct imports toward more import-intensive activities whereas an efficient allocation would have economized on imports by doing the opposite.

Manufacturing declined more spectacularly than other sectors because it is a supremely import-dependent sector. However, the volume of agricultural exports declined by almost as much. Export agriculture is also import-dependent: a recent study (Marketing Development Bureau 1985) estimated the import content of agricultural exports at 29 percent. Like the manufacturing sector, agricultural exports experienced a decline far greater than the fall in the volume of intermediate imports. Further, the other key input into exports, transport services, actually increased more rapidly than GDP according to the National Accounts. Hence, to the extent that imported input availability was a key constraint, the poor performance of the sector must be partly accounted for by the allocation of imported inputs within the economy rather than their scarcity to the economy.

To summarize, the decline in living standards is accounted for by a widespread decline in production. In both export agriculture and manufacturing a component of this decline was the reduced availability and deteriorating allocation of imported inputs. The next step in the analysis is to investigate the causes of this reduced availability of noncapital imports.

The most obvious direct cause of reduced noncapital imports is scarcity of foreign exchange. Again, however, we must distinguish between changes in the total quantity of foreign exchange and changes in its allocation. We now argue that to a considerable extent the cause was a change in the composition of imports in favor of capital goods. The composition of imports changed massively, with the share of capital goods rising from 19 percent in 1966 to a peak of 50 percent in 1981 and 1982. Had all else stayed constant, this reallocation alone would have accounted for a 32 percent decline in noncapital imports. The actual decline over this period was around 35 percent (there is some room for varying the deflator). Hence we may conclude that the absolute decline in the volume of noncapital imports was largely a composition effect.

The increase in capital imports can, in turn, be decomposed into that due to a rise in capital formation and that due to a rise in its import content. Between 1966 and the early 1980s capital imports doubled relative to GDP. This rise far exceeded the overall increase in capital formation: even at its peak in 1978–80, gross fixed capital formation relative to GDP was only 40 percent above its 1966 level, and by 1984 it was actually lower. Hence, the increase in capital imports seems better characterized as a decision in itself, rather than the by-product of a decision to increase investment.

Thus, many of the problems generated by the reduced availability of noncapital imports are ascribable to the commitment to increase capital imports. However, there was also a large reduction in total imports relative to GDP, so that such composition effects do not account for the entire problem. Why then did the capacity to import decline?

In all but the short term, Tanzania's imports are financed by either exports or aid, whose respective medium-term contributions to imports can be inferred from trade data. Although exports financed 112 percent of

imports in 1966, this fell to the 40–48 percent range after 1978. Hence, the decline in imports was substantially less than the decline in exports. This point is substantiated in the next section, which quantifies aid flows both directly and residually as the trade deficit. Thus the overall decline in the availability of imports relative to GDP is fully attributable to the decline in export earnings relative to GDP. In turn, the latter is attributable partly to volume and partly to price effects. There was undoubtedly a large deterioration in the terms of trade for most of the period, and by itself this would clearly have posed severe difficulties to an economy with rather limited short-run capacity for diversification into new export areas. There is reason to believe, however, that part of the apparent deterioration in the terms of trade was an endogenous response to the incentive structure. Bevan et al. (1989b) show that, controlling for the composition of imports, the c.i.f. (cost, insurance, freight) unit cost rose significantly faster in Tanzania than in Kenya. With 1975 as a base, by 1981 (the most recent data point) Tanzanian import unit costs had risen by 12.2 percent relative to those of Kenya. There are several possible explanations for this superdeterioration. The centralization of purchasing through the Board of External Trade may have led to less astute negotiations with suppliers. The insurance costs of contracts involving Tanzania appear to have risen. The major cause, however, was probably a tendency toward overinvoicing of imports, which occurred because the price control regime provided increasingly powerful incentives for the practice. Cost-plus price control had been introduced in 1973, but it was only during the late 1970s that controlled prices intensified excess demand. In this environment a fake rise in import costs could be used to justify an increase in price without reducing sales. Hence, instead of being a device to transfer profits abroad (which is the case under market-clearing conditions) overinvoicing created profits abroad at no opportunity cost to domestic profits (this argument is stated formally in Bevan et al. 1989b). Bevan et al. estimate that between 1976 and 1981 overinvoicing, at a rate additional to whatever the rate was in 1975, cost Tanzania an average of around 3 percent of GDP, and that over half of the coffee boom windfall of 1976–79, the largest trade windfall ever experienced by Tanzania, was lost to the country as a result.

The volume of agricultural exports declined substantially relative to GDP. As suggested above, part of the explanation for this was the reduced allocation of imported inputs to the sector. However, two other explanations for the fall in agricultural exports are also credible: the decline in the real domestic price of export crops and the reduced availability of consumer goods, both of which constituted disincentives to marketing through official channels. The decline in export volumes can therefore reasonably be regarded as inherent to the policy environment.

In sum, the compression of intermediate imports to manufacturing was a contributing factor to the decline in living standards because of its multiplier effects. The proximate causes of this compression were the increased priority of capital formation, the increased import content of capital, the poor

performance of export volumes, and endogenous deterioration in the terms of trade. However, the policy environment both determined some of these proximate causes and contributed to the decline in production in ways unrelated to the aggregate supply of noncapital imports. We have seen that in both manufacturing and export agriculture other explanations must have been predominant. We now turn to such an alternative explanation.

Deteriorating resource allocation. Prior to the policy experiments of the 1970s, commodities were allocated through private and fairly competitive markets, whereas factor markets were either undeveloped or regulated. In the peasant economy there was virtually no land market and only negligible hired labor. Since land was abundant in most areas, factor markets were largely unnecessary. In the formal economy, both urban and plantation, wage rates were substantially above the supply price of labor consequent upon the legislated minimum wage. In the 1970s, however, allocation of many resources changed radically with the introduction of public nonmarket allocation.

Private trading for consumer goods was abolished in rural areas. National controlled prices were set by the Price Commission, established in the early 1970s. The Price Commission attempted to determine around two thousand prices on a cost-plus basis without reference to the balance between supply and demand. Because the supply of consumer imports declined precipitously, prices would have had to rise considerably in real terms to clear the market. By 1984 the per capita volume of consumer imports was only 16 percent of the 1966 level, and its share of consumer expenditure had fallen from 15.2 percent to only 2.5 percent. Since controls prevented prices from rising sufficiently, acute excess demand developed. The Board of Internal Trade was responsible for allocating supplies (and hence for determining who was to suffer unsatisfied demand). It appears not to have developed consistent criteria in its allocation policy, although Dar es Salaam did consistently receive a share far in excess of its population. Even when goods were dispatched to the regions, the requirement of uniform national pricing coupled with pervasive excess demand created a powerful disincentive to incurring the high and rising transport costs necessary to supply rural areas. Bevan et al. (1987a, 1987b, 1988) argue that peasant-marketed supply was reduced by the resulting shortages of consumer goods in rural areas.

In the market for peasant produce, monopoly state marketing boards were responsible for both export and major food crops. Prices were set by the Cabinet on the advice of the Marketing Development Bureau, an aid-funded agency. The MDB based its recommendations on a cost-plus pricing formula, which was designed to equalize the returns to the farmer from different crops. For much of the period, the same price was paid nationally, resulting in unusable maize surpluses in remote but ecologically suited regions. In a

curious twisting of comparative advantage theory, this was subsequently modified to pay higher prices in those regions most ecologically suited for a crop; this greatly aggravated the problem of untransportable surpluses. All crop prices declined substantially in real terms during the 1970s (Ellis 1982). Politically, this was seen as a sharing of the burden in view of the highly visible decline in urban real wages (see Table 7.2). Emphasis on food security, through higher food prices, or on foreign exchange, through higher export crop prices, shifted depending upon which crisis was deemed the more severe.

In the peasant economy from 1974 onward, most land and some labor was allocated by Village Councils. The resettlement of the population into villages tended to reduce holding size. In a sample of twenty villages, holding size fell by 10 percent between 1973 and 1980 (Collier, Radwan, and Wangwe 1986). Up to 20 percent of household labor was diverted into communal activities that were usually of low productivity and unremunerated. Since this labor came disproportionately from poor households, communal activities constituted a system of regressive taxation. In the urban economy the administered wage declined sharply (see Table 7.2). Employment, however, expanded contemporaneously with declining output. As with overinvoicing, the cost-plus pricing system enabled patronage-induced employment to expand at no cost to the enterprise. During the 1970s unemployment and low-income self-employment grew rapidly (Collier 1979).

Capital formation was largely determined by government planning and followed the Basic Industries Strategy (BIS). Not only did this strategy skew resources heavily against agriculture, but the entire resulting capital stock has been useless to date. Mporogomyi's regression analysis of manufacturing output shows that, even when lagged, additions to the capital stock are insignificant and negative: industrial capital formation did not produce any output and may have reduced it. The latter is credible since the extra enterprises increased the demand for intermediate imports. Recall that the transformation of such imports to output deteriorated over time; that is, the allocation between competing claims became less efficient. Imported intermediate inputs were allocated through the Central Bank and the Cabinet as a corollary of foreign exchange rationing. Entitlements to foreign exchange became both user- and commodity-specific. This allocation system may have worked less well as excess demand increased. In other words, not only did bureaucratic allocation face an intrinsic lack of information, but the degree of misinformation increased as actual prices diverged from shadow prices.

Thus, there was a wide-ranging change in the mode of resource allocation during the 1970s. Changes in the allocation of capital and rural land and labor, in formal sector employment, and in access to imported inputs and

consumer goods all reduced or eliminated the incentive to base decisions upon the criterion of maximization of value added.

Preemption of resources for public consumption. Our earlier analysis of living standards was confined to private consumption and income. To some extent this is misleading because one element of the Arusha strategy was to equalize and raise living standards through a redirection of resources to public services, especially health, education, and rural water. Potentially, the decline in private consumption might have been necessary to finance a desirable expansion of public services. We now consider whether public consumption did in fact increase, whether it raised living standards, and how it was financed.

First, the definition of public consumption warrants some consideration. It can be defined either positively, as those items of government expenditure that enter directly into the utility functions of consumers, or negatively, as those items that do not augment productive capacity. Large components of Tanzanian public expenditure are included in or excluded from public consumption, depending upon which of these definitions is adopted. In particular, most industrial capital formation, part of the wage bill of public corporations, and part of the "government services" category of the National Accounts were probably neither utility- nor output-raising. Yet these were among the most rapidly growing sectors of the economy. The National Accounts show government services to have been among the fastest-growing sectors of the economy in terms of volume. Between 1966 and 1984, per capita provision of these services doubled despite the decline in per capita private consumption. This was a clear preemption of resources, especially educated labor. Because of the fall in real wages, however, this expansion was not concomitant with an explosive growth of public expenditure. As a share of GDP, the latter rose rapidly in the early 1970s—from 17 percent in 1972 to 25 percent in 1974—but the most recent consistent data, for 1980, show the share to have risen only to 26 percent. Further, this share of GDP was not abnormally large compared to other similar countries.

This increase in public expenditure relative to GDP was largely confined to items that were not directly utility-raising. Bevan et al. (1988) take as a proxy for utility-raising public consumption, expenditures on health, education, roads, and agricultural services. The share of GDP devoted to these items changed little during the key period, rising from 9.9 percent in 1974 to just 10.2 percent in 1981 (the most recent data). This contrasts with Kenya, where the share was both higher and rising. Utility-raising public consumption was a declining priority of public expenditure, averaging 47 percent of total expenditure 1974–76 and only 38 percent during 1979–81.

Whether extra social expenditure raised living standards is difficult to evaluate, because provision is usually monitored only by its inputs. It is possible that, as in the productive sectors of the economy, there was some deterioration in the mapping from inputs to output. There were some clear monitorable successes, such as the rise in adult literacy and the proportion of children attending primary school, but important aspects of social programs appear to have been deficient. Education was excessively biased toward the elementary and away from the secondary level (Boissierre, Knight, and Sabot 1985), and in higher education resources were misallocated toward vocational training (Loxley and Psacharopoulos 1985). A study of the rural health-care system (Bevan et al. 1989a) concluded that as of 1983 it appeared to be increasing the net illnesses of its users, perhaps because of the lack of drugs (an extreme case of import compression).

Increased public expenditure preempts resources, yet the extent of output loss in the rest of the economy depends not only on the magnitude of expenditure, but on how it is financed: taxes create disincentives of varying degree and deficit financing from the banking system generally creates inflation. The Tanzanian government relied heavily upon such deficit financing.

The budget deficit peaked at 8.8 and 9.1 percent of GDP in 1978 and 1979. Usually, this magnitude of deficit would have generated severe inflation, but because of price controls and nonmarket allocation it was repressed. Deficit financing, in combination with price controls, was thus being used in an attempt to increase the real (not merely the nominal) money supply. Unless the real demand for money also rises, such a strategy fails, either because the government is unable to make all of its desired purchases of goods and services or because price controls collapse. Fortuitously, during the late 1970s and early 1980s, real money demand appears to have increased enormously, with the velocity of circulation halving. One explanation for this increase is that it is spurious: official price series may understate the rise in the cost of living through under-enumeration of black market transactions. In other words, price controls broke down. Although there is some truth in this, the available quantitative evidence on black market prices suggests that it was a relatively minor factor. An alternative explanation (Bevan et al. 1987a, 1987b) is that the random access to consumer goods generated by excess demand without a formal rationing system at the household level reduced the transaction efficiency of money holdings: for a given average level of expenditure, higher money balances became necessary in order to take advantage of unpredictable opportunities. Such an effect can be demonstrated formally and is also supported by anecdotal evidence from rural Tanzania. If correct, it implies that the combination of price controls plus fiscal deficits that the government adopted in the mid-1970s produced a honeymoon period during which private citizens increased their real money

stocks in exchange for goods and services supplied to the government. However, the resulting overhang of money balances represents a serious problem for any subsequent return to market clearing.

To summarize, the public sector did preempt an increasing share of resources, but in aggregate this was not massive. However, the composition of public expenditure was weighted toward activities that did not directly enhance utility, and even here doubts have been raised as to the efficiency of expenditure. Most remarkably, during the key period from the mid-1970s to the early 1980s, the government was able to increase its command over resources without either raising taxes or causing inflation, as real money demand rose. However, this constituted either a loan from the private sector or, in the event of default, a temporary windfall.

Some key policy decisions. Three key policies contributed to conditions that led to the decline of production: the Ujamaa and villagization program of 1974 onward; the nonmarket allocation of resources resulting from price controls and foreign exchange rationing, which became pronounced after 1978; and the adoption of the Basic Industries Strategy in 1976. (This is not, of course, an exhaustive list of important policy decisions.)

In 1974 most of the rural population was resettled into newly created villages within which cooperative agriculture (Ujamaa) was promoted. Arguably, the Ujamaa and villagization program was the product of unrealistic expectations and a misunderstanding of the economics of Tanzanian peasant society. In retrospect, economic performance in the pre-Arusha period appears satisfactory, yet one argument for Ujamaa was that the pace of development was too slow. The other main argument was that kulaks were emerging as a result of the success of cash crops in some regions. These regions were politically weak within the government and so policies to redistribute income away from peasants growing cash crops were favored. In addition to Ujamaa, a tax was imposed on coffee, the major cash crop. Although the tax was ostensibly designed to stabilize the coffee price during the coffee boom of 1976–78, it was retained after the world price fell, while in Kenya, where coffee-growing peasants were politically more powerful, no such tax was imposed. Yet the resentment of proto-kulaks was based on "false consciousness." Survey data for 1979 (Collier, Radwan, and Wangwe 1986) established that cash-crop income was more equally distributed than total peasant income, that hired labor was negligible, and that most activities soon encountered scale diseconomies. Agricultural commercialization in Tanzania would have proceeded without the creation of kulaks.

Shortly after the Arusha Declaration in 1967, Tanzania encountered balance of payments problems consequent upon increased government expenditure. In its response to the crisis, the government established much of the framework for nonmarket resource allocation that determined subsequent problems. Foreign exchange was rationed, and inflation was met

TABLE 7.4 "Aid" ($M - X$) to Tanzania Relative to GDP, 1973–84

Year	$M - X$ (millions of US$)	Index of real $M - X$	GDP index	Index of exports	
				Value	Volume[a]
1973	127.9	100	100	100	100
1974	350.2	184	102	74	69
1975	399.8	188	108	61	76
1976	199.1	93	116	66	99
1977	236.8	102	119	76	87
1978	665.0	253	122	63	65
1979	605.7	193	124	55	67
1980	746.1	194	125	46	48
1981	607.5	157	124	51	69
1982	684.4	185	125	42	59
1983	425.2	117	124	35	48
1984	470.6	138	127	38	n.a.

NOTE: M = imports; X = exports; n.a. = not available.
a. Agricultural exports only.
SOURCE: IMF, *International Financial Statistics*, various years.

by the establishment of a Price Commission. This payments crisis thus initiated the apparatus for nonmarket resource allocation. However, the apparatus was largely dormant until the emergence of serious disequilibria in the late 1970s. Hence, there was no single decision to ration resources; rather, there was a decision to create the facade of nonmarket resource allocation and this subsequently became serious as the availability of non-capital imports deteriorated.

Probably the key decision that contributed to each of the three problems identified above was the adoption of the Basic Industries Strategy.[3] The BIS preempted resources, it was foreign exchange–intensive, and it allocated resources to investments that generated no output. As argued below, this strategy was adopted with fairly full information, but it was only adopted with hesitation. Indeed, at one stage the decision was reversed only to be restored later. A key question is thus whether aid flows affected this decision.

The Determinants of Aid Flows

We shall use two definitions of aid to examine the pattern of aid flows to Tanzania. Because Tanzania has been largely shut out of long-term private capital markets, one approximation of the net resource transfer to the country is the annual payments deficit on goods and services. We refer to this as "aid," and an index of its real magnitude, deflated by import prices, is shown in Table 7.4. Thus defined, "aid" increased enormously relative to GDP, even when indexed to the relatively high aid year of 1973, although it did fluctuate considerably.

TABLE 7.5 Total Receipts Net to Tanzania, 1966–84 (millions of 1980 U.S. dollars)

Year	Largest bilateral donors					Multilateral donors[a]	Total
	Germany	Netherlands	Sweden	U.K.	U.S.		
1966	19.86	0.00	0.00	37.78	29.41	-5.56	81.49
1967	11.78	0.00	7.01	8.76	33.76	8.98	70.29
1968	11.25	0.00	10.55	10.19	36.72	0.00	68.71
1969	35.64	0.31	26.22	4.21	24.39	26.55	117.32
1970	4.83	3.82	20.23	20.14	25.86	30.63	105.52
1971	16.38	4.17	30.41	16.43	27.25	41.47	136.10
1972	15.40	9.25	42.58	60.73	17.50	46.04	191.48
1973	15.09	15.54	68.71	25.45	19.40	26.62	170.80
1974	19.82	19.08	60.89	6.92	17.70	24.46	148.87
1975	44.94	30.27	87.21	3.06	52.55	114.91	332.93
1976	41.21	43.27	80.58	42.53	51.81	72.27	331.65
1977	49.84	65.10	82.03	37.61	42.86	115.92	393.36
1978	78.62	78.70	79.69	41.80	17.39	108.35	404.55
1979	95.76	103.55	115.32	65.67	24.12	131.49	535.91
1980	81.27	88.67	87.22	146.52	28.00	114.93	546.61
1981	65.67	70.76	83.35	101.54	29.85	145.08	496.25
1982	63.22	62.41	82.22	31.74	26.24	139.35	405.17
1983	39.77	38.85	71.68	25.17	20.70	122.51	318.69
1984	53.88	41.05	58.03	27.08	23.18	107.57	310.80
Total	764.24	674.79	1,093.91	713.33	548.69	1,371.57	5,166.49

NOTE: Figures may not add due to rounding.
a. Multilateral donors are IBRD, IDA, IFC, AFDB, EDF, and IMF Trust.
SOURCE: Cancian (1986).

TABLE 7.6 Official Development Assistance and Total Receipts Net per Capita to Tanzania, 1970–84 (1983 US$)

Year	ODA per capita	TRN per capita
1970	11.4	13.1
1971	12.4	15.8
1972	10.7	17.9
1973	14.2	18.1
1974	17.7	18.5
1975	27.5	30.2
1976	23.6	29.7
1977	26.8	33.2
1978	27.5	33.5
1979	33.2	42.0
1980	33.5	42.9
1981	35.7	44.7
1982	34.3	37.5
1983	29.6	28.9
1984	25.1	27.3

SOURCE: Cancian (1986).

Table 7.5 shows aid defined as total receipts net (TRN), and its donor composition. Tanzania has been among the highest recipients of TRN per capita in the world, and the composition of donors shows an unusual bias toward Scandinavia. However, the key feature of these aid flows is neither their average magnitude nor their source, but their trajectory. Aid flows rose rapidly during the 1970s and fell rapidly in the 1980s. The late 1970s were thus a period of temporary aid boom. The two definitions of "aid" and aid differ as to the precise dating and magnitude of this trajectory, but both agree as to its general shape. Per capita TRN averaged $16.7 from 1970 to 1974, $36.6 from 1975 to 1981, and $31.2 from 1981 to 1984 (see Table 7.6), while the real trade deficit per capita, indexed to the average deficit in 1973–74, rose to an average of 150 for the 1978–80 period followed by a drop to 105 in 1981–84.

That aid flows constituted a temporary boom is important in two respects. First, as with any temporary windfall we need to know whether its transience could reasonably have been, and whether it was, in fact, foreseen. Second, the aid boom happened to be approximately synchronized with two other temporary government windfalls: the coffee boom of 1976–79, which added around 20 percent of 1975 GDP, and the once-and-for-all doubling of the real demand for money, discussed above. The late 1970s, when some key and subsequently unfortunate decisions were taken, was thus an atypically favorable period for public resources. The aid boom amplified a cycle that was already ripe for misinterpretation, and it is thus important to understand why aid magnitudes followed this trajectory.

Unlike the coffee boom, the aid boom was largely endogenous to Tanzanian policies, which first led to an upsurge in receipts and then to donor discouragement. Two political stances adopted by President Nyerere probably account for the increase in aid received during the 1970s. His effective leadership of the Frontline States made the country internationally influential quite beyond its long-term strategic significance, and this probably attracted the United States and United Kingdom despite their dislike of his domestic policies. His domestic policy shift, particularly the post-Arusha commitment to poverty alleviation, self-reliance, and socialism, appealed to Scandinavian governments at a time when many governments of poor countries appeared unconcerned, incompetent, or even predatory toward the poor. Both of these phenomena were intrinsically temporary. After the Zimbabwe settlement President Nyerere became less influential internationally, and during the 1980s Scandinavian countries, and particularly Sweden, became more cautious in their aid policies. Hence, the aid boom of the 1970s was intrinsically temporary. This transience was reinforced because aid flows were related to the performance of the Tanzanian economy, and the country's severe economic deterioration of the early 1980s caused a ripple of disillusion throughout the donor community, with the United States in the front and Sweden in the rear of this process. The transience of the aid boom was not readily foreseeable, however, and was certainly not foreseen. It was

far more difficult to forecast the end of the aid boom than to predict that the coffee boom and the fall in the velocity of money circulation would both cease.

The Contribution of Aid

In spite of receiving large aid flows, which were synchronized with other temporary windfalls, Tanzania experienced a severe decline in living standards attributable to both domestic policies and a deterioration in the terms of trade. In considering to what extent aid flows alleviated or exacerbated problems, we distinguish three ways aid might have altered outcomes: the direct effect of aid projects, the general equilibrium effects of aid on the economy for given policies, and the effects on policy decisions both directly as a result of advice or conditionality and indirectly as a result of the easing of the resource constraint on policymakers.

For most economies the analysis of individual aid projects would probably be central in calculating the benefits of aid. In Tanzania, however, by the early 1980s the macroeconomic crisis dominated the performance of all sectors and aid projects. With foreign exchange and many goods only fitfully available, even otherwise viable projects were likely to fail, and management time was diverted into meeting short-term bottleneck problems. By the early 1980s, project aid was being displaced by program aid. During the key period of the late 1970s, however, project lending to industry and agriculture was predominant. Between 1976 and 1980, 25 percent of official development assistance (ODA) commitments were to industry and 14 percent to agriculture. This heavy bias against agriculture (both absolutely and relative to other African aid programs) would have been more serious had those projects actually undertaken been more successful. Lele and Meyers (1989) found that of the ten large projects in Tanzania subjected to postproject evaluation by the World Bank, seven had negative returns (and the others may have since deteriorated to that point). Thus, despite the fact that the agricultural sector was seriously neglected—probably the single major policy error—the environment was so hostile that the major projects that were undertaken were unjustified. The major projects of the 1970s were regional "Integrated Development Projects." By the time these projects were implemented, the failings of projects of this type had already been identified (Lele 1974). There was also a neglect of nonfood crops, in an overreaction to previous biases. The rate of return on aid to the industrial sector can be inferred from the fact that by 1984 manufacturing output had halved relative to the early 1970s. It is difficult to account for the precise cause of this outcome: many projects appear badly conceived, but they were also operating in an environment

in which even good projects would have been likely to fail through shortages of foreign exchange. The resident Harvard group of economic advisers determined in the early 1970s, however, that the major heavy-industry projects were fundamentally misconceived.

Aid has had the general equilibrium effect of lowering the shadow price of foreign exchange, which in turn lowered the price of tradable relative to nontradable goods. The distributional consequence of this is to benefit net consumers of tradable goods at the expense of net producers. Clearly, since the rationed allocation of imported consumer goods favored urban areas, especially Dar es Salaam, while virtually the only producers of tradables were peasants in the export crop sector, this amounted to a redistribution to urban households from these peasants. During the 1970s, at least, this transfer was regressive. This permanent general equilibrium effect was amplified during the late 1970s, since, as we have seen, aid flows accentuated an already pronounced foreign exchange cycle. A temporary foreign exchange windfall not only raises the relative price of all nontradable goods, but it differentially raises the relative price of nontradable capital goods (see Bevan, Collier, and Gunning 1987). In Kenya, where the distributional consequences of this process can be quantified through a computable general equilibrium model, this resulted in substantial transfers to the urban population.

Although the general equilibrium effects of the aid boom were probably considerable, in Tanzania the central issue must surely be the effects of aid upon policy. The conventional discussion of the policy effects of aid focuses, naturally enough, upon aggregate savings and investment, and poverty targeting. In Tanzania this is largely beside the point. The aid influx did indeed coincide with a severe decline in domestic savings and a large increase in absolute poverty, but these did not occur because the government assigned low priorities to savings promotion and poverty alleviation. Rather, they were by-products of more fundamental problems. In assessing the effects of aid on policy, therefore, it is appropriate to focus upon the policy decisions that contributed to the unsatisfactory performance of the whole economy. It seems unlikely *a priori* that aid flows, since they were so large and accompanied by so much advice, were orthogonal to these decisions. We distinguish between direct and indirect effects: did the advice push in the right direction, and did aid flows make policymakers more or less predisposed to adopt beneficial policies and abandon poor ones?

Donors did not speak with one voice. At the bilateral level, the policies endorsed by the Swedish International Development Agency (SIDA), the major donor, were criticized by the U.S. Agency for International Development (USAID). At the multilateral level, the advice given by World Bank and International Monetary Fund (IMF) missions was often contradicted by missions from the International Labor Organization (ILO) and the Food and

Agriculture Organization (FAO). This diversity of advice flourished in the data vacuum of that time: until 1983 the most recent official rural household survey data available was for 1969. This merely provided the benchmark from which to judge President Nyerere's Arusha experiment. As a result, policymakers could persist in assertions that have since been found to be wildly inaccurate. For example, in 1981 the Minister of Agriculture claimed that communal agriculture was more productive than peasant holdings. To their credit, both the ILO and the World Bank commissioned rural surveys, but they were several years too late. In retrospect, however, it is astonishing that such powerful experiments on the peasant economy could have been initiated by the government and financed by donors with so little attention to information on performance and problems. All parties appear to have assumed first serendipity, and then Micawberism.

In this climate of ignorance each agency was free to persist with philosophical hobby horses that gradually polarized. SIDA and the ILO were in sympathy with the rhetoric of Tanzanian policy objectives, while the World Bank and the IMF were not. Tanzanians saw advice as emanating from these sympathies and, because advice could not be rooted in credible data, evaluated it accordingly. Worse, the positions adopted by agencies were to some extent influenced by institutional rivalries. SIDA was permeated by an intellectual culture hostile to the United States, while the ILO had a tendency to see its role as counter to that of the IMF. This was well recognized within each agency at the time. For example, the World Bank unsuccessfully attempted to persuade the Tanzanians to cancel the ILO mission of 1977 so as to provide a clear run for the Bank's Basic Economic Report of that year. Not surprisingly, the ILO mission then focused upon producing a critique of that report. This was not difficult, precisely because the database was so fragile that it was open to several different interpretations.

The most persistent critiques of Tanzanian policy came from the IMF and the World Bank and have been faulted for being too confrontational. Cassen (1986) argues that the harsh stance of the IMF in the early 1980s, particularly its pressure for a large devaluation, may actually have delayed reform, since the exchange rate became reified as a national symbol against imperialism instead of being treated as an internal relative price. In contrast, Lele and Meyers (1989) argue that much World Bank advice was excessively accommodating to the government's mythology of scapegoats. The fact is that the government was receptive to neither accommodation nor confrontation.

Both the IMF and the World Bank first tried accommodation. In 1978–79 the IMF reached agreement with the finance minister on a reform program. Its key elements were a 15 percent devaluation, the gradual removal of price controls, some increase in producer prices, and containment of the budget deficit. In retrospect, this program was modest compared with that actually implemented in 1987. Nevertheless, it was vetoed by President

Nyerere, who sacked the finance minister. At this point, dialogue with the IMF ceased. When it resumed in the early 1980s, the IMF was less inclined to compromise, and the new finance minister had seen the personal danger of any attitude other than a hostile one.

There have been four major World Bank reports on Tanzania; two on agriculture (1974 and 1983) and two Basic Economic Reports (1977 and 1984). The two agricultural reports were vigorous critiques of institutional changes in crop marketing and pricing, Ujamaa, and foreign exchange allocation. The economic reports were more accommodating. The 1977 report was one of the largest BERs ever produced by the World Bank, and was in time to have averted subsequent economic decline, whereas the 1984 report was faced with a chaotic and decayed economy. Although the 1977 BER was critical of many Tanzanian policies, some were treated as being beyond debate. In 1976 President Nyerere had had published in the Tanzanian press, as an instance of the threat to Tanzania's sovereignty, a letter from World Bank President Robert McNamara setting out the Bank's advice against Ujamaa. As a result, villagization was taken as a fait accompli. Successive drafts of the BER were diluted in an attempt to achieve a dialogue with civil servants, but even in its final form the report was considered so critical that its circulation within Tanzania was highly restricted. It seems reasonable to conclude, therefore, that the IMF and the World Bank were not in a position to alter policy either through persuasion or coercion.

This lack of influence, however, does not exonerate the institutions from legitimate criticism. They appear guilty of two important failures. First, they failed to provide an emphatic warning against the making of long-term commitments during the euphoria of a temporary trade-aid boom. Although Tanzania never adequately adjusted to the 1974 oil shock (reserves being run down and imports rationed), some elements of caution prevailed among policymakers. In particular, the Basic Industries Strategy was indefinitely postponed and the entire five-year plan delayed. It was the disastrous misreading of the trade-aid boom that restored the environment in which the BIS was rehabilitated. The World Bank and the IMF largely missed this short-run macroeconomic drama in their concern to engage in long-term policy dialogue.

Second, instead of attempting to exclude other agencies whose advice was more influential in Tanzania, the World Bank might have sought common ground in order to establish an information system by which policymakers could assess the consequences of policy initiatives. Only now are such joint approaches developing, a decade after they were first needed.

Finally, consider the indirect effects of aid upon policy. Although it cannot be quantified, it seems likely that the trade-aid foreign exchange boom of the late 1970s encouraged policymakers to embark upon a course of action from which it became politically difficult to retreat. They did not

initially see the preferred policy course, Ujamaa plus Basic Industries, as a choice to be pursued regardless of economic conditions. In the face of agricultural failure, Ujamaa gradually became diluted into villagization, with communal production taking a lower priority. Similarly, in the face of the foreign exchange shortage following the first oil crisis, the BIS was abandoned, as it was again during the far more acute foreign exchange shortage after 1981. The most astonishing feature of the early 1980s is that capital imports for the BIS were maintained for so long: foreign exchange had to become far more scarce on this second occasion before the BIS was again aborted. This presumably reflects the political investments that had accumulated in industrialization and increased the costs of policy reversal. The closure of a new plant is a very public demonstration of error. Further, new industries had work forces that were direct clients of the government. Perhaps most important, because urban living standards had been sacrificed to maintain industrial capital formation, the government regarded the decline in crop prices as equitable and food subsidies as essential. Since peasants had the option of retreating into subsistence, the agricultural pricing policy undoubtedly contributed to the decline in crop sales. Yet because urban incomes had fallen so much, rural incomes could not be raised. President Nyerere's comment makes clear why the IMF proposal for devaluation and removal of price controls was unacceptable: "What do they want me to do, sign and have riots in the streets?"

Thus, once the BIS was established, it could not be stopped by the advice or pressure of donors until severe hardships had built up. The decisive time was the reestablishment of the BIS in 1976–77. Probably only a continuation of 1975 levels of foreign exchange availability could have inhibited policymakers from attempting to implement the BIS, but the trade-aid boom of the late 1970s allowed policymakers to make hard-to-reverse choices. It is perhaps this effect that raises the most serious questions about the consequences of aid. Conceivably, the temporary influx of aid induced policymakers to reembark upon a strategy that they had previously abandoned out of a sense of realism. That strategy was not only infeasible without a massive and sustained aid inflow, which was not forthcoming; it was politically not reversible until the consequences of its infeasibility had exacted a painfully high toll.

Aftermath and Conclusion

The retirement of President Nyerere in November 1985 broke the political logjam. During 1986 and 1987 the exchange rate was massively devalued, crop prices were raised, and price controls were substantially reduced within the framework of agreements with the IMF and the World Bank. At the time of writing, it is still too early to judge whether the cumulative legacy of the Nyerere experiment will prove beyond the capacity of the new government

to reform. Powerful interest groups were created during the Arusha experiment, and their existence imposes a political constraint on the reversion to the successful pre-Arusha strategy. Further, the dismantling of a control regime poses difficult technical questions about the sequencing of policy changes. The aid agencies can contribute to the surmounting of both of these difficulties. Aid can be used, if necessary, to compensate vested political interests for the losses they would suffer from reform. Policy advice can abandon the pretense that the reform of a highly distorted economy is technically straightforward and engage in the more credible task of researching viable sequences of policy change. If, as we have suggested, aid has been partly responsible for past policies, donors are under some obligation to assist in the transition from a failed experiment.

CHAPTER 8

CLAUDE FREUD

Aid and Development in Senegal

Senegal is the most resource-poor country studied in this volume and one of the most resource-poor in Africa. Its economy, based for many years on a single crop—groundnuts—is now faced with seemingly insurmountable structural disequilibria. Per capita income has declined about 20 percent in real terms in the past fifteen years, production throughout the economy is stagnating, and the debt service, which increased tenfold between 1977 and 1986, continues to use up scarce resources. Since its independence from France in 1960, Senegal has remained highly dependent on French aid, and the share of aid in gross domestic product (GDP) has actually increased over time. Senegal's inability to achieve balanced growth follows from a policy environment that began in its colonial past.

Until 1960, Senegal was, like other French West African colonies, economically dependent on France as a trading partner. Since colonization, Senegal's economy has been dominated by the production of groundnuts (peanuts), the crop favored by relative prices, and the groundnut economy was for decades supported by premium prices paid by France. On balance, the colonial period was characterized by economic growth, positive savings rates, and balanced budgets.

Independence brought with it the First Senegalese Plan, which aimed to diversify the economy, nationalize groundnut marketing, stimulate rural development, and eliminate dependence on food imports. For the most part these efforts failed. Groundnuts remained predominant, but the elimination

of premium prices in 1968 in accordance with the 1963 Yaoundé Convention led to the decline of groundnut production and the stagnation of the whole economy.

By 1985, exports had diversified, with groundnuts falling to 30 percent of exports from 80 percent in 1961. Total value of exports, however, has not changed in real terms. Savings rates have declined, from 15.5 percent in 1974 to 2.6 percent in 1984, and as a result investment requires an increasing share of external financing.

Social indicators for Senegal are ambiguous. Although incomes have fallen, no measurable fall in real incomes appears to have occurred, perhaps because the activities of the thriving informal sector are not reflected in official income accounts. Health statistics are contradictory on measurements of health since independence, and although official statistics show large increases in education achievement, it is unclear that such improvements have led to increased job skills.

France has consistently been the primary donor to Senegal. Until 1968 aid primarily took the form of purchases of groundnuts at prices averaging 30 percent above the world market price. In the 1960s and 1970s aid consisted largely of technical assistance. Total aid as a percentage of the national budget increased from one-third in 1960 to an incredible two-thirds in 1985.

The large leap in aid has not, unfortunately, been accompanied by progress in development. Donors have attempted to diversify the agricultural sector, but have met with little success. Rice cultivation is subsidized by foreign aid, and the cotton sector is running a deficit. A structural adjustment program, designed to remedy the disequilibria of the Senegalese economy, has not succeeded. Commodity prices continue to pose difficulties. At world prices, producers of cotton and groundnuts will not sell and production will fall. Higher prices supported by the government, however, are creating a real burden. Diversification of exports has begun to take place, but it still does not appear to be enough to set Senegal on a path of growth.

This chapter will begin by looking at Senegal's colonial period and the background of the groundnut economy. The next section examines the economic development of Senegal after independence in 1960, with the establishment of the First Senegalese Plan, the first attempt to diversify the economy. The chapter then looks at the effects of the end of the premium price policy, which followed the 1963 Yaoundé Convention. There follows a discussion of the current situation of Senegal's economy, looking at production, public finance, income, food imports, trade, health, and education. Next is an analysis of the origins of the structural crisis that Senegal faces and the role of external financing in Senegal's development.

The Colonial Period

The colonial pact and the expansion of groundnut production. The economic relationships characteristic of French colonization (until about 1930)

were determined by what was called the colonial pact. This system required the colonies to produce goods that France needed and in return to buy what France produced. The colonies were considered markets reserved exclusively for France and were therefore completely economically dependent on the mother country.

The key features of the pact were as follows:

- A colony could import only from France.
- It could export its raw materials only to France.
- It could have no industry that competed with those in France.
- All goods traveling between the colony and France had to be shipped on vessels of national registry.
- Only the products of French colonies could be admitted duty-free into France; other products were prohibited or subject to customs duties.

It was understood that the colonies would impose no financial burden on France. In 1901, a law established the financial autonomy of the territories which, thanks to head taxes and customs duties, were to be self-supporting. The French state guaranteed that its private sector would have infrastructure and customs protection, which meant markets and monopolistic access to raw materials. This was the background against which the groundnut economy developed in Senegal.

With the traditional farming techniques used before colonization, the lack of markets for products in Senegal led to a surplus of labor. According to Vanhaeverbecke (1970) a farmer could properly cultivate one hectare by hand and produce an average yield of 400 kilograms of millet, whereas food requirements were 200 kilos. Since farmers accounted for 75 percent of the rural population, each had to produce 270 kilos of millet to ensure the subsistence of the rural community. As a result, only about two-thirds of their labor capacity was utilized for agriculture. With the opportunity to produce for the international market, farmers could work 50 percent more land than that required to meet food needs. This excess labor was used to cultivate groundnuts. Colonization changed the pattern of underemployment by opening the country up to international trade, thereby creating effective demand that could absorb the surplus labor capacity.

It is important to note that the growth of groundnut production occurred at the same time as the rise of Muridism (1885–1927). This doctrine, which sprang from Islam in Senegal, exalted labor, particularly agricultural labor, and therefore encouraged the expansion of agriculture into new areas. This expansion was made possible by the colonial authorities who built the railway toward the east and the major trading companies that organized the commerce in groundnuts. (For details on the relationship between Muridism and the expansion of groundnut production, see Pelissier 1966. For more information on Muridism, see Cruise O'Brien 1971.)

TABLE 8.1 Estimated Purchasing Power of Groundnuts in Senegal, 1931–51

Year	Purchasing power of 100 kilos of groundnuts (in kilos of rice)	Year	Purchasing power of 100 kilos of groundnuts (in kilos of rice)
1931	42	1942	42
1932	58	1943	32
1933	70	1944	28
1934	53	1945	37
1935	112	1946	42
1936	120	1947	40
1937	82	1948	35
1938	54	1949	39
1939	57	1950	42
1940	45	1951	65
1941	32		

SOURCE: Suret-Canale (1966).

The farmers wanted to use their surplus labor capacity to cultivate groundnuts instead of food crops. In point of fact, for the marketed portion of production, relative prices clearly favored groundnuts. For example, in the 1930s per hectare yields using traditional methods were 400 kilos of millet and 700 kilos of groundnuts. The ratio of net yields (accounting for the cost of seed) was 390/620 = 0.63. Producer prices were about F 0.50 a kilo for millet and F 0.58 a kilo for groundnuts. Per hectare income therefore averaged F 195 for millet and F 360 for groundnuts—a ratio of 0.54. Therefore groundnuts brought the farmer nearly twice as much income per hectare.

Although the concentration on groundnuts meant that urban consumers were unable to find millet in the stores, it was highly advantageous for Senegal to purchase broken rice on the foreign market. As shown above, the productivity ratio between millet and groundnuts was 0.63. Given a processing loss of nearly 20 percent for millet, the ratio between millet ready for cooking and groundnuts was 0.5, while the ratio between imported rice and groundnuts was still higher throughout the period (except in 1931, for reasons discussed below), as shown by the data in Table 8.1. It was therefore more advantageous for the colony to produce groundnuts, which it could exchange for rice, than to produce millet.

This advantage did not hold for on-farm consumption. The price ratio for imported rice and exported groundnuts was on average 0.7 (see Table 8.1) from 1931 to 1939, which at the f.o.b. (free on board) price for groundnuts (F 0.70/kilo) brought the price of rice to F 1 in Dakar and to about F 1.20 in the interior. One hectare planted with groundnuts provided a farmer with an income of F 360, which was sufficient to purchase only 300 kilos of rice, whereas one hectare planted with millet produced a net yield of 390 kilos. Even given the processing loss for millet, the price ratio worked against rice and did not justify dropping production of millet, which, moreover, is important in crop rotation because it replaces the fallow period.

Between 1885 and 1930 groundnut exports rose from 25,000 to 521,000 metric tons, and the sown area grew from 40,000 hectares to 700,000 hectares.

The Customs Union and premium prices. A decrease in the price of exported groundnuts prompted the French government to intervene in the development of the colonies. From F 250 in Marseille in 1927, the price of a quintal of groundnuts plummeted to F 105 in early 1932 and F 70 in 1933. This collapse triggered a plunge in groundnut exports, which fell from 521,000 metric tons in 1930 to 203,000 metric tons in 1932. The colony's loss of revenue, estimated at F 285 million in 1931, took its toll on the economy: imports from France dropped by more than 50 percent, budgetary receipts diminished, and investments stopped. On June 6, 1930, the director of the Colonial Union sent a letter to the head of the government, Andre Tardieu, that reported the effects of the collapse on France's colonizing efforts: "First of all, the low prices for their products are creating unrest dangerous to public order among the indigenous population. The decrease in budgetary receipts may force France to subsidize the colony's budgets. Lastly, the danger that the natives will return to subsistence crops might mean that they would cease to produce groundnuts."

To ease the situation, on August 6, 1933, the French Parliament voted in a law that introduced customs duties for fruits and oilseeds and instituted a fee of F 20 per quintal of unshelled groundnuts imported from abroad. The monies thus raised were given to Senegalese farmers in the form of a subsidy. The measure drove up the price of groundnuts by 45 percent.

At the same time, in the wake of the financial crisis of 1929, France saw its foreign markets collapse. The country's need to establish a secure market for French exports resulted in the establishment of a Customs Union. This policy established a protected area in which complementary products were developed: raw materials from the empire and manufactured goods from France.

The proportion of trade the West African colonies conducted with France rose even more. In 1932 West Africa sent 66 percent of its exports to France, while 45.5 percent of West African imports came from France; by 1938 exports had reached 82 percent and imports 61 percent.

Thus, to allow the colonial market to absorb increasing volumes of manufactured goods from France, the prices of tropical agricultural products had to be increased to bring them into line with French prices and create purchasing power. Customs measures were wedded with the generous provisions, such as premium prices, needed to enable the French colonial bloc to operate independently from world channels (Marseille 1984).

Nonetheless, from 1940 to 1951, when the policy of premium prices was dropped following a break between the colonies and wartime France, and then when the Allies opposed renewed protectionism, the price ratio between exported groundnuts and imported rice plunged, to the detriment of groundnuts (see Table 8.1).

With exception of 1951 and the period following the Korean War, raw material prices soared and the terms of trade remained below 50 kilos of rice for 100 kilos of groundnuts. In 1952, when the ratio fell back down to 42 kilos, France decided to reinstitute its policy of premium prices. The ratio rose to 54 kilos in 1953 and then to 60 kilos in 1954.

The fall in groundnut prices in the 1940s was accompanied by a drop in production and exports. From more than 500,000 metric tons per year during the 1930s, exports fell to 300,000 metric tons in the 1940s. They rose to 600,000 metric tons after premium prices were reinstated in 1952, reaching 800,000 metric tons on the eve of independence in 1958.

Economic and social development plan for the overseas territories. At the end of the war, at the Brazzaville Conference in 1944, it was decided that the colonies would participate in the management of their own affairs. Direct participation by France in development-oriented investments was also allowed, in a definite departure from previous policies. In the past, the colonies had financed their own infrastructure, and if they suffered financial constraints, loans guaranteed by France were made available. Henceforth, the loans were replaced by a contribution from France's budget, even though this stretched the 1901 law that established the financial autonomy of the colonies.

At the end of the war the colonies were subject to French inflation that increased the cost of their imports. Therefore, in 1945, France established the colonial franc (CFAF), worth more than the French franc, to prevent the colonies from being penalized by galloping inflation.

On August 30, 1946, France passed a law establishing an economic and social development plan for the overseas territories. Its main objectives were to merge and reduce the number of enterprises, mechanize agriculture, build infrastructure, replace extensive agriculture with intensive farming, and enhance the value of production through industrialization. According to the plan, France was to intervene in production by taking responsibility for certain sectors and assisting private concerns in others, either by investing capital or by subsidizing them through various measures (such as tax exemptions and concessional loans). To that end, France created two institutions, Investment Fund for the Economic and Social Development of the Overseas Territories (Fonds d'Investissement pour le Développement Economique et Social des Territoires d'Outre-Mer, or FIDES) and Central French Overseas Fund (Caisse Centrale de la France d'Outre-Mer, or CCFOM). The first use of the term "aid" in France can be dated back to the establishment of these two institutions.

The results of the development plans were far from negligible. Infrastructure was built, the territories opened up, and production increased sharply. France's financial efforts were bearing fruit, and exports from the colonies boomed. Groundnut shelling and oil processing steadily increased

the value of Senegal's exports. In 1955, two-thirds of exports were in the form of hulled groundnuts and one-third was in the form of oil.

At the same time, efforts were made to improve traditional farming methods. In 1952, the French Institute for Research on Vegetable Oils and Oilseeds (Institut de Recherches pour les Huiles et les Oleagineux, or IRHO) opened experimental stations to perform research related to the widely differing soils and bioclimatic environments. Since before 1960, varieties that yielded 20–25 percent more groundnuts and produced 25–30 percent more oil than local seeds had been available. In 1960, these varieties represented two-thirds of the seeds sown. Cropping with the use of draft animals and fertilizer met with great success. Forty-three percent of cultivated land was sown with a mechanical seeder. Average yield rose to 800 kilos per hectare.

The first operations in the Senegal River Valley began with the planting of the Richard Toll rice field in 1953. Covering 6,000 hectares in 1955, the field was worked mechanically and had a comprehensive irrigation system. It produced yields of 2.5 metric tons per hectare.

Small-scale fishing increased dramatically. In 1952 the colonial authorities began to promote the use of motors for pirogues, and by 1955, 400 pirogues—about 15 percent of the local maritime pirogue fleet—were motorized.

Overall impact of the colonial period. Contrary to general opinion, colonization was undeniably a period of economic growth for Senegal. The terms of trade did not deteriorate until after the colonial era. Savings were positive, and budget receipts enabled the colony to meet its expenditures. This situation was due to two factors: the interest of the rural inhabitants in agricultural development, particularly groundnuts, and the policy of premium prices.

The prices paid by France averaged 30 percent more than world market groundnut prices, deviating between 15 and 44 percent more (see Table 8.2). These premiums were calculated starting from the difference between French prices and the arithmetic average of quoted world market prices (the price of Nigerian groundnuts was used).

TABLE 8.2 Total Groundnut Premiums Paid by France to Senegal, 1952–53 to 1958–59 (billions of CFAF)

Year	Groundnut premiums
1952–53	3.8
1953–54	3.2
1954–55	4.4
1955–56	4.7
1956–57	3.7
1957–58	6.7
1958–59	7.0

SOURCE Vanhaeverbecke (1970).

TABLE 8.3 Total Overpayments by Senegal for French Imports, 1952–53 to 1958–59 (billions of CFAF)

Year	Overpayments
1952–53	2.5
1953–54	2.4
1954–55	2.5
1955–56	2.7
1956–57	2.5
1957–58	2.0
1958–59	2.0

SOURCE: Vanhaeverbecke (1970).

The premiums should be compared with the CFAF 30 billion in export receipts on average throughout the period. Their magnitude explains the great popularity of growing groundnuts in Senegal, even if at the same time imports from France cost more (see Table 8.3).

At the official exchange rates, French products cost, on average, 15 percent more than comparable foreign products. Overall, however, Senegal came out ahead. The Senegalese farmer, who consumed few imported products (rural areas accounted for 30 percent of all imports), was the primary beneficiary of these terms of trade. The groundnuts produced by a multitude of small family farms provided 80 percent of the country's external receipts (CFAF 25 billion out of CFAF 30 billion) and three-fourths of the monetary revenue in the rural areas.

In the late 1950s, the international situation changed and French capitalists were attracted by the establishment of the European Economic Community. They felt that the colonies were a financial burden and that the premium prices paid to the colonies hampered France's expansion into foreign markets.

The Post-Independence Period: 1960–85

The First Senegalese Plan. With independence, major changes were introduced in the name of national sovereignty and African socialism. These included

- a challenge to the predominance of groundnuts, which provided 80 percent of the country's export receipts
- nationalization of groundnut marketing, with a view to freeing the farmer from exploitation by trading companies
- establishment of rural *animation* operations
- formulation of a rice policy that aimed at the eventual elimination of Senegal's dependence on food from abroad

The First Senegalese Plan, formulated in 1961 and based on studies made by two French consulting firms, CINAM and SERESA, recommended economic diversification. Efforts were planned to increase grain production and develop other export crops, such as off-season vegetables and tropical fruits, and to produce crops such as cotton and sugar that had previously been imported.

To free farmers from the grip of import-export companies that exploited them, a public enterprise, the Agricultural Marketing Office (Office de Commercialisation Agricole, or OCA) was established. By centralizing marketing channels, the agency was to help the farmer receive better prices.

To increase local participation in rural development efforts, Senegal established a program of *animation rurale* rather than an extension service. These *animation* operations were entrusted to IRAM, another French consulting firm of the same ideological persuasion as CINAM. These groups believed in Christian principles of economy and humanism, a philosophy very close to that of President Léopold Senghor and Prime Minister Mamadou Dia, who wanted to promote African socialism. The ultimate objective of the *animation* efforts was to see the farmers take complete responsibility for their own affairs, without the help of civil servants, whereas a rather militaristic extension service would only have strengthened the development societies.

Several factors led to the adoption of a rice policy by the Senegalese government. As the specialization of Senegalese farmers in groundnuts during the colonial period had lowered food crop production and consequently caused greater rice imports from Southeast Asia, CINAM recommended that the government of Senegal become involved in the development of rice cultivation on a large scale.

Pressure from groups in the Senegal River Valley offered another impetus for the development of rice production (ENDA 1986). The transfer of the national capital from the city of Saint-Louis on the Senegal River to Dakar in 1957 had had adverse effects on the Saint-Louis regional economy. In August of that year the Saint-Louis government officials protested and went on strike. In response, the central government adopted an ambitious regional development program, based on irrigated rice cultivation, to offset the effects of the transfer of the capital. Potential for successful rice growing in the region was strong according to engineering firms and the findings of the Richard Toll Senegal Development Mission. This strategy was also influenced by France, which favored developing the valley through the farm system rather than by financing a large dam that would support an agro-industrial system.

Refocusing. The new thrusts could not withstand the political rivalries, which led to the ousting of Mamadou Dia in 1962 and the departure of his advisers and a counteroffensive by certain established interests in the French private sector and the Murid *marabouts*, or clerics, who were not favorably disposed toward the calling into question of groundnut production.

Diversification efforts that had been implemented were arrested, and President Senghor placed the emphasis back on groundnuts, despite the likely elimination of the premium prices as part of the Yaoundé Convention, which brought the former colonies into association with the European Economic Community.

The alignment of Senegal's groundnut prices with world prices, scheduled for 1968, would mean a 25 percent price reduction. SATEC, a French company involved in rural development in Africa, attempted to increase production in the groundnut-growing area by 25 percent in three years, to offset the anticipated lower prices. René Dumont (1972) describes the results of that gamble:

> Young French technicians, reputed to be more hard-working than the Senegalese supervisors, took the basic extension agents in hand. With treated seed, timely sowing, appropriate fertilizer for each region, and better weeding, it was technically possible to achieve the objective. However, the technical advice did not always have a sound economic foundation; the rate of return on fertilizer plunged during dry years, which made proper repayment of credit impossible. The upkeep of equipment was unsatisfactory; there were not enough competent tradesmen; and spare parts were often difficult to obtain. The idea was to introduce in several years' time a series of technical advances that had required long decades, and sometimes centuries, in Western Europe. Savings had to be higher and innovations more dramatic.

Fertilizer consumption had risen to 52,000 metric tons by 1967 but production lagged far behind: from 1 million metric tons in 1964, production grew to 1.1 million metric tons in 1965, but fell at the end of the decade to less than 700,000 metric tons. The SATEC gamble was lost.

Although climate played a role in the decline of production, a much more significant factor was price. Producer prices shrank from CFAF 22 to 17 per kilo, discouraging farmers, who as a result planted less land.

Poor management on the part of OCA resulted in its being dismantled and replaced by another state agency, ONCAD. In the meantime, farmer income fell by 25 percent, and the credit facilities accorded by the trading companies were lost.

Current situation.

Production levels. From 1980 to 1985 the economy was characterized by a leveling off of groundnut production as well as of agricultural production as a whole. This stagnation of the primary sector has had direct consequences for the processing industries (vegetable oil refineries) and all economic activity. The volume of cement produced and the amount of construction have not increased and have even decreased in certain instances. Purchasing

TABLE 8.4 Volume of Selected Production and Consumption Items in Senegal, 1977–83

	1977	1978	1979	1980	1981	1982	1983
Consumption of petroleum products (in 1,000 liters)							
Supergrade gasoline	n.a.	n.a.	178,573	171,141	156,191	150,117	148,671
Diesel	n.a.	n.a.	42,945	45,826	44,658	37,951	43,086
Kerosene	n.a.	n.a.	16,852	15,245	14,653	15,228	14,430
Purchases of new vehicles							
Automobiles	1,797	2,951	4,282	2,955	1,753	1,492	1,469
Trucks	1,107	1,516	2,054	1,176	875	634	714
Production of cement (in 1,000 tons)	n.a.	n.a.	380.3	371.3	396.0	375.4	388.2
Authorization to build in Dakar (square meters)	n.a.	259,704	161,342	233,194	280,470	248,094	245,705
Activity at the port of Dakar (unloaded merchandise in tons)	n.a.	n.a.	1,983	1,691	1,834	1,872	2,426
Local production of beverages (in 1,000 hectoliters)							
Beer	n.a.	n.a.	270.4	210.5	177.6	176.1	188.8
Carbonated beverages	n.a.	n.a.	436.9	352.6	329.4	287.2	257.8

NOTE: n.a. = not available.
SOURCE: Direction de la Statistique, Senegal.

power has experienced a lasting decline in urban areas and an ever more severe decline in the countryside. Consumption of gasoline and purchases of new vehicles, carbonated beverages, and kerosene have all fallen.

Data provided by Senegal's Statistics Department (see Table 8.4) contradict the economic accounts published by the Forecasting Department, which indicate a 20 percent growth in the secondary sector in 1980–85, as well as a 12.7 percent increase in the tertiary sector, reportedly sparking a 3.1 percent annual increase in GDP during the period. Growth in the secondary sector was attributed to increases in construction and public works (132 on an index in which 1979 = 100 in constant CFAF), which contradicts the stagnation in the production of cement. Expansion in the tertiary sector was based on growth of transportation (130 on the index), which is inconsistent with the stagnation of fuel consumption and vehicle purchases.

The decline in the production and consumption of intermediary goods led to the stagnation of the formal sector of the Senegalese economy in the 1979–85 period and calls into question the Forecasting Department's assertion that the annual growth rate in Senegal was 3 percent.

Public finance. Although the balance of recurrent expenditures in the budget was in general positive from 1960 to 1985, it was negative between 1980 and 1983. The balance of recurrent and capital expenditures has been negative since 1963 and was positive only during the first two years of

TABLE 8.5 Senegal's Debt Service, 1977–84 (billions of CFAF)

Year	Debt service	Year	Debt service
1977	10.0	1981	52.4
1978	35.0	1982	64.2
1979	38.0	1983	72.1
1980	48.0	1984	92.8

SOURCE: World Bank (1984).

independence. This deficit was equal to 30 percent of budget receipts in 1982–83.

This constant deficit has meant increasing indebtedness, which has accelerated since 1978. Debt service, CFAF 10 billion or 10 percent of government revenue in 1977, has increased tenfold and accounted for 50 percent of current receipts in 1984, an unacceptable level (see Table 8.5).

Per capita income. The various economic indicators show a fall in per capita income of about 20 percent from the end of the 1960s to 1983. The decline in urban income is greater than that for rural income, as a result of migration to the cities by many rural dwellers who do not always find work there (see Table 8.6). There are no statistics that show a sudden pauperization of the population, perhaps owing to the existence of an informal sector, which contributes to the formation of revenue that is not shown on the books.

Food imports. The First Senegalese Plan aimed at reducing dependence on food imports. In 1961, imports amounted to some 110,000 metric tons of rice and 60,000 metric tons of wheat per year, that is, 50 kilos of grain per capita. Twenty years later, in the early 1980s, imports of rice were 360,000 metric tons and wheat 120,000 metric tons, or 75 kilos of grain per capita. The stagnation of local food crop production was not caused, contrary to popular belief, by drought, but by the price policy effective in Senegal. Local food crop production is for private consumption: when during a drought food reserves are depleted, the next year's cultivated areas increase phenomenally in order to fill depleted stocks, demonstrating the high elasticity of production possibilities.

Cereal imports almost exclusively affect urban centers. Farmers have no interest in producing for the market, given the price differential between groundnuts and food crops. They favor groundnuts at CFAF 90 per kilo over food crops at CFAF 70 per kilo, even though given the difference in yields it would be in the farmers' interest to favor cereals (see section on the colonial period). Millet, marketed in the form of flour at CFAF 180 per kilo, is more expensive than rice at CFAF 160 per kilo (Yung 1984). This price differential discourages consumers from buying local cereals and reflects the goal of Senegalese authorities to encourage groundnut production and rice consumption.

TABLE 8.6 Population and Income in Senegal, 1960–83

	1960	1965	1970	1975	1980	1981	1982	1983
Population (thousands)								
Total	3,498	3,919	4,391	4,977	5,655	5,806	5,962	6,122
Rural	2,706	2,908	3,082	3,291	3,482	3,514	3,544	3,571
Urban	792	1,011	1,309	1,686	2,173	2,292	2,418	2,551
Nominal national income (billions of current CFAF)								
Total	102.2	148.7	177.7	294.3	490.0	550.3	660.2	743.3
Rural	34.2	46.8	51.2	106.0	107.3	105.2	167.7	179.9
Urban	68.0	101.9	126.5	188.3	382.7	445.1	492.5	563.4
Nominal per capita income (thousands of current CFAF)								
Total	29.2	37.9	40.5	59.1	86.7	94.8	110.7	121.4
Rural	12.6	16.1	16.6	32.2	30.8	29.9	43.3	50.4
Urban	85.9	100.8	96.6	111.7	176.1	194.2	203.2	226.9
Deflator Consumer price index (1971 = 100)	68.2	85.9	96.3	181.5	251.4	266.2	312.3	348.7
Real national income (billions of 1971 CFAF)								
Total	149.9	173.1	184.5	162.1	194.9	206.7	211.4	213.2
Rural	50.1	54.5	53.2	58.4	42.7	39.5	53.7	51.6
Urban	99.7	118.6	131.4	103.7	152.2	167.2	157.7	161.6
Real per capita income (thousands of 1971 CFAF)								
Total	42.8	44.1	42.1	32.6	34.5	35.6	35.4	34.8
Rural	18.5	18.7	17.2	17.7	12.3	11.2	15.1	14.5
Urban	126.0	117.3	100.3	61.5	70.0	73.0	65.2	63.3

SOURCE: Durufle, Mogenet, and Martin (1985: Statistical Appendix).

Trade. In 1961 Senegal produced a single cash crop—groundnuts—that accounted for more than 80 percent of export receipts. By 1985 the economy had diversified and groundnut products accounted for only 30 percent of export receipts. Fish products rose from 3 to 28 percent of total export receipts and phosphates from 4 to 16 percent in that period. However, total export receipts did not grow; the new revenue from fish products and phosphates merely offset the fall in groundnut receipts. The value of exports was CFAF 30 billion in 1961, which in real francs is equivalent to the 1985 value of CFAF 190 million.

During this time, however, the value of imports increased and the trade deficit, which was 20 percent of the balance of trade in 1961, rose to 50 percent by 1985.

Health. So little is known of health status indicators that it is impossible to determine whether general and infant mortality have decreased since 1960. The available data are contradictory. Depending on the source used,

the mortality rate was 17 or 27 per thousand in 1961 and 20 to 22 per thousand in recent years. It can therefore be concluded either that the situation has improved or that it has deteriorated. The same is true of infant mortality. For 1961, estimates range from 93 to 182 per thousand and for 1976, from 118 to 158 per thousand.

Education. Enrollment in primary education rose from 106,900 in 1961 to 470,000 in 1985, more than doubling from 22 to 50 the percentage of school-age population in school. The teacher-pupil ratio remained high, with forty-five students per class in 1960 and forty-three in 1985. In secondary education, enrollment increased over fivefold, from 18,000 in 1961 to 100,000 in 1985.

In spite of this success in education, graduates frequently lack skills. Young executives are often put in positions of great responsibility, but have not achieved a sufficient level of knowledge from their university studies to put their training to work in a difficult socioeconomic environment. The training system prepares them better for positions as good junior executives in Europe rather than as effective planners or decision makers in their own country.

Origin of the structural crisis.

1960–67. The first years of independence perpetuated the economic system that had prevailed during the colonial period, with privileged access to the French market and premium prices for local products. GDP continued to grow at a steady 3 percent per year on average, a rate consistent with demographic growth. The distribution of groundnut income was the driving force behind the other sectors of the economy, which grew at the same rate. Imports of consumer goods fluctuated in response to changes in groundnut revenue.

Independence had two direct consequences for economic life: lower investment by the French formal private sector, which in the wake of the disintegration of French West Africa turned toward France (see Table 8.7); and more rapid growth in consumption than in GDP (see Table 8.8). This has

TABLE 8.7 Investment in Senegal, 1960–65 (percentage of GDP)

Year	Total	Public	Private
1960	15.3	1.7	13.6
1961	13.1	4.3	8.8
1962	13.0	4.8	8.2
1963	11.3	3.8	7.5
1964	11.8	4.4	7.4
1965	11.1	4.9	6.2

SOURCE: World Bank (1979).

TABLE 8.8 Annual Change in GDP and Consumption in Senegal, 1960–63 (percentage)

Year	GDP	Consumption
1960	1.8	1.1
1961	4.4	5.9
1962	3.4	9.4
1963	3.5	7.7

SOURCE: World Bank (1979).

meant a public deficit, which rose to 3 percent of GDP, and a decline in gross fixed capital formation, which was at the root of the subsequent drop in the growth rate.

1968–74. The end of French support prices for groundnuts in 1968 triggered a fall in farmer income and resulted in a decrease in cultivated land area and a rural exodus to the cities. Since that time, the groundnut economy has never regained its former dynamism. This stagnation spilled over into the economy as a whole, as reflected by a drop in per capita GDP and a decrease in both rural and urban household consumption. The result has been social crisis in the rural areas, student unrest, and deterioration of public enterprises, which had to redistribute more revenue than they generated.

1974–79. The favorable international economic situation in 1974–79 masked the structural deterioration of Senegal's economy. Economic problems were attributed to natural disasters. The increase in export receipts as a result of the doubling of the prices of raw materials (groundnuts and phosphates), enabled the country to boost its budgetary receipts.

This windfall was used to increase income, thereby diffusing social pressures, through rises in the minimum wage, the producer price for groundnuts, and civil service salaries. The upswing in consumption sparked a recovery in GDP growth, which rose to 4.8 percent per year. Nevertheless, the share of household and government consumption increased even more rapidly, to the detriment of gross fixed capital formation, which fell from 15 to 4 percent of GDP. Growth during this period was in fact consumption-pulled.

The resulting decline in savings (see Table 8.9) meant that a growing share of investment (more than 50 percent) depended on external financing. This reliance on external financing was made possible by the desire of foreign banks to recycle their petrodollars and to support the exports of their countries. These readily available loans linked to exports of equipment, primarily for public works, partially explain the nonproductive orientation of investments at the time.

An analysis of the period shows that the structural disequilibria date from the mid-1960s when the Yaoundé Convention stipulated that the policy

TABLE 8.9 Saving Rates in Senegal, 1974–84 (percentage of GDP)

Year	Saving rate	Year	Saving rate
1974	15.5	1980	-0.5
1975	12.5	1981	-5.0
1976	8.4	1982	2.1
1977	11.2	1983	3.6
1978	4.7	1984	2.6
1979	4.2		

SOURCE: World Bank (1984).

of support prices would end (Durufle et al. 1985). Two factors caused the disequilibria: the decline of the groundnut economy without the emergence of other dynamic branches and a policy of income distribution that was independent from production and financed by budget deficits and foreign borrowing. This policy fueled growth in consumption but not production, and this dissociation of consumption and production was partially responsible for the sluggishness of the formal sector. Urban revenue was plowed back into nonproductive sectors, especially real estate, or sent abroad rather than being invested in agriculture or the local private sector. External financing became Senegal's lifeblood.

The Role of Foreign Aid

Foreign aid, which represented the equivalent of one-third of Senegal's budget at the time of independence, represented two-thirds in 1985. This dependence on external financing is all the more disturbing as it does not go hand in hand with development. GDP has not increased in real terms, savings have become negative, per capita income has fallen, and foreign aid is used as a crutch. This failure did not occur for lack of effort. Aid policies and leaders have changed, but the results are the same: poor economic performance. An analysis of the statistical and economic data shows three major periods in the provision of aid to Senegal.

1960–70. During the 1960s, France, in particular through the Ministry of Cooperation, provided for two-thirds of aid granted to Senegal (see Table 8.10). The aid took many forms, but consisted primarily of technical assistance, with 1,650 people serving as advisers or teachers in secondary education. Their pay represented 70 percent of aid inflows.

As far as production, development of individual products was favored. Initially rice and sugar, and later groundnuts, were stressed. The results of the emphasis on rice and groundnuts were described earlier; sugar produced good results in terms of quantity, but the costs of production were very high. Sugar production therefore required subsidies.

TABLE 8.10 Official Development Assistance to Senegal in Selected Years, 1964–85 (net payments)

	1964		1969		1978		1985	
	Billions of CFAF	%	Billions of CFAF	%	Billions of CFAF	%	Billions of CFAF	%
Bilateral	12.2	36	11.4	80	29.3	58	110.4	80
Of which DAC	12.2	86	11.4	80	27.1	54	93.0	68
France	10.3	73	7.4	52	17.0	34	41.0	30
Germany	0.6	4	1.9	14	1.3	3	6.6	5
Canada	0.0	0	0.4	3	2.4	5	6.2	5
U.S.	1.2	9	1.5	11	3.1	6	19.8	14
Belgium	0.0	0	0.0	0	1.1	2	2.3	2
COMECON countries	n.a.	n.a.	n.a.	n.a.	0.0	0	0.0	0
OPEC countries	0.0	0	0.0	0	2.2	4	17.2	12
Multilateral	1.9	14	2.9	20	21.3	42	27.1	20
Of which EEC	1.6	12	1.1	8	10.8	21	2.7	2
IDA–IBRD	0.0	0	0.9	6	2.5	5	12.1	9
UN	0.4	3	0.9	6	2.9	6	5.5	4
IMF	0.0	0	0.0	0	4.0	8	0.0	0
AfDB	0.0	0	0.0	0	0.5	1	1.3	1
Total	14.2	100	14.3	100	50.6	100	137.5	100

NOTE: n.a. = not available.
SOURCE: Organization for Economic Cooperation and Development (1985).

1970–80. Although France remained the major donor during the 1970s, it provided less than 50 percent of the total foreign aid payments. Most of that aid was still allocated for salaries of technical personnel, who continued to number more than one thousand. Since France did not want to concentrate its aid resources to continue financing Senegal's large-scale development projects at the expense of aid to other countries, it introduced a cofinancing policy with other sources of aid such as European Development Fund (EDF) and the International Bank for Reconstruction and Development (IBRD). France acted as a catalyst, making its experience and personnel available to other donors.

Following the failure of the development strategy based on individual products, a new development strategy was introduced promoting diversification of crops. Projects focusing on rice and cotton were initiated in the Senegal River Valley, Terres Neuves, and Haute Casamance.

The operations of the Senegal River Valley Development Agency (SAED) are extremely impressive: the cultivated area has doubled, from 10,000 hectares in the 1970s to more than 20,000 hectares in the 1980s, and production has more than doubled, reaching 70,000 metric tons of rice per paddy. But at what cost? According to an economic evaluation made in 1983 it cost CFAF 250 to produce a kilo of rice in Senegal (Bonnefond and Raymond 1982–1983). That figure must be compared to the price of CFAF 160 for rice on the Sengalese market, which was supplied with imported rice at CFAF 50

per kilo. Therefore one kilo of imported rice generates receipts of CFAF 100 for Senegal's budget, while local production of one kilo of rice costs a subsidy of CFAF 100. Rice continues to be grown because the subsidy does not come out of the budget, but from foreign aid.

The problem of domestic food supply has not been resolved. Local food-crop production is consumed on the farm, and urban dwellers have to rely on imported food. As shown earlier, dependence on food imports has worsened.

The operations of the Society for the Development of Textile Fibers (Société de Développement des Fibres Textiles, or SODEFITEX) in eastern Senegal and Haute Casamance have also had dramatic results. In 1972 cotton production rose from 10,000 metric tons to more than 40,000 metric tons. Nevertheless, world cotton prices increased more slowly than those of the imported insecticides and fertilizers, and value added per ton declined; as a result disenchanted farmers produced only 21,000 metric tons in 1981. The fall in production would have been more precipitous if SODEFITEX, which paid a net purchase price to the farmer, had not subsidized inputs. However, at the national level, the subsector was running a deficit (Benhamou and Zaslawsky 1983).

1980–86. While the Ministry of Cooperation has remained the leading donor in terms of amount of aid, the bankers, led by the World Bank and the French Caisse Centrale de Coopération Economique behind it, have predominated in terms of definition of policies. If Table 8.10 suggests that the United States had become an important donor to Senegal, it is because of the temporary effects of the overvaluation of the U.S. dollar in 1984 and 1985 and emergency food aid to Senegal.

Senegal's needs now go beyond what the normal aid mechanisms can satisfy. France's backing alone is no longer sufficient for obtaining external support. Senegal must ask the International Monetary Fund (IMF) for an enlarged access agreement to facilitate new loans from other donors. After Senegal has implemented a reorganization plan for its economy and the results are deemed satisfactory by the international community, through the Club of Paris, it will be able to secure new loans.

The economic failure of the diversification efforts, in addition to the new deficit for groundnuts (Thenevin and Yung 1983), prompted Senegal and the international aid donors to modify their policies in order to grapple with the disequilibria in Senegal's economy. The structural adjustment program established by the World Bank in late 1980 aimed at restoring the major equilibria in the balance of payments and the state budget. It recommended the following measures: restriction of demand, reorganization of the public sector (including the transfer of certain activities to the private sector), elimination of production and consumption subsidies, a restrictive employment policy, and a reduction in public deficits. The program should have led to a return to a positive savings capacity, which would enable Senegal to

finance its investments using domestic funds, honor its debt service, and reduce public deficits.

The program, however, has obtained mediocre results: the need for public and external financing continues to grow, the external debt represents three years of exports, and the public debt represents three years of tax revenue. Production is stagnating and employment declining. Clearly, the situation would have been worse if the structural adjustment measures had not been taken. However, two major problems have not been resolved and are jeopardizing the soundness of the adjustment policy: the marginalization of agriculture and Senegal's risk of deindustrialization.

The agricultural sector had a deficit of CFAF 30 billion in 1986, resulting from the combined effect of revalued producer prices and a fall in world prices. Higher producer prices were among the recommendations made by donors to encourage the rapid recovery of production. The burden of this policy, however, is falling on the government of Senegal. There is reason to fear that donors will next advise Senegal to bring producer prices into line with world prices. Under such circumstances, the producer prices for cotton and groundnuts would be CFAF 30 to 35 instead of CFAF 90 to 100. At those prices, farmers would refuse to sell (except possibly to the domestic black market where prices are twice as high), and production would eventually fall.

Moreover, the role of public enterprises must be redefined. The question, however, is whether or not to push for virtually total divestiture, on the grounds that such divestiture alone would spur the recovery of production and help overcome the social obstacles to the establishment of a more favorable environment for farmers and agricultural production.

In the industrial sector, the recommendation to reduce tariff protection as part of the structural adjustment program, at a time when the market is depressed, production capacity is underutilized, and companies, handcuffed by inefficient production systems, are in financial straits, may well spark a true dismantling of the import-substitution sectors.

This is already true for the Industrie Chimique du Senegal (ICS, an industry that produces fertilizer from locally extracted phosphate) that has barely gotten off the ground and is already in serious difficulty owing to both the collapse of Senegalese fertilizer consumption (down from 100,000 metric tons to 10,000 metric tons, following the elimination of the fertilizer subsidy) and the increase in the cost of inputs (sulfur in particular). The operational deficit of ICS in 1985 was CFAF 16 billion. How far will foreign donors go to support this sector?

Prospects

Since 1981 Senegal has been trying to stabilize its finances and decrease its foreign trade deficit. It has had some success in these efforts. The trade deficit,

TABLE 8.11 State Budget of Senegal, 1980–81 and 1985–86 (billions of CFAF)

	1980–81	1985–86	Difference
Receipts	125.5	249.3	
Recurrent expenditures	- 156.9	- 234.9	
Balance	-31.4	14.4	45.8
Capital expenditures	-38.4	-42.0	
Debt service (after rescheduling)	-11.0	-110.0	-99.0
Balance of the budget	-80.8	-137.6	

SOURCE: Direction de la Prévision, Senegal, 1986.

which was CFAF 135 billion in 1981, had shrunk to CFAF 110 billion by 1985. The regular state budget, from a deficit of CFAF 31.4 billion in 1981, had a surplus of CFAF 14.4 billion in 1985 (see Table 8.11). Nevertheless, the country has been unable to offset the increase in debt service (which rose from CFAF 11 billion in 1980–81 to CFAF 110 billion in 1985–86) after rescheduling. The result is a larger deficit in the balance of goods and services, which rose from CFAF 160 billion to CFAF 186 billion in 1985. The budget deficit and thus the need for external financing rose from CFAF 80.8 billion to CFAF 137.6 billion. In order to restore general equilibrium, Senegal must thus make additional savings or new revenue.

More comprehensive tax collection (for example, land and property taxes) and increases in taxes on consumption items would increase state revenues by approximately CFAF 30 billion and thus save on regular state expenditure. This amount, however, is insufficient; larger receipts are required. Given the international economic situation, it is unrealistic to count on export crops to provide revenue for the state. In fact, the export crop subsectors are running deficits that may eventually have to be carried by the budget.

Senegal is thus at an impasse, unable to generate additional revenue to cover debt service and forced to request permanent rescheduling of debt, which will continue to increase, seriously compromising any possibility of accumulating funds for investment. Debt reduction is thus a prerequisite for a return to growth. It is beyond the scope of this chapter to define the means of such debt reduction, but it is certain that countries such as Senegal cannot overcome their difficulties without the help of the international community.

Groundnuts account for most monetary income earned by Senegalese farmers, even in cotton-growing areas. Groundnuts are thus very important to the rural economy; in a typical year they generate CFAF 50 to 60 billion in monetary income for farmers. Ceasing groundnut production now would be tantamount to eliminating the monetary component of the rural economy. This is especially true since in many cases the farmer does not have a choice; in four-fifths of the country, millet and groundnuts are the only crops that grow. The reasons that Senegalese farmers planted groundnuts at the beginning of the century still hold, and relative prices clearly favor groundnuts.

With the receipts from one hectare of groundnuts Senegal can buy 1.5 metric tons of rice on the international market, while the receipts of three hectares of millet are required to purchase the same amount of rice.

The focus of agricultural development should thus still be accorded to groundnuts in the short term, even if the world price of groundnut oil is depressed. This is the only product for which Senegal has a comparative advantage. If the groundnut oil subsector is running a deficit it is because of competition from soybean oil, which is sold cheaply on the world market. Solutions must be found so that groundnut oil can be purchased at a fair price in the short run, until the economy diversifies.

Diversification, the key to Senegal's development, is a long-term objective. Although diversification was attempted unsuccessfully in agriculture during the 1970s, and in industry during the 1980s without any greater success, it now seems to be becoming a reality, without external development assistance, in fishing and tourism. In 1985 tourism brought in CFAF 30 billion in foreign exchange, and the following year fishing moved into first place among Senegal's exports in terms of gross value. These two sectors alone, however, are unlikely to replace groundnuts, for both have a low domestic value added of about 25 to 30 percent of their turnover. Many similar subsectors will be needed to form the basis for the development of Senegal. Foreign aid can play a large role in transferring both necessary technology and capital to Senegal.

CHAPTER 9

HEBA HANDOUSSA

The Impact of Foreign Aid on Egypt's Economic Development, 1952–1986

The most obvious factor in Egypt's experience with aid and capital flows is not economics, but politics. The country's strategic location, large size (the population was 50.2 million in 1986), and military strength have not only made it the leading power in the Arab World, but also positioned it at a critical point in the larger superpower competition. As a result, Egypt has become one of the largest per capita recipients of aid in the world; since 1975, aid has amounted to an average of 15 percent of gross domestic product (GDP). Over the past thirty years, aid to Egypt has been characterized by enormous shifts in both donor source and amount, because of the changing configurations in superpower politics and the shift in Egypt's foreign policy stance (see Table 9.1).

Although Egypt's growing dependence on aid can be measured by the impressive flow of physical resource transfers boosting its economic development,[1] the corresponding political and economic gains achieved by major aid donors have been equally important, if less easily quantifiable. From the mid-1950s to the 1970s Egypt accounted for over 20 percent of Soviet trade and aid flows to developing countries, as well as 29 percent of such military sales. In addition, the Egyptian offer of air base facilities in the Mediterranean enabled the Soviets to establish a strong military presence in the Middle East (Madkour 1983: 23–34). As the first country in the Middle East to adopt a

TABLE 9.1 A Chronology of Political and Economic Events in Egypt, 1952–88

Year	Military/political events	Aid/trade relations
1952	Egypt's July Revolution.	U.S. offers loans under Point Four Program.
1954	Evacuation of British troops from Egypt.	Egypt requests arms purchase from U.S.
1955	West creates CENTO but Egypt remains non-aligned. U.S. arms embargo on Egypt. Israeli attack on Gaza.	U.S. and IBRD agree to Egypt's request for finance of High Dam. First arms deal negotiated by Egypt with USSR and Czechoslovakia.
1956	Egypt recognizes People's Republic of China. Egypt nationalizes the Suez Canal. Tripartite Agression (Britain, France, and Israel).	U.S. and IBRD withdraw from pledge to finance High Dam. U.S. discontinues PL 480 shipments. Economic blockade by major western countries. Egypt turns to Eastern Europe for trade.
1958		First and second loan agreements from USSR to finance industry and High Dam.
1959	Tension arises between Egypt and USSR over Soviet influence in Iraq and Egypt's treatment of Communists.	U.S./Egyptian agreement on grain shipments under PL 480.
1960		Soviet aid agreement to finance the second stage of High Dam.
1964	Worsening relations between U.S. and Egypt.	Fourth Soviet loan for industry.
1965		PL 480 is discontinued.
1967	Egypt-Israel War. Breaking of diplomatic ties with U.S.	Soviet assistance to rebuild Egypt's armed forces. Arab aid compensates for foreign exchange losses.
1970	September death of Nasser.	July inauguration of High Dam.
1971	Treaty of Friendship and Cooperation between USSR and Egypt.	Fifth Soviet loan for industry, land reclamation, and electricity.
1972	Egypt terminates mission of Soviet military advisers.	
1973	Egyptian army crosses Suez Canal and regains control. Sadat adopts Open Door Economic Policy.	Suez Canal reopened with assistance from West. USSR demands payment for arms supplied in 1973 war.
1974	Resumption of diplomatic ties with U.S.	Oil and wheat prices shoot up. U.S. loans to Egypt resumed.
1975	Prominent Communist sympathizers jailed.	USSR refuses to supply Egypt with new arms or spare parts. Arab aid passes the US$1 billion mark.
1976	Sadat abrogates Friendship Treaty with USSR.	Egypt suspends repayment of USSR debts.
1977	Sadat visits Jerusalem.	U.S. economic aid reaches US$1 billion.
1979	Camp David Peace Treaty with Israel. Arab countries sever diplomatic relations with Egypt.	U.S. military aid reaches US$1 billion. Arab aid discontinued. Arab markets closed to Egypt's exports.
1981	Assassination of Sadat. Normalization of relations with USSR.	Increase in volume of trade with USSR.
1986		Foreign debt reaches US$40 billion. Debt rescheduling at Paris Club. Agreement with IMF on economic reform program.
1988	Arab countries resume diplomatic relations with Egypt.	Arab markets opened to Egypt. Major inflow of foreign exchange receipts from Arab tourists.

NOTE: As of this writing, under President Mubarak there have been no major political or military events and consequently, no major changes in Egypt's aid or trade relations with the United States or others. However, the above developments in the 1980s indicate a trend toward a more "neutral" stance vis-a-vis foreign relations.
SOURCE: Author.

socialist orientation, Egypt became a model for countries such as Syria, Iraq, Algeria, South Yemen, and Libya.

The United States began to benefit from large flows of aid to Egypt in the mid-1970s; foreign policy successes include neutralizing Soviet influence, replacing it with a strong American presence in Egypt, the Egypt-Israeli Peace Treaty, and the more recent U.S.-Egyptian military agreement. Egypt's turn to the West has also given the United States an opportunity to demonstrate the viability of a shift toward a Western-style democratic system within a liberal open market economy. Moreover, American investments in the Egyptian petroleum and banking sectors have earned annual profits commensurate with the size of U.S. economic aid disbursements to Egypt, and American nonmilitary exports to Egypt have now become larger than the value of U.S. economic aid flows to Egypt.[2]

This chapter examines the impact of foreign aid transfers on Egypt's economic development since the 1952 revolution, and is organized around four discrete intervals in Egyptian economic history: 1952–58, the relatively nonaligned postindependence period; 1959–66, the turn to Soviet aid and pursuit of an active socialist development experiment; 1967–74, a period of stagnation, punctuated by two Arab-Israeli wars; and finally, the period since 1975, with large aid flows from the West and economic liberalization producing substantial economic growth.

Between 1952 and 1958 gross national product (GNP) grew at 3.5 percent per year, the dominance of agriculture began to decline (from 36 to 31 percent of GNP); and the composition of exports began to change, with raw cotton declining from 84 to 71 percent of merchandise exports and manufactured goods rising from 4.7 to 17 percent. Although Egypt received no aid and contracted no foreign debt in the 1952–58 period, aid flows reached 6–7 percent of GNP in the 1959–1966 period—from the Eastern Bloc in support of the High Dam and industry, and from the United States in the form of Public Law 480 cereals.

During the second period, the role of the state in economic management became dominant, major manufacturing sectors were nationalized, and the entire finance and trade sectors came under government control. Nevertheless, Egypt's brand of socialism permitted state enterprises to behave like private firms; relative price flexibility reflected real scarcities in the economy. Foreign aid financed one-third of the country's ambitious first Five-Year Plan, and GNP grew at 6.1 percent per year during this period.

After the 1967 war the Egyptian economy experienced relative stagnation. The United States and other Western donors had begun to cut off aid to Egypt in 1965–66, and net aid flows from the Eastern Bloc were negative over the 1967–74 period. The impact of foreign exchange shortages led to a rapid fall in cereal consumption, from 280 kilograms per capita in 1964 to 239 kilos in 1970. Meanwhile, the mobilization of domestic resources for defense led to a decline in investment expenditure from 18 to 12 percent of GNP, and lowered annual GNP growth to only 3.3 percent over this third period.[3]

A major change occurred with Sadat's rapprochement with the West following the military and diplomatic successes of the October 1973 war with Israel. His new commitment to economic liberalization—"The Infitah" or Open Door Policy—brought a large increase in aid beginning in 1975, and strong economic performance (8.7 percent annual GDP growth) through 1984. In addition to substantial aid flows, major sources of growth were the petroleum boom, windfall income from newly found petroleum reserves, the Suez Canal, and worker remittances. These earnings were responsible for a sharp appreciation of the real exchange rate, which served to reduce export competitiveness and the relative profitability of the manufacturing sector. They also allowed the government to temporarily ignore the serious structural imbalances in the economy.

The partial liberalization of trade and exchange rates led to an upsurge in imports and capital outflows; at the same time extravagant government expenditures on labor creation, subsidies, and defense resulted in deficit financing and money creation. Adding fuel to inflationary pressures were the massive emigration of Egyptian workers, which significantly raised the cost of labor; the domestic construction boom; and the rapid growth of household demand. The annual rate of inflation soared from 5 percent in the 1960s to 15 percent in the late 1970s and 20 percent in the 1980s.

Income distribution has obviously suffered on account of inflation, weak tax administration, and the discriminatory nature of the investment and trade incentives of the Open Door Policy. The impact of migration has also tended to accentuate the gap between the haves and have-nots. Although both per capita GDP and social indicators imply a reduction in the poverty level, income differentials have widened and the government's commitment to support the living standards of the most vulnerable income groups is of increasing importance.

Foreign aid has done little to counteract the structural imbalances that developed over the Infitah period. Project aid has been heavily skewed toward nontraded infrastructural sectors having little impact on the performance of agriculture and industry. Substantial aid allocations to research and technical assistance have been largely wasted on expensive, poorly designed, and ill-focused studies with few practical results. Commodity aid, both food and intermediates, has further aggravated the symptoms of "Dutch disease." Except for devaluation, essentially no structural adjustment programs proposed by the West have been implemented by the government. The aid package unduly favored military expenditure, consequently reducing development potential, and increasing the cost of debt servicing.

The Struggle for Independent Development: 1952–58

Egypt emerged from World War II as a typically resource-poor, underdeveloped country heavily dependent on agriculture: raw cotton accounted for

more than 80 percent of exports. The bulk of the population lived at a subsistence level, and rapid population growth began just as growth of agricultural land and cropping intensity reached their limits. Per capita agricultural output declined to two-thirds of its 1914 level, and annual real per capita income stagnated at around $82 (1953 prices) between 1937 and 1952 (Hansen and Marzouk 1965: 46; Mabro 1974: ch. 1; El Kammash 1968: 159).

Throughout the first half of the century, Egypt's economic policy was dictated by cautious conservatism in budget, exchange rate, and trade management. Looming large in the minds of policymakers was the memory of the extravagant expenditures of the Khedives in the 1860s, which had led to foreign occupation in 1882 and had cost the government 40 percent of budget revenues annually to service the foreign debt for the next thirty years (Mabro 1974: 19).

The 1952 revolution resulted in a radical transformation of the government's approach to domestic and foreign policy. On the domestic front, economic development and income distribution were aggressively pursued with the initiation of land reform and the establishment of a development budget. Industrialization was the order of the day. Among the many projects appraised for investment, the largest and most ambitious was the construction of the High Dam in Aswan, designed to increase and control the supply of Nile River water, as well as double the electricity-generating capacity of the country.

The political aspects of aid. On the political front, the new regime was successful in ending British military occupation in 1954. Its next priority was to overcome Egypt's military weakness, which in 1948 had resulted in humiliating defeat when Egypt had tried to prevent the partition of Palestine.

Throughout the 1950s, the government attempted to remain ideologically neutral, insisting on its nonaligned status. Neither this stance, however, nor the country's high credit rating, with sterling reserves of approximately $1 billion accumulated with the British Treasury (Mead 1967: 158; Hansen and Nashashibi 1975: ch. 2), helped the country gain the funds it needed. Finance was not available on market terms, and Egypt's most likely Western creditors were unwilling to negotiate without strings: U.S. arms sales were tied to Egypt's participation in the newly formed Central Treaty Organization Near East defense alliance (the Baghdad Pact), and financing of the High Dam by the International Bank for Reconstruction and Development (IBRD, part of the World Bank Group) was conditional upon Egypt's commitment not to implement any other major development project.

In 1955, therefore, Egypt contracted its first arms deal with Czechoslovakia on terms significantly more affordable than those offered by the United States. At a time when the British Treasury had restricted the convertibility of Egypt's sterling balances and the United States demanded advance cash payment in dollars, Czechoslovakia offered long-term credit

repayable in Egyptian exports. In retaliation for Egypt's arms transaction, as well as its recognition of the People's Republic of China, the United States, followed by the IBRD and Britain, withdrew from its commitment to finance the High Dam.

President Gamal Abdel Nasser responded to the West's pressure politics by nationalizing the Suez Canal in July 1956, thirteen years before ownership would have reverted to the Egyptian government. In retrospect, even after accounting for Egypt's compensation payments to shareholders and the damages inflicted by the aggression of Britain, France, and Israel in the Suez War, the economic benefits of the nationalization far surpassed its costs: income generated by the canal accounted for more than half of the government's foreign exchange receipts.

Development strategy and structural change. Before World War II both the budget and balance of payments had always been balanced; in the 1950s, however, the government embarked upon a bolder strategy of development. A large number of industrial projects were initiated with government participation, using machinery and technology imported from Western Europe. Among these new manufacturing projects were the iron and steel complex at Helwan and the large nitrogen fertilizer project at the old Aswan Dam, as well as projects to produce railway rolling stock, rubber tires, paper, and pharmaceuticals. Private sector entrepreneurs and development banks, as well as foreign investors, were encouraged with direct and indirect investment incentives to promote growth and diversification within the context of an import-substitution development strategy.

Throughout the first half of the 1950s, Egypt ran an annual trade deficit, entirely with the Organization for Economic Cooperation and Development (OECD), of some $100 million (Hansen and Marzouk 1965: 174). In 1956, when Egypt's traditional markets in the West were shut as part of the economic blockade following the Suez Canal nationalization, the Soviet Union and other Eastern European countries moved in as substantial trading partners. The share of Egypt's exports to Eastern Europe rose from 10 percent in 1954 to 36 percent in 1957. This shift had tremendous significance; it set in motion a trend whereby bilateral trade assured Egypt a secure market for its raw cotton, cotton textiles, and other manufactures, as well as providing reliable suppliers of military equipment on reasonable terms. To Egypt's new trading partners, this access represented a golden opportunity to sell the products of their nascent capital goods and military industries.

Indicators of development for this period show only moderate growth (GDP grew at an annual rate of 3.5 percent), but they reflect the beginnings of significant structural change. The share of agriculture in GNP declined from 36 to 32 percent, and that of industry rose from 15 to 20 percent. The share of raw cotton in exports fell from 84 percent in 1952 to 71 percent in 1959, and that of manufactures rose from 4.7 to 17 percent over the same period. The composition of imports also improved in favor of capital goods, which grew

TABLE 9.2 Main Indicators of Aid Flows and Economic Development of Egypt, 1952–84

	1952–58	1959–66	1967–74	1975–84
Annual averages (millions of US$)				
Total medium- and long-term loans and grants (disbursed)	0	217	663	2,494
Current account deficit	73	202	575	1,431
Debt service (amortization and interest)	8	81	391[a]	1,723
Average real annual growth rates (%)				
Gross domestic product	3.5	5.4	3.6	8.7
Gross domestic investment	7.8	10.7	5.4	6.5
Gross national saving	3.6	3.0	-7.0	13.0
Exports of goods	1.6	4.3	6.2	14.7
Imports of goods	1.9	6.8	9.2	13.9
Major flows (% of GDP)				
Aggregate consumption	88.1	86.5	97.4	85.8
Gross investment	14.2	16.8	9.1	29.4
Domestic saving	11.9	13.5	6.3	14.2
Exports (goods and services)	16.3	16.0	17.2	27.9
Imports (goods and services)	18.6	20.1	23.7	43.1
Resource gap	2.3	4.1	6.5	15.2
Aggregate balance of payments (millions of US$)				
Trade balance	-947	-2,475	-4,579	-32,185
Services, net	442	865	-24	17,871
Balance on current account	-505	-1,610	-4,603	-14,314
Amortization of medium- and long-term debt	-58	-448	-2,567	-8,939
Aggregate aid flows[b]	0	1,725	5,306	23,691

a. Interest payments are the annual average for 1967 to 1972.
b. Aid flows are defined as medium- and long-term loans and grants as well as suppliers' credits.
SOURCE: 1952–58: Mead (1967) and Hansen and Marzouk (1965); 1959–66 and 1967–74: Ikram (1980) and Mabro (1974); 1967 to 1984: Ikram (1980) and World Bank (1986: Statistical Appendixes).

from 16 percent in 1953 to 25 percent in 1959, reflecting the country's investment drive. The domestic savings rate persisted at a stable 12 percent of GNP throughout the period, and the modest resource gap of 2.3 percent was financed by running down Egypt's foreign exchange reserves (see Table 9.2).

Soviet Aid and Socialist Transformation: 1959–66

A major trend that continued from the late 1950s into the 1960s was the growing role of the state in the economy. The nationalization of the Suez Canal was followed by the Egyptianization of British and French assets, and the nationalization of the entire external trade, finance, and large-scale manufacturing sectors. Government revenue thus climbed from £E 167 million (18.4 percent of GNP) in 1952–53 to £E 660 million (28.4 percent of GNP) in 1965–66 (Hansen and Marzouk 1965: 250; Ikram 1980: 408–9). The savings contribution of public enterprises (after tax profits and self-financing)

amounted to £E 136 million in 1965–66 or 20.4 percent of budget revenue.[3] Although centralization and state ownership were inspired by the socialist models of Eastern Europe, Egypt's brand of socialism retained some of the virtues of market economies, including the profit motive and relative price flexibility. Most of the problems that were to later constrain the efficient operation of the public sector did not in fact appear until the 1970s, when serious distortions in the market mechanism (selling at subsidized prices and the cumulative effect of guaranteed employment) were allowed to turn a dynamic and surplus-generating asset into a net burden on the Treasury.

The allocation of aid flows. After the 1952–58 period, when Egypt had received virtually no aid and had had no external debt, the country began in 1959 to depend increasingly on foreign aid flows to sustain its development, at the cost of increased indebtedness. Paradoxically, even though Egypt had by now exhausted its foreign exchange reserves and was heavily dependent on foreign capital flows to finance its investment effort, creditors from both East and West were competing to advance Egypt the capital and technology to implement its development plans. Although Egypt's first two economic aid agreements with the USSR were signed in 1958, disbursement began in 1959, the same year that American PL 480 grain shipments to Egypt were resumed. Egypt was thus able to sustain a much larger balance of payments deficit on current account, from an average of $73 million in 1952–58 to $202 million in 1959–66.

Between January 1958 and December 1964, the Soviet Union signed four major aid agreements, worth $750 million, with Egypt. The first (January 1958, $175 million) called for cooperation in implementing projects in Egypt's five-year plan for industry (1957–62). The next two (December 1958, $100 million, and August 1960, $225 million) were for the finance of the first and second stages of the High Dam, and the fourth (September 1964, $250 million) was for the expansion of the German-built iron and steel complex at Helwan as well as the construction of other industrial plants. Over the same period, other Eastern European creditors extended up to $425 million.[4]

Egypt was also the third largest recipient of food aid under the U.S. PL 480 program, which constituted the whole of American aid to Egypt for that period. Total U.S. aid commitments reached $662 million between 1959 and 1965 with $537 million disbursed (compared to $320 million disbursed through Soviet project aid). The terms of these U.S. aid credits were more concessional than those from Eastern Europe on two accounts: first, as much as 85 percent of loans were to be repaid in local currency, which meant that Egypt did not need to divert exports to the United States in repayment for the loans; second, the repayment period was twenty years, compared to only twelve years for the credits from Eastern Europe. The interest rate charged on PL 480 Title I credits was 2–3 percent, equivalent to the 2.5 percent payable on loans from the socialist countries.

Foreign aid commitments from other Western countries and institutions and Japan amounted to $375 million, with the largest donors being West Germany ($122 million), Italy ($79 million), Japan ($39 million), and the IBRD ($57 million). The majority of these loans were for the implementation of industrial and infrastructure projects. While some of these credits, such as the West German, were highly concessionary, others were at close to commercial terms. Total aid commitments to Egypt over the seven-year period ending in 1965 were therefore about $2.21 billion, with an annual average of slightly more than $300 million, while the cumulative value of aid disbursements was $1.73 billion, with an annual average of $217 million (see Table 9.2).

The effectiveness of aid. In order to assess the contribution of external resources to Egypt's development effort over this initial period of substantial and diversified foreign aid flows, three criteria of effectiveness will be analyzed. The first is the size of the aid flows and their adequacy in allowing the recipient to finance its investment program; the second is the terms of the aid transactions and their impact on the recipient's capacity to service these debts; the third is the recipient's development strategy and the effectiveness of the domestic policy package in moving the economy toward self-sustaining growth.

Egypt's first comprehensive five-year plan was launched in 1960. At the macroeconomic level planners targeted a growth rate of 7.2 percent, based on raising the ratio of investment to GNP to 20 percent. The total investment cost projected by the plan was £E 1,636 million ($4,695 million) of which £E 540 million, or one-third, would be financed with foreign credits. It is evident that the size of the total aid disbursed over the period, $1,725 million, was in line with the plan's projected foreign exchange requirements. The fungibility of American food aid was also important; U.S. cereal shipments to Egypt were instrumental in enabling the government to use export proceeds in purchasing capital goods equivalent in value to the savings on the food import bill as a result of PL 480. In the first half of the 1950s, Egypt had already reallocated a significant proportion of land from cotton to wheat, and further land could not be spared from cotton cultivation without reducing Egypt's export revenues or cutting back supplies to the domestic textile industry (Mead 1967: 170). During this period, therefore, American food aid was fully fungible.

Regarding the second criterion, the financial terms of the aid transactions, a calculation was made of the grant element of aid received by Egypt in the 1958–65 period to show that the combination of maturity, grace period, and interest charged made the provision of aid highly concessionary at a discount rate (opportunity cost of capital) of 10 percent. However, long-term interest rates on the international capital market during 1953–64 were closer to the range of 4 to 6 percent, considerably reducing the grant element from the levels of 15 to 50 percent as calculated for the major loans

contracted in 1958, 1960, 1962, and 1964.[5] The nonfinancial terms accompanying aid flows to Egypt involved little, if any, conditionality, apart from the inevitable tied aspects of the capital-cum-technology transfers embodied in projects. In terms of trade impact, Egypt was encouraged by its socialist friends to repay its debts in exports of raw cotton and manufactured goods. In one instance, the output of a spinning mill project was earmarked to repay the donor. Moreover, the growth in trade with the Eastern Bloc did not involve any pressure on Egypt to reduce its trade links with the West. Over the 1958–66 period, it is clear that Egypt ran a large and growing deficit with the OECD; imports rose from $235 million in 1958 to $615 million in 1966, while exports to that area rose from $112 million to only $126 million over the same period.

The third criterion examines the extent to which aid-funded projects coincided with the country's priorities. The answer is straightforward and simple: aid donors, headed by the USSR and including all other bilateral and multilateral donors, selected projects from the elaborate list prepared independently by the government's planning agencies. It should be noted that apart from the highly publicized showcases of the High Dam ($325 million) and the Helwan steel complex (less than $150 million), some $300 million of Soviet aid was spent on the establishment or expansion of at least two dozen industrial plants, which produced heavy engineering equipment, forgings, castings, basic chemicals, petroleum products, pharmaceutical chemicals, and cotton yarn, as well as on the creation of a shipyard and a thermal power station.

The industrialization program itself can be criticized on three counts. First, it was heavily biased in favor of import-substituting projects, many of which did not coincide with Egypt's dynamic comparative advantage. Second, the employment effect of these projects was also very small, and they did not establish mechanisms for productive employment generation, one of the key objectives of development. Third, the industrialization program failed to fulfill another basic goal of the plan: to raise the volume of Egyptian exports enough to close the foreign exchange gap by 1964–65, the last year of the plan, and allow Egypt to begin servicing its foreign debt. One of the endemic weaknesses of Egypt's postindependence development strategy has been an inability to design an investment and export promotion package to establish Egypt as a net exporter of manufactured goods in order to compensate for the resource constraints of the agricultural sector. These three features of Egypt's industrialization strategy go a long way toward explaining why Egypt experienced such grave problems in servicing its foreign debt early in the mid-1960s, when debt obligations were still manageable and the average debt service ratio was only 12 percent.

Macroeconomic management. The 1960–65 plan was overoptimistic both in forecasting an increase in the domestic savings rate from 14.1 to 20 percent

and in calling for an increase in exports large enough to generate a balance of payments surplus that could be used to begin repayment of foreign debt by 1964–65. Neither target was fulfilled or even approached. Stringent controls on imports and distribution succeeded in reducing the rate of growth of private consumption so that its ratio to GNP declined from 70.6 percent to 64.9 percent. In contrast, public consumption grew from 16.6 to 21.5 percent instead of declining to 14.6 percent as planned (Al Gritiy 1977: 59).

The massive investment effort of 1960–65 explains only a fraction of the country's foreign exchange deficit. Nor can the legitimate growth in government welfare and social service expenditures explain the growth in public consumption from £E 252 million in 1959–60 to £E 612 million in 1964–65 (Hansen and Marzouk 1965: 206–7, 250; Ikram 1980: 396). Expenditure on health, education, and subsidies grew from £E 62 million to £E 161 million in that period. Together, they can only account for 30 percent of the rise in current government expenditure. Defense expenditures, however, more than doubled to 10 percent of GDP in the early 1960s because of Egypt's involvement in the Yemen War. A second large burden on the budget came from the policy of guaranteed employment for graduates of university and higher technical institutes. Civil service employment thus grew by 39 percent over a five-year period, to 933,000 in 1965–66. Although the employment drive was motivated by social and political considerations, it introduced a permanent exponential growth factor to the government wage bill that policymakers are still grappling with today.

The perennial weakness of budget policy began to appear: deficit financing and borrowing (initially through foreign credits and later through central bank lending). Increased aggregate demand generated by government expenditures was matched not with increased domestic output but with an inevitable decline in aggregate savings and increased reliance on imports. By 1965–66, gross domestic savings stood at 13.6 percent of GDP, down from 14.1 percent in 1960–61. Public savings declined from 6 percent of GDP at the end of the 1950s to a 2.2 percent average in 1960–63, and became negative in 1964–65 and 1965–66. In line with the growing savings-investment gap, the ratio of current account deficit to GNP had risen from 1.4 percent in 1960–61 to 4.5 percent in 1965–66 (see Table 9.2).

Despite these serious flaws in macroeconomic management, in retrospect it seems that the 1959–66 period was Egypt's golden era of foreign assistance. Aid disbursements were sufficiently large (6–7 percent of GNP) and diversified over the period to permit the government to embark on its ambitious development plan. There was no waste in aid allocations; projects and commodity flows were finely tuned to the recipient's perceived needs. The sectoral balance of aid allocation was conducive to long-term development, with agriculture and industry receiving a lion's share of investments. The terms of the aid transactions were also generous, providing Egypt with reasonably priced credit and relatively few conditions.

The War Period and Economic Stagnation: 1967–74

If Egypt's development faltered in the second half of the 1960s, the blame must be shouldered by both recipient and donor. Whereas government budget policy was too expansionary, donor countries were reluctant to continue supporting Egypt at more than a small fraction of their previous commitment. Even if the government had contained public consumption at levels of the late 1950s, it is doubtful that private savings could have matched the level of public savings as envisaged by the plan without great declines in the living standards of a poor population. Economic development can hardly be expected to achieve the necessary transformation from a dependent to a self-reliant economy within one or two decades. Unfortunately, Egypt's 1967 war was preceded by a cutoff of PL 480 food shipments and followed by a discontinuation of all OECD aid, including suppliers' credits, and a significant reduction in aid from Eastern Europe and the USSR.

Egypt's focus on development virtually ceased in the aftermath of the June 1967 war with Israel. Between 1967 and 1974 Egypt suffered two wars that caused extensive material damage and major dislocations: three major cities along the Suez Canal were destroyed; 1 million Egyptians were left homeless and required relocation and housing; oil refineries and petrochemical and fertilizer plants were destroyed; the Suez Canal was closed; and Egypt lost the Sinai oil fields to Israel. In addition to paying the high cost of refurbishing the army, Egypt was forced to mobilize a major part of its resources in preparation for another inevitable round of fighting to regain lost territory and recover its political standing. Defense expenditures claimed 15 percent of GDP, up from the previous peaks of 8 percent during the Suez war and 10 percent during the Yemen war.

In the Khartoum Agreement of 1968, Saudi Arabia, Kuwait, and Libya pledged a steady flow of grants at $250 million per year to compensate Egypt for the loss of Suez Canal revenue ($229 million in 1966) and the Sinai oil fields. The Soviet Union replaced most of the military ware lost during the 1967 war. Apart from these compensatory and military transfers, Egypt was able to obtain very little economic aid until the October war of 1973 when the country regained its regional and international geopolitical importance. Meanwhile, Egypt's debt servicing obligations on long- and medium-term aid rose from an average of $81 million per year in 1959–66 to $391 million in 1967–74, an increase in the debt service ratio from 9.8 to 32.9 percent. Since its repayment difficulties beginning in 1964, the government had resorted to short-term foreign credit, which grew from $244 million in 1964–65 to $711 million in 1973 and $1,542 million in 1974 (Ikram 1980: 358, 408–11). The 1967–73 period thus witnessed a major downswing in Egypt's receipts of foreign aid; the debt service burden was becoming sizable, and disbursements were more than offset by amortization payments. The United States had abruptly announced in 1965 that it was unwilling to renew the PL 480 agreement; the official reason was that it "did not approve of Egypt's foreign

policy." Meanwhile, the USSR had refused to postpone repayment on High Dam credits, and its only new commitment was $415 million in 1971 for industrial projects and land reclamation; few funds materialized, however, because of worsening political relations. In fact, capital flows from the Soviet Union became negative after 1972, with net outflows of about $228 million in 1974, $67 million in 1975, and $148 million in 1976.

In the second half of the 1960s there was little expansion in the size of Egypt's foreign debt (which stood at $1,788 million, or 26 percent of GDP, at the end of 1970), not because of a decline in the country's foreign exchange requirements or a deliberate effort to curtail domestic growth, but simply because traditional aid donors were tightfisted and more market-conscious foreign suppliers were weary of Egypt's poor credit standing. Imports of the less vital intermediate goods were severely curtailed, capital goods imports declined by half, and even food imports suffered. The total value of imports declined from $1,015 million in 1965 to $724 million in 1968 and regained its 1965 level (in current prices) only in 1970.

Both food shortages and declines in the real income standards of the population were reflected in a drop of per capita caloric intake from 2,701 per day in 1965–66 to 2,552 per day in 1972–73; the Food and Agriculture Organization (FAO) reported that caloric dietary deficiencies were now more serious than protein deficiencies. To compound Egypt's foreign exchange difficulties, the oil boom of 1973 coincided with the explosive rise in the cost of wheat on the international market. From an average of $25 per ton in 1969–70, the price of wheat shot up to $70 per ton in 1973–74 and $112 per ton in 1974–75. In 1974 the additional cost of grain imports to Egypt was $500 million, equivalent to 9 percent of GNP, forcing the government to divert more than 40 percent of its import allocation to food grains, up from 24 percent in 1970. Egypt's terms of trade had deteriorated to such an extent that a unit of cotton exports could buy less than half as much wheat as it had in 1969. Meanwhile, Egypt was still a net importer of petroleum (Ikram 1980: 221, 224).[6]

The annual rate of growth of GNP, which had been 6.4 percent in 1963–64, experienced a rapid decline to 4.4 percent in 1965–66, 0.3 percent in 1966–67, and –3.1 percent in 1967–68; thereafter it made a modest recovery with an annual average of 4.9 percent for the six-year period from 1968–69 to 1974. Resources were shifted away from investment expenditure, which dropped to an all-time low of 9.1 percent of GNP for 1966–74, partly because of the war effort, which absorbed some 15 percent of GNP during that period, but also because of Egypt's inability to acquire the same level of net foreign exchange resources that it was able to mobilize in the previous development era.

The 1973 war with Israel resulted in $475 million of additional aid from Arab countries in that year, followed by another $2,116 million for 1974 and 1975. Relations with the United States were restored and were accompanied by renewed commitments of medium- and long-term aid from the West. OECD countries together accounted for $920 million of pledges in 1974 and

1975. Despite all of the aid agreements that Egypt managed to secure between 1973 and 1975, however, disbursements were still short of debt service obligations on Egypt's total foreign debt (outstanding and disbursed), which stood at $3,830 million at the end of 1974 (38 percent of GDP). One-third of the debt was in short-term bank credits, and because of these short maturities, repayment of as much as $1,315 million was due in 1975 (IMF 1975: 44–45).

The year 1974 marked the close of Egypt's period of economic hardship and the start of a new development era based on free enterprise and the liberalization of trade. Sadat's rapprochement with the West, together with his commitment to peace, was intended to bring the country significant economic dividends. Sadat hoped to attract substantial flows of Arab finance and Western capital and technology, which would be used together to reconstruct the war-torn economy. Ambitious investment projects were to be implemented in all areas of economic activity, particularly land reclamation, industry, tourism, and the development of new cities. To this end, Law 43, encouraging private domestic and foreign investors, was enacted and subsequently became the cornerstone of the Open Door Policy. To date, apart from the petroleum, banking, and tourism sectors, the response of foreign capital has been disappointing; the bulk of Law 43 projects have been financed domestically and cannot be said to have contributed significantly to the subsequent economic boom of 1975 to 1986.

Aid from the West and Economic Liberalization: 1975–86

The turning point in Egypt's economic fortunes came in 1975, when new sources of foreign exchange appeared on the economic horizon. After eight years of belt tightening and falling standards of living, compounded by pressure from foreign creditors to repay short-term loans (spent largely on food imports), the country became the beneficiary of generous aid flows and of the petroleum boom of the mid-1970s.

The five major sources of foreign exchange. First, the donor community was coordinating a joint effort to support the Egyptian economy with longer-term aid commitments. Until 1974, Egypt experienced net long-term capital outflows; this trend was reversed in 1975 when aid disbursements exceeded amortization payments by $1,778 million. By 1977 net inflows of long-term loans, grants, and suppliers' credits increased to $2,320 million, helping Egypt retire its short-term debt, and between 1978 and 1984–85, net inflows averaged as much as $1.5 billion annually (World Bank 1986: 92).

The reopening of the Suez Canal in mid-1975 provided the second major source of foreign exchange (see Table 9.3), with $85 million in tolls collected in that year. A major expansion project to broaden and deepen the canal was financed by bilateral and multilateral aid. By 1978, Suez Canal earnings had

TABLE 9.3 Growth of Egypt's Foreign Exchange Earnings in Selected Years, 1952–85 (millions of US$)

	Commodity exports					Service receipts				Total current account receipts
Year	Fuels[a]	Raw cotton	Other agricultural products	Manufactured products	Total	Suez Canal	Tourism	Remittances	Total	
1952	7	363	24	28	416	76	n.a.	n.a.	210	626
1955	6	310	40	41	397	92	n.a.	n.a.	270	667
1958	n.a.	316	n.a.	n.a.	462	123	n.a.	n.a.	256	718
1966	43	330	75	165	613	229[b]	n.a.	n.a.	n.a.	n.a.
1970	92	340	117	246	822	0	139	34	183	1,005
1974	251	714	202	474	1,641	0	265	189	276	2,569
1978	1,262	336	223	697	2,518	514	702	1,761	1,905	6,058
1980–81	4,489	394	225	740	5,848	780	712	2,855	3,259	11,125
1983–84	4,539	402	164	734	5,591	974	557	3,934	4,434	12,947
1984–85	4,955	414	194	686	6,249	897	409	3,496	6,954	13,203

NOTE: n.a. = not available.
a. Fuels include both crude petroleum and petroleum products.
b. The figure US$229 million was reached by converting £E95.3 million at £E1 = US$2.40 (central bank figure).
SOURCE: 1952, 1955, 1958: Mead (1967: Appendix Table V.A.4) and Hansen and Marzouk (1965: 182); 1966 to 1983–84: World Bank (1985: Appendix Table 3.3 and Table 3.1) and IMF (1975).

surpassed the $500 million mark and approached $1 billion in 1983–84, with the completion of the expansion project.

Third, major petroleum concessions had been granted by the government in 1972 and 1973, and they offered promising results. Because a substantial share of Egyptian output of petroleum belonged to foreign partner companies, the oil sector had a net balance of payments outflow of $257 million in 1974 (exports of Egypt's share minus petroleum product imports). The balance was –$31 million in 1975 and grew to a positive $381 million in 1976, $585 million in 1977, $1,635 million in 1979, and $2,824 million in 1981–82. Total export value of petroleum reached $4,955 million in 1984–85, of which Egypt's share was $2,891 million. In physical terms, the output of petroleum had risen from 12 to 44 million tons between 1975 and 1984–85, and exports from about 4 to 27 million tons.

Expatriate workers, in response to opportunities provided by the oil boom in neighboring Arab countries, increased to about 1 million by the mid-1970s, and their remittances were a fourth source of foreign exchange. Egypt's reservoir of human capital, a heavy burden to the economy in terms of unemployment, now contributed to the country's balance of payments. Worker remittances were attracted to Egypt by the "parallel market" exchange rate (later the "commercial bank" rate), which offered an incentive premium over the official exchange rate. Total worker remittances (including both cash transfers and own-exchange imports) are estimated to have grown from $189 million in 1974 to $366 million in 1975 and $755 million in 1976. They accelerated and peaked at $3,931 million in 1983–84.

Finally, under the Open Door Policy, tourism became one of the fastest growing sectors of the economy. Substantial Arab and Western capital contributed to the construction of new hotels. In 1975, tourism earnings reached $332 million, up from $139 million in 1970 and $265 million in 1974. Because of problems of regional stability, tourism earnings continued to be highly volatile throughout the period. However, much of the cyclical trend in recorded tourism income stemmed from the size of the gap between the commercial bank exchange rate at which tourism transactions are conducted and the more devalued but illegal free (black market) rate. Balance of payments data on tourism receipts show that the annual average ranged between $500 million and $700 million from 1977 to 1984–85, but other indicators show a significant overall upward trend; the number of tourist nights spent, for example, rose from 6.3 million nights in 1977 to 9.0 million nights in 1984–85.

Impact of liberalization on the balance of payments. The dramatic rise in foreign exchange resources in the mid-1970s radically transformed the composition of Egypt's export receipts (see Table 9.4). Between 1974 and 1983–84 fuels rose from 8.5 percent of merchandise exports to 81.2 percent, while raw

TABLE 9.4 Commodity Composition of Egypt's Exports and Imports in Selected Years, 1952–84 (percentage)

	Exports					
Year	Raw cotton	Other agricultural products	Fuels[a]	Yarn and textiles	Other manufactured products	Other
1952–53	84.0	8.1	1.1	3.3	1.4	2.1
1959–60	70.8	6.8	3.2	9.7	6.9	2.6
1964–65	55.9	13.6	8.0	14.0	6.6	1.8
1969–70	49.0	18.8	2.0	14.3	15.5	0.4
1974	47.0	13.3	8.5	15.3	12.4	3.5
1978	13.3	8.8	50.1	16.3	11.4	0.1
1983–84	7.2	3.0	81.2	4.2	4.5	0.0

	Imports				
	Food, beverages, and tobacco	Intermediates	Capital goods	Consumer goods	Other
1953	30.4	29.1	16.0	20.3	4.3
1959	24.5	31.7	25.2	15.7	2.9
1970	24.3	41.6	23.3	7.9	2.9
1974	42.9	31.9	13.5	9.1	2.6
1978	22.7	29.7	32.0	13.8	1.8
1983–84	20.9	36.2	27.9	13.9	1.1

a. Fuels include petroleum and petroleum products.
SOURCE: Exports, 1952–53 to 1969–70: Mabro (1974: 180); 1974: IMF (1975); 1978 and 1983–84: World Bank (1985). Imports, 1953 and 1959: Hansen and Marzouk (1965: 183), based on UN standard classified; 1970: calculated from IMF (1975); 1974, 1978, and 1983–84: calculated from World Bank (1985).

cotton fell from 47 percent to 7.2 percent and manufactures fell from 27.7 percent to 8.7 percent. Meanwhile, the proportion of all service receipts in the balance of payments regained its 35 percent share of total current account receipts, which it had lost with the closure of the Suez Canal. The composition of service receipts was dominated by workers' remittances, followed by Suez Canal dues and tourism. Between 1975 and 1984–85 current account receipts grew from $3,045 million to $13,203 million, an increase of 330 percent. In spite of this growth in foreign exchange revenue, which raised the share of exports from 20 to 28 percent of GDP, the growth in payments was equally dramatic: following an overall upward trend, the current account deficit grew from $2,426 million in 1975 to $3,586 million in 1984–85.[7]

Even the generous level of net foreign assistance on capital account could not accommodate the sharp rise in the domestic savings gap, which averaged 15.2 percent of GDP between 1975 and 1985, compared to 6.5 percent between 1967 and 1974, and a modest 4.1 percent in the early 1960s. To understand how, from 1975 to 1985, astounding real annual rates of growth of GDP (9.1 percent), investment (6.5 percent), savings (13.0 percent), exports (16.0 percent), and imports (12.0 percent) could be accompanied by an equally astounding growth in total civilian foreign debt from $4 billion at the end of 1974 to $26.1 billion in June 1985, one must identify the variables that have impaired the movement of the economy toward fiscal and foreign exchange equilibrium.

Although Egypt's apparent flow of foreign exchange earnings has been phenomenal, with aggregate current account receipts amounting to $85.8 billion for the ten-year period from 1975 to 1984–85, a number of deductions must be made in order to arrive at the true amount of aggregate receipts available to the economy in that decade. These deductions include the share of foreign companies in petroleum exports ($9.5 billion), the growth in foreign currency deposits held by Egyptian residents with the banking system ($9.9 billion), factor service receipts other than recorded worker remittances ($3.4 billion), and the burden of debt incurred before 1975 ($4.0 billion) (World Bank 1986: 91; IMF 1985: 46, 55).[8] After adjustment, aggregate receipts are still enormous ($59 billion), and at an annual average of $5,619 million, the bulk of these income flows have aptly been described as exogenous, volatile, windfall, or of a rentier nature.

Egypt's variant of the Dutch disease. The partial liberalization of the trade and exchange rate regime that began in the early 1970s was largely responsible for the upsurge in imports and foreign currency holdings by Egyptian residents. Own-exchange imports (not requiring the purchase of foreign currency from the formal banking system) were permitted for a growing range of goods, a sizable black market for foreign currency (where the exchange rate fluctuated freely at a premium over the parallel exchange rate) was tolerated by the authorities, and all restrictions were eliminated on

residents' holding of foreign currency deposits earning competitive interest rates above nominal and real domestic rates.

Egypt thus experienced its own peculiar variant of the Dutch disease: the boom in petroleum, tourism, and remittance income was not associated with the expected surplus on current account or increase in foreign reserves. Instead, the rise in current account receipts (from an average of $1.5 billion in 1970–75 to $9.2 billion in 1976–84) was accompanied by a similar increase in merchandise imports (from an average of $2.2 billion in 1970–75 to $8.5 billion in 1976–84) as well as capital outflows and foreign currency holdings by residents. The share of foreign currency deposits in commercial banks rose from 14 percent of total deposits in 1976 to 21 percent at the end of 1978 and 25 percent in 1984 (World Bank 1986: 91; IMF 1975: 40; IMF 1983: 108–9).

Meanwhile, fiscal policies were expansive, in part because a large proportion of Egypt's windfall income accrued directly to the state in the form of oil exports (Egypt's share) and Suez Canal tolls, which together accounted for more than one-third of the increase in Egypt's current account receipts from 1975 to 1985. While the government indulged in its expenditures on subsidies, employment creation, and defense, private domestic consumption and investment were buoyant as a result of the massive wave of emigration, which led to increased income levels and demand for consumer goods and housing. Critical shortages of skilled and unskilled labor pushed up real wages in the commodity sectors of the economy and resulted in a combination of cost-push and demand-pull inflation.

The government attempted to fight domestic inflationary pressures and sterilize the impact of world energy and cereal price increases by shouldering the burden through an extensive system of explicit and implicit subsidies and a general price freeze on public sector goods and services. These price controls were enforced at the cost of forgoing potentially large budget surpluses and moved the Treasury to borrow heavily from the banking system, giving rise to unprecedented growth in the money supply. The average annual increase in the official consumer price index moved from 3.4 percent in 1967–72, to 9.6 percent in 1972–77, to 13.3 percent in 1977–82, and to 17.3 percent in 1982–87.

The combined impact of the boom in oil-related foreign exchange earnings and the chronic problem of domestic inflation resulted in a real appreciation of the domestic currency even at the black market exchange rate, at which manufactured exports are transacted. Manufactured goods lost much of their competitiveness on the world market, and the incentive value of full retention rights to dollar income from exports did little to outweigh the antiexport bias due to the overvalued Egyptian currency. Both tariff protection and the rise in the real cost of labor further accentuated the decline in export competitiveness.

Egypt's experience confirms the strength of the bias against nonresource-based exports caused by the Dutch disease. In contrast to the boom in oil-related commodity and service exports, nonpetroleum commodity

exports stagnated during this period. The dollar value of raw cotton and textile exports declined from 1974 to 1984–85, and that of other agriculture and other manufactures stagnated. The total value of nonpetroleum exports declined from $1,567 million in 1974 to $1,294 million in 1984–85; in real terms the decline was obviously more significant (World Bank 1986: 91).

The sizable flow of foreign aid throughout the decade has no doubt reinforced the symptoms of Egypt's version of the Dutch disease, even though the impact of aid itself was overshadowed by Egypt's poor management of new sources of foreign exchange. In addition to contributing to real exchange rate appreciation, project aid heavily stressed infrastructure and aggravated the tendency for resources to flow out of the tradable and into the nontradable sectors of the economy.

The structure of aggregate demand. By tracing merchandise imports, one can make a fairly good assessment of how Egypt has allocated its $5,619 million in annual foreign exchange income and its additional annual average of $2,330 million in net official loans and grants from 1975 to 1984–85.[9] The ratio of commodity imports to GDP rose from an average of less than 20 percent in the 1950s and 1960s to as much as 30 percent during 1975–78 and 40 percent from 1979 to 1984–85. The three largest groups responsible for the growth of the import bill are food, building materials, and capital goods, and a close inspection of each gives a revealing account of developments in aggregate expenditure.[10]

In 1975, food imports amounted to $1,388 million—36 percent of imports—and more than doubled to reach $2,826 million—25 percent of imports—in 1984–85. Four basic commodities account for more than 80 percent of food imports: wheat and wheat flour, maize, vegetable oils and fats, and sugar. In physical terms, cereal imports more than doubled from 4.214 million tons in 1975 to 8.616 million tons in 1984. In contrast to a population growth of 28.5 percent in that period, the volume of domestic wheat output declined by 8 percent, rice output by 4.7 percent, and maize output increased by 29 percent. Egypt's growing dependence on cereal imports is a function of its inability to expand its cultivated area and of its limited success in raising the yields of wheat, rice, and maize (yields of wheat and rice have risen less than 1 percent annually over the decade 1974–75 to 1984–85, while maize yields have risen 2 percent). The ratio of cereal imports to total domestic production of cereals has increased from 1:2 in 1975 to 1:1 in 1984–85. In 1975 the proportion of aid-funded cereal imports stood at 14.5 percent of total volume of cereal imports. It peaked at 42 percent in 1977—the year of Egypt's food riots—and then declined both in absolute and proportional terms to reach 20.7 percent in 1984 (World Bank 1986: 114–15).[11]

A significant share of U.S. project aid to Egypt since 1977 ($552 million through 1986) has been allocated to the development of agriculture and irrigation. However, this sizable amount, two-thirds of which has already been spent on research and technical assistance, may be seen as too costly

given the limited yield gains achieved to date and the poor overall growth of the agricultural sector—less than 2 percent per year—over the decade. The magnitude of this failure can be gauged by comparison with a technical assistance program like that of the Rockefeller Foundation in India—a well-documented success that cost a modest $23 million, in current prices, over the 1963–74 period (Agency for International Development 1986: 43–58; Lele and Goldsmith 1987: 6).

Several factors contributed to the lack of real progress in agriculture. A majority of U.S. Agency for International Development (USAID) research in Egypt focused exclusively on old fertile lands, which boast some of the highest yields by international standards, while neglecting the most basic technical problems in the newly reclaimed areas. In addition, research design has favored institution building and on-station research over on-farm extension work; this imbalance has contributed to the reluctance of the average farmer to adopt and adapt to high-yield seed varieties and improved technologies. Research projects have also been characterized by excessive use of American consulting firms, a high turnover of foreign personnel, and fragmentary research assignments. A great deal of waste has also accompanied the multiplicity of management upgrading programs in government departments and policy-related studies, which have together used up about half of the total technical assistance funding.

It may, however, be too early to pass judgment on the research projects that are designed to yield results in the long term. Two major projects for rice and cereals research (completed at a cost of $74 million) have reported yields on demonstration plots that exceed the national average by 60 percent for rice, 50 percent for wheat, and 100 percent for maize and millet. Whether these results can be reproduced on a large scale throughout Egypt and within an acceptable time frame is still open to speculation.

Solving Egypt's food deficit problem in the near future will not be an easy task, but two conditions seem necessary for the country to at least regain the trade balance in agricultural commodities that was lost in 1974. The first is to direct more capital and technology resources to desert farming so as to raise the productivity of the nearly 1 million feddans reclaimed over the past two decades (a feddan equals 1.038 acres). The major benefit of the High Dam was to irrigate an additional 1.2 million feddans, but currently Egypt's total cultivated area is still no more than the 6 million feddans available to it in the 1950s; thus it is clear that both Egypt's planners and major aid donors must concentrate their efforts to better utilize Egypt's "new" lands where the real but unexploited potential exists for a green revolution. The second condition necessary to raise productivity and reduce the current waste in food distribution is a radical reform in the government's agricultural price, procurement, and distribution policies. Per capita consumption of cereals grew from 286 kilograms in 1974–75 to 362 kilograms in 1984–85—an annual growth rate of 2.4 percent. This increase can hardly reflect caloric requirements, but indicates rather the extent of

the waste due to subsidies. These policies have unfortunately placed Egypt at the top of the world ranking for per capita cereal consumption, and fourth, after Russia, Japan, and China, in volume of cereal imports.

As for the second group of merchandise imports, building materials rose from 6 percent of total imports, or $276 million, in 1975, to 8 percent in 1980–81 and to 16 percent in 1984–85, when they reached $1,809 million. The acceleration in imports of building materials has accompanied Egypt's housing and infrastructure construction boom that began in 1975. Whereas more than 95 percent of investment in housing has been undertaken by the domestic private sector, a major portion of government investment in infrastructure was financed with American and other OECD assistance. Judging from the acute housing shortage and the decaying infrastructure that were inherited at the start of the decade, it was inevitable that a substantial portion of public investment resources be directed to rebuilding the Suez cities, to rehabilitating the public utilities, and to extending their services to meet the needs of the sprawling housing estates in urban and rural areas.

Results of the preliminary 1986 census (CAPMAS 1987: 69–85) indicate that as much as 25 percent of the entire stock of housing in urban areas was built between 1980 and 1986, which equals an average of 211,000 new housing units per year, more than double the planned target. The rural areas have also benefited from the housing boom, with 53 percent of rural housing built between 1975 and 1986. However, in both urban and rural regions, the census reports an alarming trend: 17 percent of the total stock of completed urban housing units and 14.5 percent of rural housing units—a total of 1.79 million units—were vacant at the end of 1986.

A major reason for this situation is that investment in housing is a hedge against inflation. This has two major implications. Income distribution is obviously the worse when many hundreds of thousands of families are unable to afford a house, while a few families have built homes they can afford but do not need. A second implication is that an overwhelming proportion of Egypt's domestic savings and foreign exchange resources have been channeled to build up nonproductive assets that do not help to alleviate the housing shortage. If we apply a conservative cost of $5,000 per housing unit built, the opportunity cost of these idle assets is $9 billion. At the macroeconomic level, a related problem has been the allocation of a disproportionate amount of investment resources to the nontradable subsectors serving construction and housing activity at the expense of investments in sectors that produce tradable goods that would help Egypt build a strong domestic capability for exporting.

The third group of imports, capital goods, experienced a dramatic growth rate of 11 percent per year throughout the period; this is in line with the steady 29.4 percent ratio of investment to GDP. Its share in commodity imports rose from a low of 13.5 percent in 1974 to reach an average of 28 percent during the 1976 to 1984–85 period. In absolute terms the value of

capital goods rose steadily from $1,090 million in 1975 to reach a peak of $3,781 million in 1980–81 and then declined to $2,900 million in 1983–84 and $3,064 million in 1984–85.[12] Egypt has no capital goods industry to speak of; thus annual imports of these goods are a good proxy for fixed investment other than buildings.

Our concern is with the distribution of investment between private and public sectors, and with the allocation of investment between the productive nonpetroleum sectors of the economy and the petroleum, infrastructure, and service sectors. Aggregate imports of capital goods over the 1975 to 1984–85 period amounted to $25.42 billion. Imports by foreign petroleum companies were equal to $5.53 billion or 22 percent of the total. Imports by private domestic and foreign companies operating under Law 43 (the 1974 investment-encouragement law) are estimated at $3.28 billion, and those of private sector firms operating outside Law 43 at another $4.74 billion over the same period. Total private nonpetroleum sector capital goods imports have thus amounted to $8.02 billion, or 32 percent of total foreign exchange expenditures for capital goods imports, and these imports reflect the increase in private sector investment sought by the government. The size of public sector imports of capital goods can be calculated as the residual $11.87 billion, or 46 percent of total imports of capital goods (World Bank 1986: 91).[13]

As the pillar of Sadat's Open Door Policy, Law 43 provided new private investors with generous tax holidays and other significant investment incentives. By the end of 1986, a total of 1,355 projects had been approved since the enactment of the law in 1974, and over half of these were in operation. While manufacturing projects account for roughly half of the projected investment expenditure of £E 12.7 billion, one-third is being channeled into finance, tourism, housing, and other services. Manufacturing investments have gradually shifted from relatively small import-substituting projects in goods such as plastics, clothing, and food to medium-sized projects in building materials, chemicals, and engineering. The contribution of foreign investment has been minimal to date, and the bulk of finance is from the domestic private sector, public sector funds having been contributed only in the very large projects: cement, yarn, sponge iron, and beet sugar. Although it is too early to pass judgment, the export performance of Law 43 companies so far has been a great disappointment, especially since one of the main objectives of the law was export promotion. By 1984–85, their exports had not exceeded $26 million, in contrast to imports of $609 million the previous year.

The share of manufacturing in total public sector investment over the decade has been about 34 percent, most of it directed toward replacement of worn-out machinery and equipment. After a decade of emphasis on rehabilitation and renewal, the process is not yet completed, and a significant number of public enterprises still await the funds necessary for rehabilitation. In the meantime, as long as this large and potentially dynamic sector is deprived of investment resources, there is little possibility of making the vast but necessary strides to help Egypt's manufacturing sector contribute to the

process of structural transformation whereby value added, savings, employment, and export generation are self-sustaining.

In 1984–85, after ten years of economic liberalization, the contribution of the entire public sector to aggregate value added (GDP) had risen to 45.2 percent, from 38.1 percent in 1975, in spite of the significant decline in the share of aggregate investment allocated to the public sector. Although the petroleum and Suez Canal authorities were responsible for one-third of the increase in aggregate value added generated by the public sector, another 43 percent of this increase was in fact contributed by the large public enterprise sector. Yet profits earned by this vital sector (net of subsidies) had fallen from 31 percent of its net value added in 1975 to a negative figure in 1984–85.[14] The reason for this sad performance has been the government's reluctance to grant these public enterprises sufficient autonomy in decisions on pricing, wages, and employment. The freedom to make these decisions could allow public enterprises to increase dividends to the state and savings for use in self-finance of investment (Handoussa 1980: 1983).

Structural reform and crisis management. To date, no concerted attempt has been made to introduce structural reforms into the economy; only piecemeal measures have been undertaken. Some claim that social equity considerations have limited the maneuverability of the government and forced it to maintain a large program of welfare expenditures. This argument ignores the option of a more selective and decentralized program and liberalization in those sectors now constrained by government controls—public sector manufacturing and private sector agriculture.

The government must redefine its role as provider of basic needs. In 1984–85, explicit budget subsidies stood at 37 percent of total budget revenue, while the government's employment of an additional 100,000 graduates per year had swelled the wage bill to 45 percent of revenue. With defense expenditure at close to one-third of government revenues, the situation obviously could not be sustained indefinitely. The two-headed monster of the 1960s (government employment and military expenditure) had now grown a third head (subsidies) that was consuming government income faster then it could be earned.

Early in 1985, several indicators were pointing to Egypt's impending economic crisis. On the domestic front, GDP growth slowed to 5.2 percent after the impressive 9 percent sustained between 1975 and 1980–81, while a budget deficit of more than 20 percent of GDP persisted for the fourth consecutive year. Foreign exchange earnings from the "big five" were stagnating; the decline in petroleum prices wiped out any gains from increased volume of exports. Although the growth in merchandise imports had slowed to an average of 2.1 percent per year since 1980–81, service payments soared at an annual rate of 15 percent over the same period. The debt service ratio, which had stabilized at a deceptive 24 percent (see Table 9.5), could not conceal the fact that Egypt owed foreign creditors more than one-third of

TABLE 9.5 Annual Disbursements and Repayments of Egypt's Medium- and Long-Term Loans, 1974–85 (millions of US$)

	1974	1975	1976	1977	1978	1979	1980–81	1981–82	1982–83	1983–84[a]	1984–85[a]	Aggregate 1975 to 1983–84
Current account receipts (goods and services)	2,527	2,955	4,146	4,898	6,004	8,152	11,062	10,365	11,493	12,970	13,203	72,045
Capital account receipts												
Grants	1,261	986	705	382	291	72	279	395	400	900	1,050	4,410
Official loans	140	881	673	2,150	1,720	1,066	1,323	1,464	1,172	1,428	1,252	
Suppliers' credits	295	365	501	467	694	823	1,174	1,050	1,120	825	979	
Total	1,696	2,232	1,879	2,999	2,705	1,961	2,776	2,909	2,692	3,153	3,281	23,306
Amortization												
Official loans	161	151	108	128	154	248	382	474	315	566	473	
Suppliers' credits	225	303	413	551	601	570	940	985	1,030	1,000	950	
Total	386	454	521	679	755	818	1,322	1,459	1,345	1,566	1,423	8,919
Interest												
Medium- and long-term debt	51	89	77	292	314	150	607	723	882	958	n.a.	
Short-term debt	113	192	81	75	57	86	943	709	557	641	n.a.	
Total	164	281	158	367	371	236	1,550	1,432	1,439	1,599	n.a.	7,433
Debt service	550	735	679	1,046	1,126	1,054	2,872	2,891	2,784	3,165	n.a.	
Debt service ratio (%)	21.8	24.9	16.4	21.4	18.8	12.9	26.0	27.9	24.2	24.4	n.a.	

NOTE: n.a. = not available.
a. Estimate.
SOURCE: World Bank (1986: Statistical Appendix).

current account receipts. In addition to large annual outflows in profit transfers, amortization, and interest payments, Egypt was in arrears, raising the size of its external debt, disbursed and outstanding, from around $22 billion in June 1983 to $26 billion in June 1985. These figures exclude military debts, which had accumulated to an estimated $10 billion.

In 1984–85, policymakers were unwilling to respond to the sharp decline in the level of net resources available to the economy; planners were caught unprepared at the midpoint of Egypt's second five-year plan, designed for the period from 1982–83 to 1986–87. The plan had forecast Egypt's share in oil exports at $21.4 billion over this five-year period but actual earnings for the first three years were only $8.7 billion—a shortfall of $2.8 billion. Nevertheless, the plan remained unchanged and, like its predecessor (1977 to 1981–82), was overly ambitious in attempting to reconstruct and expand the infrastructure at the cost of postponing investments in the productive sectors of the economy. In these, the first and second five-year plans, only 38 percent and 35 percent, respectively, of investments in the public sector were allocated to agriculture, manufacturing, petroleum, and mining. The bulk of public sector resources was absorbed by transport and communications (29 percent and 27 percent in the respective plans), public utilities (8 percent and 11 percent), and electricity (9 percent and 10 percent). It is important to observe that the availability of foreign, primarily American, project aid was intended for expenditure on these three infrastructure subsectors and not the commodity-producing agriculture and industry sectors.[15]

The serious imbalance in the allocation of investments has had negative repercussions on employment creation. Together, these two plans had forecast the creation of 4 million new jobs between 1977 and 1986–87, 60 percent of which were to be in the commodity sectors. The follow-up reports show a complete failure to generate real jobs in the economy. The total increase in employment was only 3.3 million jobs over the decade, with a decline from 1.8 million in the first planning period to 1.5 in the second. Moreover, the distribution of new jobs across sectors was not in line with plan targets: the government administration sector was responsible for a staggering 46 percent of new employment during the first period and for 29 percent in the second. In contrast, the commodity-producing sectors have generated only a fraction of their targets, with 33 percent of new jobs in the first period and 45 percent in the second. Open unemployment jumped from a rate of 7 percent in 1976 to 15 percent in 1986.

Scope and shortcomings of U.S. aid. The composition of total U.S. economic aid commitments to Egypt until the end of 1986 has remained fairly stable; project aid comprised 42 percent of the $12.1 billion total, while food and commodity aid (and more recently cash transfers) made up the other 58 percent. While food and commodity aid flows have been highly fungible, most project aid has been tied to specific long-term investments in the infrastructure. As a result the percentage of allocated but undisbursed funds

reached a peak of 86 percent at the end of 1982 (Handoussa 1984: 87), and then declined to a more reasonable 33 percent by the end of 1986.

The distribution of U.S. project aid has been even more biased than that of Egypt's five-year plans (see Table 9.6); only 17 percent of commitments were earmarked for directly productive investments in agriculture and industry, with most of the allocations to industry made prior to 1979. The major share of U.S. project funding has been allocated to water and sewerage (20 percent), electricity (18 percent), transport and communications (9 percent), and "decentralization" (16 percent), which consists of infrastructure projects at the local government level. Research-oriented projects have also absorbed a disproportionate share of project aid, at 12 percent ($615 million). These activities have been severely criticized in Egypt for being too large and for focusing on low-priority and low-return activities. Not only has the impact of these studies been negligible, but a sizable portion of the funds was automatically recycled to American consulting firms and research institutions.

It seems fair to say that U.S. project aid has not been effective in helping the economy overcome the structural imbalances that developed as a result of liberalization. While the economy was going through a period of rapid growth in population, real income, and consumption, U.S. aid projects did relatively little to promote employment, production, or exports. Although the U.S. program of economic assistance included significant allocations of project aid to Egypt's private sector industry, the speed with which the funds were disbursed was disappointing. The first loan of $32 million made available to private sector industry in 1976 was not fully disbursed until more than five years later. The main problem seems to have been the tied loans, which forced private businessmen to purchase American machinery and equipment. In contrast, after 1978, the huge requests for loans by the public sector were largely ignored by USAID. Although USAID committed as much as 40 percent (or $504 million) of its project resources to industry (mostly public enterprise) during the first four years of its involvement in Egypt starting in 1975, this share later fell to less than 4 percent.

The United States was not the only donor to undergo a change in attitude toward Egypt's public manufacturing sector. World Bank loans, which had also been generous before the 1980s—when major funds were allocated to iron and steel, fertilizers, and textiles—were subsequently no longer available to the public sector. It is clear that two trends were at work: on the one hand, Western aid donors were trying to pressure Egypt into adopting policies of privatization by refusing to support public sector expansion or rehabilitation. On the other hand, offers of project aid by bilateral institutions were being replaced by loans tied to structural adjustment. Conditionality took hold. Thus by 1986, the Egyptian government was forced to accept a proposed IMF reform package as a precondition for financing part of the country's estimated $40 billion debt, of which approximately $10 billion was for military purchases.

TABLE 9.6 Sectoral Distribution of U.S. Project Aid Commitments to Egypt, 1975–86 (millions of US$)

Project	Aid commitment
Infrastructure sectors (g.e. = 86%)	2,415.0
Electricity	915.8
Two power plants (Shoubra and Ismailia)	513.0
Power plant equipment	132.3
National Energy Control Center	43.5
High Dam turbines rehabilitation	100.0
Urban power distribution equipment	127.0
Water and sewerage	1,030.3
Cairo sewerage system	550.8
Alexandria sewerage	213.3
Cairo water system	97.4
Canal cities water and sewerage	168.8
Telecommunications	
Telephone system	247.0
Transport and storage	222.1
Grain silos and other food storage	160.6
Port development and equipment	61.5
Productive sectors (g.e. = 63%)	863.0
Industry	639.2
Two cement plants (Suez and Katamia)	205.0
Textile plant rehabilitation (Mehalla)	91.0
Public sector loans	142.9
Private sector loans	200.3
Agriculture	156.0
Loans to farmers	84.0
Agriculture mechanization	38.6
Agriculture and poultry development	28.8
Agricultural cooperative development	4.7
Irrigation	68.3
Canal maintenance and irrigation pumps	48.9
Covered drainage	19.4
Decentralization (local government sector) (g.e. = 100%)	796.2
Decentralization of governorate	266.0
Provincial cities development	110.0
Basic village services	251.2
Neighborhood urban services[a]	169.0
Social services sector (g.e. = 100%)	395.8
Health and population control	230.8
Family planning	111.4
Infant and child health	44.0
Urban health services	61.5
Rural health services	13.9

continued on following page

TABLE 9.6 (continued)

Education	165.0
Basic education	105.0
Peace fellowships	60.0
Research and technical assistance sector (g.e. = 100%)	615.0
Energy related	
Natural resource assessment	29.7
Energy policy and renewables	22.3
Industry related	
Industrial management productivity	39.0
Private sector encouraging fund	33.0
Agriculture related	
Cereals and rice research	73.7
Development research and management	70.5
Irrigation related	
Water use and management	13.0
Irrigation management systems	93.0
Universities promotion	
Applied research and technology	48.8
University linkages	20.5
Investment promotion	
Technical and feasibility studies	87.5
Technology transfer and labor plan	50.8
Administrative development	
Various ministries	21.0
Capital market and tax administration	12.8
Total commitments	5,086.4
Total disbursements	3,387.6

NOTE: g.e. = grant element.
a. Includes urban low-income housing and community upgrading.
SOURCE: Ministry of Planning and International Cooperation, U.S. Economic Cooperation Division, *Status Report on Use of U.S. Loans and Grants to Egypt for the Period 1975 to End 1986*, Cairo, 1987. Entries collated and classified by author.

Indeed, one of the key features of American aid to Egypt over the past decade has been the conspicuously large component of military sales in the total aid package. In the late 1970s the value of arms purchases was set at $1 billion to match the annual level of U.S. economic aid to Egypt. The cost of these arms supplies to Egypt appears staggering in comparison to any previous arms transactions. For one thing, the terms of the transactions were at the "concessionary" rate of interest of 14 percent. Moreover, it was agreed that the principal would only start to be amortized after thirty years, thereby raising the aggregate interest payment cost of these deliveries to $10 billion during the grace period. Finally, one might ask why it was necessary to service a military debt of $4.5 billion at an annual interest cost of $650 million at a time when peace was the order of the day. If it is in the interest of the

United States for Egypt to assume a role as regional watchdog, why were arms provided at such paralyzing commercial rates until 1984? The burden U.S. military aid has placed on Egypt has drastically diminished the concessionary element of total U.S. aid.

Another major problem in Egypt's relations with aid donors has been the protectionist policies of Egypt's major trading partners in the West. When Egypt adopted its liberalization program in 1974, it was immediately pressured by the IMF to terminate its bilateral trading links with Eastern Europe and other less-developed countries. By 1980, Egypt had relinquished its trade agreements with some thirty countries, to the detriment of vast numbers of firms of all sizes that depended on these markets for the export of products from the textile, leather, furniture, and other manufacturing sectors. The sudden shift to a system of free trade initially caused difficulties because of deficiencies in the marketing skills of these firms and their limited acquaintance with the system governing OECD trade. Soon, however, Egypt's exports to the West were to meet with protectionist barriers, especially for textiles, which account for more than half of Egypt's manufactured exports.

In the early 1980s many enterprises, especially larger private and public sector firms, were starting to suffer from the imposition of quotas in the U.S. and European Economic Community markets. A striking example was in 1986–87 when, after difficult and prolonged negotiations with the United States, Egypt's textile industry was only allowed to increase its annual quota to the United States by 6.5 percent for cotton yarn, cotton fabrics, and T-shirts, to reach a rough estimate of $70 million for 1987. No allowance seems to have been made for the fact that Egypt's staple raw material is cotton, that Egypt's textile exports to the United States started from a negligible base, that the United States' total imports of textiles are about $21 billion, or that Egypt's imports from the United States had soared from $610 million in 1976 to $2,323 million in 1985.

A major stumbling block in Egypt's long-term relationship with the United States is the absence of a formula linking aid flows to trade flows. Some such arrangement would guarantee the recipient's growth simultaneously with debt repayment. A related issue is the import content of American project aid: both partners in the aid transaction should seek to promote the use of more local materials and skills in order to create domestic multiplier effects and stretch aid funds.

Conclusion

Overall, Egypt's massive flows of foreign aid have been a mixed blessing. During the two intervals when net capital inflows were positive, 1959–66 and 1975–85, concessionary finance enabled the government to embark on large-scale investments that served the country's long-term development. However, given the highly political nature of the aid relationship, Egypt has

been obliged to play a leading role in the regional military balance, which drains a good part of the state's resources on defense. Moreover, the tied nature of aid has made projects costly because of the packaging of capital goods, technology, and technical assistance from a single donor. As a consequence, after 1985 the servicing of debt, the bulk of which is aid-related, has reversed the balance of capital flows negatively, and Egypt is dangerously close to its pre-1975 economic crisis.

On the domestic front, inappropriate macroeconomic policies and a wasteful program of subsidies and guaranteed employment have also contributed to the chronic deficits in the budget and balance of payments. Regardless of whether blame should be shouldered more heavily by external or internal policies, the net result is that Egypt is entering the decade of the 1990s with a massive public foreign debt that under present conditions cannot be serviced under the most optimistic of scenarios. Donors, led by the United States are pressing for a serious program of economic reform that will address all fiscal, monetary, trade, and exchange rate policies. Critical issues are the reduction of implicit and explicit subsidies, raising the rate of interest, and unification of the exchange rate.

No matter how successful the structural adjustment program is in reducing the country's budget and balance of payments deficits and in boosting aggregate savings, in the final analysis these reforms can be expected to reduce growth and employment to unacceptably low levels unless old debts are forgiven or new transfers of foreign capital become available at reasonable terms. If aid is to be an effective resource to help the economy regain its structural balance, the use of scarce aid money should be channeled into the productive sectors of the economy with a focus on boosting employment, output, and exports. Commodity aid and especially food aid should be selectively targeted to alleviate the impact of adjustment on the most vulnerable segments of the population. This reorientation, along with a more balanced and less protectionist trade relationship in Egypt's favor, will go a long way toward setting the Egyptian economy on the road to recovery.

CHAPTER 10

FRANCISCO GIL DÍAZ

Mexico's Experience with Foreign Aid

Throughout the 1980s Mexico's economy faltered under a massive foreign debt that all but eliminated the potential for economic growth. The country's enormous public sector and its distortive policies, such as protectionism, price subsidies, and heavy reliance on parastatal firms, have required ever greater amounts of foreign capital without making a real return in terms of growth. As a result, in recent years there has been a net outflow of resources from Mexico and gross domestic product (GDP) has actually declined.

Until the 1980s, Mexico's economic situation had been quite favorable. Before 1955, the country achieved a high rate of economic growth and made remarkable advances in social and health indicators without either foreign aid or foreign indebtedness. Between 1955 and 1971 foreign debt was moderate and manageable. In the 1970s, however, debt levels began to rise rapidly, becoming dangerously high by 1982. When foreign voluntary lending was interrupted in that year, the country entered a protracted economic crisis, characterized by net negative foreign borrowing and large reductions in the government's budget. Mexico responded by making several major structural adjustments, such as the opening of the economy to foreign trade. While these changes have corrected past distortions, they had not succeeded in overcoming the current crisis by 1987, when research for this chapter was completed.

My appreciation to Rafael Ortega, Oscar Sanchez, and Alejandro Valenzuela for their research assistance. The views expressed here are the sole responsibility of the author.

Economic indicators for the 1980s show the impact of the debt crisis. Between 1981 and 1987 GDP growth averaged -0.2 percent annually, while the population grew at an annual rate of 2.3 percent. The real minimum wage and real total investment each declined by some 40 percent during the 1980s.

Compared to foreign borrowing, concessional aid flows have formed a relatively small percentage of foreign resources to Mexico, amounting to 0.2 percent of GDP between 1960 and 1985. Although aid has made some contributions to technological developments in agriculture, methods of project evaluation, and recent progress in social expenditures, it has not perceptibly influenced either economic growth or the sectoral distribution of public investment.

Mexico's recent development experience shows the limited value of foreign assistance when market and monetary policies are not directed toward stability, efficiency, and growth. With efficient management, aid could have had a much greater impact on social and economic development. The question for Mexico is whether the country can, through policy and budgetary reforms and with the help of foreign lenders, overcome the effects of more than a decade of debilitating debt.

The first sections of this chapter concentrate on the internal and external macroeconomic environment that led the country to its extreme dependence on capital inflows and describe the stages of its increasing foreign assistance. The second part of the chapter provides an overview of the relationship between foreign aid and the chief macroeconomic variables such as GDP, investment, government expenditure, and the trade balance. Next there is a general examination of the pattern of aid given to Mexico and of its impact on various sectors of the economy since World War II. The chapter's final section suggests conclusions from the discussion and poses questions for future studies.

One caution bears mentioning. As no published data exist on megaprojects, it is extremely difficult to assess the contribution (negative or positive) of foreign aid on Mexico's development. A few studies do, however, evaluate the returns on some of the early successful agricultural undertakings. For these reasons, my conclusions on the effects of foreign aid on Mexico's social and economic progress are based partly on isolated case evidence and very aggregate data.

Finally, before beginning, it would be wise to define foreign aid. Foreign assistance or aid will be defined as the official development aid through which a given nation receives or obtains a transfer of resources—on concessional terms or not—from one donor nation (bilateral) or group of nations (multilateral). This definition excludes some concessional flows, namely those from private voluntary agencies. Multilateral organizations are institutions such as the International Bank for Reconstruction and Development (IBRD), the Inter-American Development Bank (IDB), the International Finance Corporation, the United Nations agencies (UNDP, UNITAR, UNIDO,

UNICEF), and the Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC).

The Contribution of External Funds to Mexico's Growth, Development, and Crisis

Broad trends of debt and the economy. This section reviews recent Mexican economic history to illuminate the circumstances that carried the country into its recent excessive dependence on foreign debt.

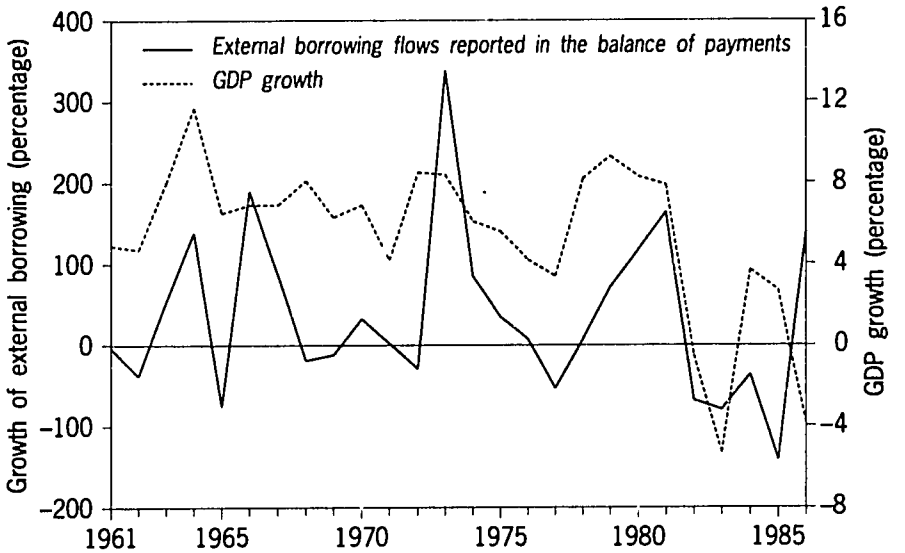
As demonstrated by social and health indicators, Mexico has advanced considerably in recent years. Between 1960 and 1980, home ownership increased from 54 to 68 percent of the population; dwellings with sewer-line connections rose from 29 to 51 percent; and in just ten years from 1970 to 1980, homes with electricity jumped from 59 to 75 percent. Health improved considerably, from 25 deaths per thousand in the 1920s to 6 per thousand in 1965. Finally, reading and writing abilities have advanced from an illiteracy rate of 44 percent of the population in 1950 to only 17 percent in 1980, with the rate continuing to fall (see appendix Table A10.1).

In the 1960s, sound economic policy coupled with a stable, if not advantageous, external situation allowed the Mexican economy to achieve favorable macroeconomic results with a minimal, conscientious use of foreign finance. Internal financial savings were fostered by both positive and competitive real returns (see Table A10.2) and a fixed nominal exchange rate that made domestic inflation equal on average to world inflation. The exchange rate was manageable because the finances of the public sector were under control. Although budget deficits were somewhat higher on average (3 percent of GDP for the 1960s) than in the preceding decades (1.3 percent for the 1940s and 0.7 percent for the 1950s), the increase resulted in stable economic growth. Growing internal financial intermediation, together with the use of foreign debt in the late 1950s, provided the necessary resources to finance both this higher budget deficit and a high rate of private investment, which consequently ensured high levels of GDP growth (see Figure 10.1).

The tranquil monetary situation, however, hid ominous economic trends. No comprehensive study of the sources of Mexico's economic growth exists for any period, but one can safely assert that even in the macroeconomically well-behaved 1950s and 1960s, the Mexican economy was subjected to distortive policies whose consequences would later haunt policymakers.

Growth was to some degree an accounting illusion, since it resulted partly from increasing absolute rates of protection to manufacturing. From 1941 to 1955, the annual growth rate of the primary nonminerals sector (PNMS) was 5.7 percent, almost the same as that of GDP, 5.9 percent, and only slightly below the rate of growth of manufacturing, 6.9 percent. As

FIGURE 10.1 Growth of External Borrowing Flows and GDP in Mexico, 1961–86



SOURCE: Banco de México.

protectionism began to favor manufacturing over the PNMS, these growth rates became 6.9 percent and 3.0 percent respectively in the 1956–87 period, during which time GDP grew at a rate of 5.5 percent (see Table A10.3).

Trade protection was granted mostly through quantitative restrictions (mainly prohibitions) to import. These quantitative restrictions increased in the second half of the 1950s and continued unabated until 1982. From 1963 to 1984, imports subject to restrictions never fell below 60 percent of all imports (see Table A10.4).

Trade policy throughout this period can be described as a combination of a high level of protection on consumer goods and low tariffs on inputs and capital goods. The result, known to economists as a high effective protection rate, produced growth primarily in protected areas. As this biased pattern of industrialization proceeded, so did the demand for parts and inputs to supply this nascent but crippled industry. With the increasing demand for parts and inputs, the need grew for additional protected industries. Soon, in exchange for their investment and production in these newly created markets, potential "entrepreneurs" had only to ask and the border would be closed. In turn, their higher prices led to greater inefficiencies in the original protected industries that used these inputs. And so on down the line.

Ironically, this downward spiraling pattern of protectionism prevented the desired result of the "infant industry" principle of protection. Under the infant industry argument, temporary protection is granted to enable a firm to reach a scale sufficient to compete in world markets. If, however, as this

process goes on, the derived demands created by the initial protection licenses are also protected, the first temporary grant must be extended. The resulting web complicates the reopening of the economy, especially in sectors where this infernal logic is extensively applied (as in the automobile sector). In addition, reopening the economy becomes politically difficult in the short run, since the creeping weakening of exports through protection causes the private sector to believe it will lose from an open economy.

Growth appears in the short run to be boosted through these policies, but only at the expense of the country's ability to import through exports. Eventually, foreign credit becomes necessary to provide for the import needs of a growing economy; ultimately, however, there will be no hard currency earnings either to pay for such imports or to service the debt. Foreign financing, even on the limited scale granted from 1955 through the end of the 1960s, provided the hard currency that was made indispensable by the increasingly weakened export sector.

Yet despite protectionism and its negative effects on agricultural output, the generally efficient development of infrastructure in agriculture, together with improved inputs (see section on the Mexican development process and the patterns of aid) allowed agriculture to grow. This growth, however, occurred at a historically low rate and fell below the overall growth of the economy. As a consequence, the demand for labor grew at a low rate in a country with one of the most successful records of "people production." (See Tables A10.3 and A10.5 on the sectoral distribution and growth of output.)

The cumulative effects of many years of distortive microeconomic policies might have presented balance of payments difficulties at the start of the 1970s and would probably have required policymakers to rethink their industrialization strategy. But the external environment turned extremely favorable to Mexico, thus eliminating the urgency of internal structural change. External credit became abundant and Mexico's terms of trade improved considerably. Distortive policies such as excessive protectionism were continued, however, and despite sharply improved public income, the budget deficit was increasing, leading the country into a balance of payments crisis in 1976 and into an adjustment in 1977. Nonetheless, oil exports and high oil revenues entered the picture in 1978, allowing the economy to continue along the same path until it again faced crisis in 1982.

From 1972 to 1982, the use of foreign resources by the public and private sectors increased sharply, because of the rise in nominal interest rates, which rose from an average of 4.6 percent in the late 1960s to 8.1 percent in 1980–86, and especially to public sector spending (see Solís and Zedillo 1985). The high budget deficits financed externally led the ratio of external public debt to GDP to rise at a steady pace from 1973, reaching 25.5 percent in 1977, as shown by Table 10.1.[1]

During 1973, in a complete breach with the past, external public debt increased by 29 percent in dollar terms—an increment of more than $1 billion. From that point forward, the economy relied on high transfusions of

TABLE 10.1 Mexico's External Public Debt, 1940–86

Year	Debt (millions of US$)	Debt/GDP (%)	Year	Debt (millions of US$)	Debt/GDP (%)
1940	75.9	4.5	1976	16,559.8	18.8
1945	93.9	2.2	1977	20,791.4	25.5
1950	114.3	2.3	1978	24,123.4	23.5
1955	181.1	2.5	1979	27,693.9	20.6
1960	619.9	4.9	1980	31,253.4	16.8
1965	1,590.8	7.4	1981	41,321.1	17.3
1970	3,448.3	9.7	1982	56,459.0	32.7
1971	3,875.4	9.9	1983	59,981.5	42.0
1972	4,340.4	9.6	1984	66,242.1	38.6
1973	5,602.7	10.1	1985	70,088.8	39.5
1974	8,057.9	11.2	1986	72,904.7	56.8
1975	11,747.2	13.3			

SOURCE: Gil Díaz (1988).

external funds, which bolstered demand, helped finance public projects, and artificially sustained growth.

The trend continued during 1974. External public debt increased 43.8 percent in dollar value. This huge injection of capital fed the expansion of demand, which in turn increased the ratio of the deficit in the current account by 1.7 percent of GDP from the previous year (a significant rise if one recalls that for the 1960s the average level was 2 percent). By 1975, the only way to maintain exchange rate stability was to borrow heavily for the third sucessive time. During the last quarter of 1975, large amounts of foreign public debt were contracted in order to prevent draining the international reserves of the central bank. The capital account surplus reached 6.2 percent of GDP, its highest peak in thirty years. Private firms obtained increasing amounts of foreign finance in order to compensate for the absorption of domestic credit by the public sector.

In the first three quarters of 1976, despite the continued inflow of external public debt and an improved current account, which reflected a slight reduction in the real government deficit, international reserves fell. The drainage of reserves had become excessive by August; talks with the International Monetary Fund (IMF) were under way and the government decided to let the peso float. Not surprisingly, the balance of payments showed the strains of massive capital flight during this period (2.7 percent of GDP in errors and omissions). The story repeated itself during the next presidential period, 1976–82. The only differences were higher levels of balance of payments disequilibria, foreign indebtedness, and inflation as the years advanced.

Under other external circumstances, the levels reached by public deficits during these two presidential periods would have been unmanageable. Moreover, a lower coefficient of financial intermediation, as was the case

from 1974 to 1981, would have exacerbated the problem. But the virtually unlimited availability of foreign credit, the improvement of the terms of trade, and the large quantities of oil income from 1978 onward made these budgets affordable.

The structural rigidities of the economy grew worse as the public sector continued its expansion during this sexenio.[2] The huge, capital-intensive, state-owned enterprises initiated by the previous governments, mostly in fertilizers and steel, continued to grow, and new public enterprises were initiated in petrochemicals. Mammoth investments were also channeled into the development of new seaports.

It is difficult to ascertain a posteriori if the waste these projects entailed resulted from the uncanny ability of the government to select areas in which international prices were going to decline, such as silver, steel, tuna fishing, and petrochemicals, or if it simply resulted from inadequate evaluation of alternatives when deciding to invest. The government invested in seaports, for example, when more efficient handling of cargo would have done wonders for transportation costs while requiring minimal public expenditure. Bad management and a poor selection of product lines, as was the case in steel, could also have been factors. Perhaps it was a combination of all of the above, plus other effects of spending so much in such a short period.

High growth, oil revenues, and some gains in taxation financed a good portion of these public sector expenditures, which rose from 22 percent of GDP in 1970 to 32 percent in 1976 and to 40 percent in 1981. Public sector revenues went from 23.8 percent of GDP in 1976 to 33.3 in 1981 (see Table A10.6). The shortfall covered by the foreign sector in 1981 was still substantial, but smaller than in 1976.

Although public debt (internal and external) had reached 40 percent of GDP at the end of the Echeverría administration (1970–76), the López Portillo administration, which followed, actually lowered it to 32.6 percent of GDP. In fact, though one may be critical of the wasteful expenditures incurred, increased revenues from the favorable oil shock kept the public sector borrowing requirement (PSBR) at a manageable level during the López Portillo administration until 1980, when oil revenues were 18.5 times their 1976 level. The dollar value of imports, however, had increased even more, and although the current account deficit reflected the public sector savings gap, this shortfall of resources had been easily financed.

By 1981, snowballing expenditures on new and existing projects resulted in a huge deficit, despite an increase in oil revenues of $4 billion. Consequently, the government embarked on additional foreign borrowing, raising the foreign debt in one year from $41.2 billion to $59.5 billion (December figures).

From the first quarter of 1980 to the first quarter of 1983, Mexico's public foreign debt doubled and its private foreign debt almost tripled in nominal terms (see Table 10.2). In that same period, Mexico's total foreign debt in real 1978 dollars increased 85 percent net of the international reserves of the

TABLE 10.2 Mexico's Total Foreign Debt Position, 1980–87 (billions of U.S. dollars)

Year	Public debt (1)	Private debt (2)	Gross reserves of the central bank (3)	Net foreign debt (1)+(2)–(3)	Net foreign debt at constant 1978 dollar price
1980	35.4	8.0	3.2	40.2	33.2
1981	44.7	11.6	4.3	52.0	38.7
1982	68.5	17.1	3.3	82.3	56.8
1983	72.8	22.5	3.1	92.2	61.4
1984	76.0	19.9	5.8	90.1	57.4
1985	76.9	18.5	7.7	87.7	54.0
1986	78.8	17.2	6.0	90.0	53.7
1987	82.1	15.9	9.0	89.0	52.0

NOTE: Figures reflect first quarter of each year.
SOURCE: Banco de México, balance of payments statistics.

central bank. By either measurement, Mexico's foreign debt increased dramatically in just three years from existing high levels.

Following the debt crisis of 1982, in the five-year period (including a projected 1987) from 1983 to 1987, the net use of foreign resources was negative. In 1983, the first year of a tough adjustment program, availability of foreign resources was $1.1 billion; the second year, –$3.4 billion; the third, $2.8 billion; and the fourth, barely $0.1 billion. In 1986 Mexico's oil revenues fell short by $8.5 billion.

Despite the shortfall, and with only $2.5 billion of new net public foreign debt, the country managed to repay $1.4 billion of private debt and to increase its international reserves by $1 billion. Finally, in 1987, the increase in foreign credit to the public sector, $3.5 billion, was more than offset by additional private debt amortizations of $1.4 billion and increases in reserves of $6.7 billion.

The impact of debt on growth. A more fundamental way to analyze the economic implications of the foreign debt burden is to relate debt to economic growth. The net transfer of resources a country makes abroad has a domestic counterpart in depressed real wages, consumption levels, investment, and growth. At the same time that Mexico has borne the negative effects of a large cumulative transfer of resources abroad over the past five years, its economic performance has been seriously impaired by a drastic fall in its terms of trade. As Tables 10.3 and 10.4 indicate, the country's terms of trade fell 56 percent from 1980 to 1986, while the cumulative primary current account surplus (net transfer of resources) was a whopping $60 billion from 1982 to 1987.

This transfer of resources abroad has averaged nearly 6 percent of GDP measured in dollars annually—an immense proportion for a country with a low per capita GDP and a labor force growing at an estimated 800,000 to

TABLE 10.3 Mexico's Terms of Trade (adjusted for interest rate movements), 1960–86

Year	Terms of trade
1960–69	86.5
1970–79	110.2
1980	123.5
1981	127.4
1982	94.5
1983	77.4
1984	66.5
1985	71.5
1986	54.6

SOURCE: Banco de México, *Informe Anual 1986*, p. 108.

TABLE 10.4 Mexico's Primary Noninterest Current Account Surplus, 1982–87 (billions of U.S. dollars)

	1982	1983	1984	1985	1986	1987[a]
Noninterest current account income	26.7	27.7	30.8	28.9	22.8	29.1
Noninterest current account expenditures	22.0	13.4	16.7	19.4	17.2	18.4
Noninterest current account surplus	4.7	14.3	14.1	9.5	5.6	10.7

a. Based on preliminary data up to the third quarter.
SOURCE: Banco de México, *Indicadores Económicos*.

1 million workers per year. Ironically, the rapid increase in the working population was coupled with a fall in output of 2 percent from 1981 to 1987.[3] That is, despite rapid population growth (2.3 percent per year) and even faster growth of the work force (between 2.6 and 3 percent per year), the country averaged a dismal 0.2 percent yearly rate of negative growth from 1981 to 1987. Moreover, the external shocks caused the average annual real minimum wage to fall from an index of 92.8 in 1981 to 54.2 in 1987, a drop of 42 percent.

The debt burden can also be examined through the relation between interest payments abroad and Mexico's GDP measured in dollars: the average of 6.3 percent of GDP for the post-debt crisis period (1982–87) is extremely high. There has been no net foreign credit available to Mexico to even partially finance this outflow.

Finally, both private and public investment have suffered from the decrease in available funds. The public sector has had to rely on internal funds (M5) of which it used an estimated 66 percent in 1986, compared with 45 percent in 1981 (see Table 10.5).[4] Such an absorption of financial resources by the public sector has crowded out private spending, since the private sector has also been a net amortizer of foreign debt since 1983.

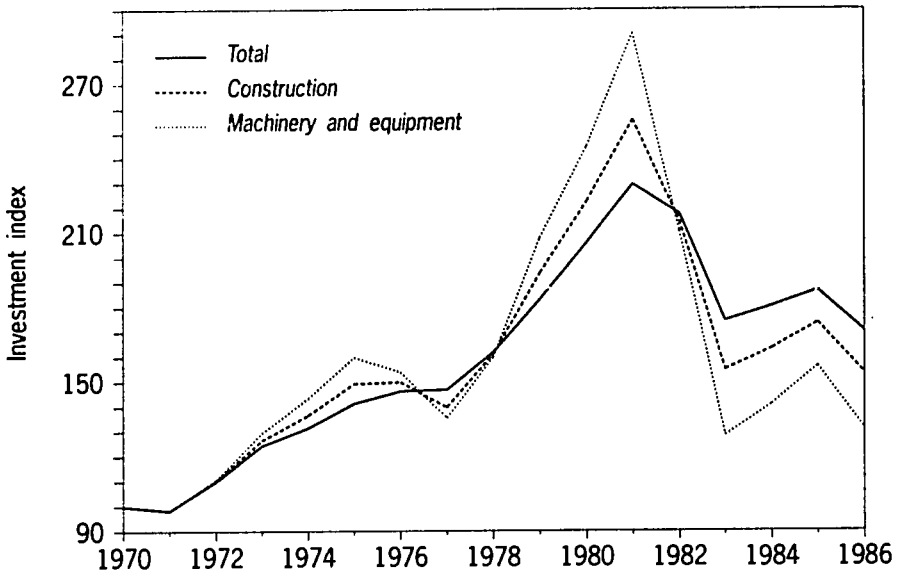
Interestingly, while real total investment fell by 40 percent from 1981 to 1986 (Figure 10.2), real construction investment diminished by only 25 percent. This was partly due to a change in relative prices, for the components of

TABLE 10.5 Relative Size of Mexico's Public Internal Debt, 1981–86 (percentage of GDP)

	1981	1982	1983	1984	1985	1986
Total internal debt	15.3	19.1	18.6	17.7	17.6	19.8
Total in pesos	12.9	14.5	16.0	16.5	16.7	18.4
Total in U.S. dollars	2.4	4.7	2.6	1.2	0.8	1.3
Financial assets of the public (M5)	28.5	29.4	27.2	27.7	27.6	28.0
Ratio of peso internal debt to M5	45.0	49.0	58.8	59.6	60.5	66.0

SOURCE: Banco de México, *Indicadores Económicos.*

FIGURE 10.2 Mexico's Fixed Real Capital Investment Index, 1970–86 (1970 = 100)

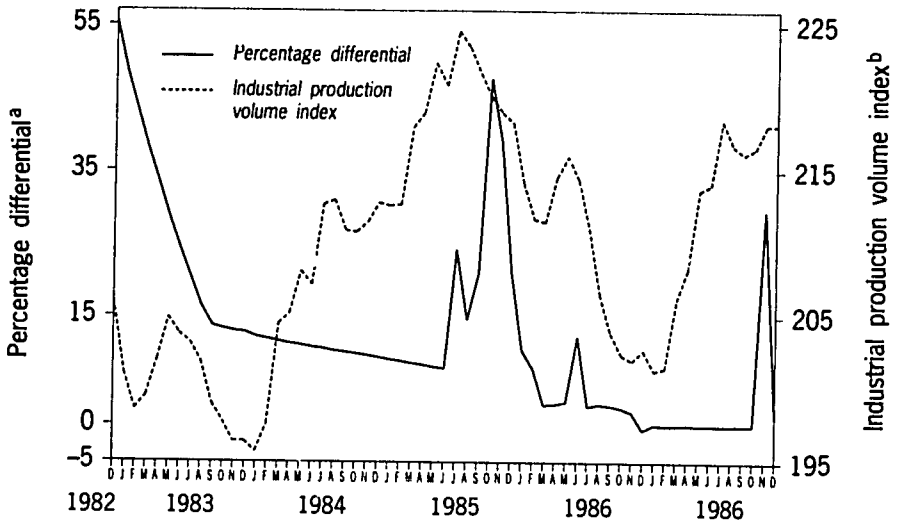


SOURCE: Budget and Programming Secretariat, *Sistema de Cuentas Nacionales de México.*

construction investment are mostly homebred, while those of machinery and equipment are largely imported. The 55 percent fall in machinery and equipment investment thus reflects a response to the higher relative price of imported goods. (The real exchange rate was estimated to be 84 percent higher in 1987 than in 1981.) The comparative strength of the construction industry has helped to retain labor in that highly labor-intensive industry, especially since housing construction, a particularly labor-intensive sector of construction, has risen markedly.

The data were obtained from the national accounts and therefore reflect the real fall in the main deflator of investment, wages. The fall in real wages has allowed public investment to have a greater impact, shifting from its earlier emphasis on heavy industrial investment to infrastructure and social

FIGURE 10.3 Mexico's Industrial Production and Exchange Rate Differential, 1982–87



a. Differential between free and controlled exchange rates.
b. 1970 = 100
SOURCE: Banco de México, *Indicadores Económicos*.

investments such as housing. Despite these cheering words, however, total investment, both public and private, has been seriously depressed by the acute shortage of funds.

It is fruitful to ask why the efforts toward growth to date have only been partially successful. It has already been pointed out that Mexico underwent falling, and in 1986 plunging, terms of trade. Even before 1986, however, and since then, it has become evident that as soon as any marginal economic growth takes place, the financial and currency markets start creaking and the country is led into a renewed balance of payments weakness with the exchange rate becoming volatile (see Figure 10.3).

Some simple arithmetic explains this behavior. If financial intermediation represents 28 percent of GDP, and if no net foreign credit is available, annual growth of 10 percent in output will enable the economy to finance a deficit of only 3 percent of GDP without pressing the price level and/or the foreign exchange market. A still healthy rate of growth, by recent standards of 5 percent per year, will only provide financing for a deficit of 1.5 percentage points of GDP. With such an anemic coefficient of financial intermediation, growth itself does not provide for the credit needs of the economy as long as a government deficit exists, however small. (See Gil Díaz and Ramos-Tercero 1987 for an examination of this issue.) Obviously, a debt burden that under zero inflation would represent approximately 50 percent of the revenues of the federal government presents quite an obstacle for further deficit

reductions. Remember that noninterest public expenditures have already been cut 7.3 percent of GDP over the past five years.

Given the numbers, it seems that growth and stability hinge either on an agreement for debt relief or on an automatic provision of fresh money to finance part of the interest burden. Programs providing one-time amounts of foreign resources are welcome if their intent is to enlarge the international reserves of the central bank, but they certainly do not provide even a temporary solution for growth-cum-stability. If the money provided by these programs so much in vogue recently in Latin America is spent, it will induce a balance of payments gap (or a smaller surplus) equal to the transfer during the period it is spent. When the "party" is over, the country will have to adjust to the shock of having lost its one-time transfer of resources. Typically, the next step is to set up a new "package" that, after arduous negotiations, allows another economic spurt. Such stop-and-go arrangements are not conducive to growth; rather they lead economies into stagnation with greater debt.

Recent structural changes in the economy. The magnitude of Mexico's adjustment can be measured in several ways. Some of the changes have been structural, such as the opening of the economy to foreign trade, the substantial correction in the prices of public sector goods and services, and the sale and liquidation of parastatal firms.

As Mexico entered its recent crisis, it had one of the tightest trade policies in the Western world. It was not a member of GATT and, more important, there were quantitative controls on all of its imports. Prohibitions were the futile instrument used to contain balance of payments deficits, as well as to protect prematurely senile adolescent industries. Imports of consumer goods were virtually prohibited, and there were flat prohibitions on imports of many inputs and capital goods as well.

By the end of 1987, however, the value of imports subject to quantitative controls was lowered to 20 percent of the previous total. Exporters now enjoy the privilege of importing almost anything free of tariffs if they plan to import goods temporarily and to reexport them after some degree of transformation. Moreover, tariffs have been drastically reduced, with the maximum tariff applicable lowered to 20 percent. The opening of the economy has also assisted in the healthy restructuring of a number of industries and an unprecedented increase in nonoil, especially manufacturing, exports.

By 1982, the prices of public sector goods and services, mostly energy related, had decreased to tiny fractions of their international levels. The loss in public revenues was worsened by huge public investments required to satisfy the increased demand for the subsidized public goods and services. Since then, these prices have been gradually brought into line, some—like diesel prices—increasing severalfold in real and dollar terms.

The number of parastatal firms stood at 1,155 at the beginning of 1983. Through liquidations, sales, and mergers, the number was reduced to 746 in 1987. The public sector has also completely exited from such sectors as

pharmaceuticals, secondary petrochemistry, and the automotive industry. Noninterest public sector expenditures have fallen 7.3 percent of GDP from 1981 to 1986, while public sector income, despite the ravages of inflation on tax revenues (known as the Olivera-Tanzi effect), has risen 3.2 percent of GDP.

Since the public sector's nominal deficit is largely endogenous when there is inflation, its numbers will not be analyzed. However, the primary (noninterest) deficit fell from a peak of 8.4 percent of GDP in 1981 to become a 3.6 percent surplus in 1985 and then a 2.9 percent surplus in oil-shock year 1986. A surplus of 5 percent was expected for 1987. From 1981 to 1987, there was a correction of 13.4 percent of GDP, despite steadily declining terms of trade (although part of the fall in the terms of trade experienced in 1986 was recovered in 1987). A budget correction of such magnitude in so short a period is difficult to find elsewhere in the world.

Investment and Growth

The role of foreign concessionary credits has a close relationship to the level of investment, as well as to its efficiency and its structure. Before going into other microeconomic aspects of the investment and aid processes (we ventured briefly into them when discussing trade policy), it will be worthwhile to present and discuss the aggregate investment data for the Mexican economy.

Table 10.6 shows figures for the gross fixed investment/GDP (GFI/GDP) ratio together with rates of yearly per capita growth. From 1956 to 1966, the investment-output ratio averaged 16.5 percent. The story changes in 1967 when the ratio starts to rise. From 1973 to 1982, with the exception of adjustment year 1977, investment ratios reached very high levels, reaching an unprecedented 24.9 percent in 1981.

Although higher investment ratios do not raise the permanent growth rate of an economy, one would expect a significant, if transitory, rise in total and per capita output to result from such a dramatic increase in capital accumulation. Per capita growth, however, actually fell from 3.4 percent for the 1956–66 period to 3.2 percent for the 1967–82 period, and annual output growth fell from 6.7 to 6.3 percent on average.

One could argue that the lower growth with higher investment in the 1967–82 period was temporary. Eventually, this buildup of plant, equipment, and infrastructure, all of which matured slowly, would yield greater output. Although this contains some truth, the bleak economic situation faced by the country in the 1982–85 period was not the result one would expect from an efficient increase in the capital stock.

Part of the explanation can be found in the behavior of public pricing. If the public sector acts as a supplier of goods and services to the economy, it will continually build up the quantities demanded of these goods and

TABLE 10.6 Investment and Growth in Mexico, 1956–86 (percentage)

Year	Gross fixed investment as % of GDP[a]	Per capita GDP growth	Year	Gross fixed investment as % of GDP[a]	Per capita GDP growth
1956	17.1	3.6	1972	19.5	5.0
1957	17.1	4.3	1973	20.6	4.9
1958	15.5	2.0	1974	21.0	2.8
1959	15.3	-0.2	1975	21.7	2.4
1960	16.2	4.7	1976	20.9	1.2
1961	15.6	1.6	1977	18.9	0.5
1962	15.8	1.4	1978	20.0	5.2
1963	16.3	4.6	1979	22.1	6.1
1964	17.5	8.2	1980	23.4	6.1
1965	17.4	3.1	1981	24.9	5.4
1966	17.9	3.5	1982	21.1	-2.8
1967	19.1	2.9	1983	16.0	-7.4
1968	19.4	4.7	1984	16.3	1.4
1969	19.8	2.9	1985	16.9	0.5
1970	20.0	3.5	1986	15.5	-5.7
1971	18.8	0.8			

a. At constant prices.
SOURCE: Banco de México, *Indicadores Económicos.*

services through prolonged subsidized prices. The greater quantities demanded will require additional expenditures; thus, savings are reduced and investment needs, artificial as they might be, are raised. (See Table A10.7 for a breakdown of public and private investments.)

Thus, public firms that supplied subsidized inputs experienced secular deterioration of their income levels. This deterioration required increasing transfers, which were financed through foreign credit. The transfers were needed to accommodate both the gap between current expenditures and falling real income and the increasing capital needs of these mostly capital-intensive energy firms.

Such examples include the gradual decline of the relative prices of electricity, railways, and oil products. The relative price of nonfuel oil products started a secular fall in 1959, fuel prices in 1960, and prices of electricity for domestic use in 1963 (Gil Díaz 1986).

In broad terms, one can look at the pricing policy followed from 1977 to 1982 for eleven energy products supplied by the public sector (Gil Díaz 1986). The amount of foreign borrowing the country incurred in order to meet the additional consumption of subsidized energy, including forgone income, was approximately $101 billion when carried forward to 1984. This amount exceeded Mexico's total foreign debt in that year.

Another reason for the apparently higher investment ratio from 1974 to 1981 is that many additions to the public capital stock were wasted resources that did not contribute to growth and that might more appropriately be classified as unenjoyed current expenditures. Several unfinished seaports,

another one finished but unusable, a perennially fog-shrouded airport, and an extremely expensive nuclear plant are only a few of the many examples of the waste resulting from spending too much, too fast in the 1972–82 period.

It is wrong, then, to conclude that the capital-output ratio of the economy is substantially higher due to a lower marginal productivity of capital. Instead, the arguments presented above suggest that wrong pricing decisions and large ineffective public industrial investments are to be faulted for this outcome. While Mexico is primarily responsible for the negative results of these giant industrial investments, international lending agencies also played a role. Rather than evaluating projects, the lending agencies instead often justified them, thus encouraging these investments.

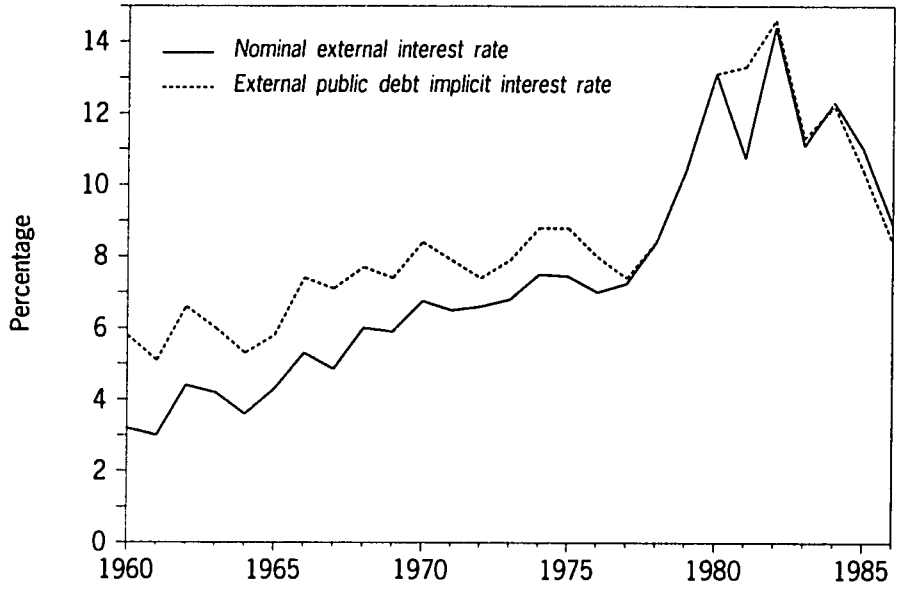
The Role of Official Aid in Mexico's Development

This section examines the contributions of aid to Mexico's economic development from 1950 to the present. In the past forty years, Mexico has managed to achieve an acceptable rhythm of economic growth. This process transformed the nation from a near feudal state at the beginning of this century into a modern, diversified economy and society. The radical change from a strictly agrarian-rural economy to an industrial-urban one did not come about without deep structural changes. In some ways, this transition was facilitated by the assistance of bilateral and multilateral organizations.

Evaluating aid is not a simple matter, since there is not—to my knowledge—a clear-cut method of assessing its impact on the development process. The main obstacle to quantifying the impact of assistance is a lack of detailed information or research on the contribution of aid to sectoral development in Mexico. Other difficulties include defining aid precisely, measuring the hidden benefits of intangible social changes or the costs of political inconsistencies, and overcoming ambiguities and contradictions expressed by both donor and recipient nations. Because of these limitations, only a general overview of the positive and (possibly) negative effects of aid on some macroeconomic variables and on a few projects will be attempted.

Official aid and its impact on some aggregate economic concepts. Aid can be divided into official development assistance (ODA) and loans from other official institutions having a grant element of less than 25 percent (other official flows, or OOF). ODA, the flows truly considered aid, amounted to slightly less than 0.2 percent of GDP in the 1960–85 period. From 1961 to 1967, they reached their maximum, when they consistently averaged close to 0.5 percent of GDP. From 1969 on, they once again fell to extremely low levels. Loans from OOF, on the other hand, averaged 0.4 percent of GDP from 1976 to 1985 (only available data). These flows have shown less annual variability, while their importance has been considerably greater. The World Bank and IDB are the main OOF contributors, and their concessionary

FIGURE 10.4 Implicit Interest Rate on External Public Debt and External Interest Rate in Mexico, 1960–86



NOTE: From 1960 to 1974 the prime U.S. interest rate is used; from 1975 on LIBOR is used.
SOURCE: Banco de México, *Indicadores Económicos*, balance of payments statistics.

contributions have not significantly lowered the burden of debt servicing. Until 1977, the share of concessionary loans in Mexico's total foreign debt did not significantly reduce the interest rate implicit on Mexico's foreign debt, which was, as Figure 10.4 shows, with few exceptions close to the interest rate quoted by foreign banks.

The purpose of aid is to transfer resources, in quantitative or qualitative terms, beyond those that the recipient nation can mobilize in a given period. Therefore, if aid or assistance is effective, it should have a lagged impact on GDP growth. As stated above, however, a thorough accounting of the sources of growth of the Mexican economy has not been performed, so there is no way to ascertain the impact of aid. It does seem reasonable to assume that a small amount of aid would have only a minor impact on growth, if any. There are however, some unquestionable examples of the positive effects of aid programs on the economic performance of some sectors.

Another way to look at the role of aid in Mexico's development is to examine its relationship to the principal components of aggregate demand, that is, investment, consumption, exports, and government expenditure. The ratio of investment to GDP grew throughout the 1960–81 period, while the percentage of grants diminished considerably. However, with the exception of freak years 1982–83, when a swap of funds between Mexico's central bank

TABLE 10.7 Outstanding Mexican Foreign Debt with IBRD and IDB, 1970–85 (millions of U.S. dollars)

Year	IBRD debt	IDB debt	Total IBRD and IDB debt	Yearly increase in IBRD and IDB debt	Yearly increase in total public external debt	Yearly increase in IBRD and IDB debt ÷ yearly increase in total public external debt
1970	581	234	816			
1971	660	283	943	126	411	31
1972	723	356	1,080	137	154	89
1973	808	457	1,266	185	1,627	11
1974	973	544	1,517	257	2,925	9
1975	1,123	630	1,753	235	4,331	5
1976	1,222	744	1,967	213	5,141	4
1977	1,374	890	2,264	297	2,987	10
1978	1,480	1,056	2,536	272	2,588	10
1979	1,730	1,167	2,898	361	3,334	11
1980	2,063	1,320	3,383	485	3,621	13
1981	2,416	1,437	3,854	470	18,287	3
1982	2,691	1,527	4,219	365	8,966	4
1983	2,869	1,513	4,383	164	2,703	6
1984	3,288	1,726	5,015	631	3,725	17
1985	3,768	2,177	5,945	930	1,529	11

NOTE: Blank cells indicate not applicable.
SOURCE: IBRD and IDB reports and Banco de México, *Indicadores Económicos*.

and the U.S. Federal Reserve Bank distorts the figures, the ratio of OOF to GDP fluctuates around its mean of 0.4 percent in the 1976–81 period, without making a systematic contribution to rising investment ratios (see Table A10.8).

The contribution of IDB and IBRD to annual net foreign indebtedness decreased from 31 percent in 1971 to only 4 percent in 1976. It rose to 10 percent in 1977 only to fall again to 4 percent in 1982. The decrease of 1981 is due mostly to the extraordinary growth of public sector indebtedness with foreign commercial banks in that year (see Table 10.7). If there is a pattern in the flows from these institutions, it is that they are practically suspended in crisis years (1976–82), only to play an important supporting role in the adjustment process.

Insofar as aid brought scarce dollars to a rapidly growing economy that implemented policies harmful to its exports, it could be argued that aid contributed to these inefficient policies. Its role, however, was so small—and declining—that its contribution to this and to all other aspects of macroeconomic performance was clearly minimal.

Since 1960, official aid and government expenditures have been moving in opposite directions. As the government sector occupies a greater share of the economy, the negative correlation between the two variables is accentuated (see Table 10.8).

TABLE 10.8 Official Aid and Aggregate Demand in Mexico, 1960–85 (percentage of GDP)

Year	Official aid	Investment			Exports	Trade balance	Government expenditure	Private savings
		Total	Public	Private				
1960	0.13	16.0	5.3	10.7	5.8	-3.5	9.6	9.8
1965	0.31	17.2	6.1	11.1	5.3	-2.0	9.8	13.0
1970	0.22	20.0	6.6	13.4	3.6	-3.4	10.9	14.4
1975	0.07	21.4	9.0	12.4	3.5	-4.6	15.5	14.1
1980	0.03	24.2	10.9	13.3	8.1	-2.0	19.1	16.8
1981	0.04	25.7	11.7	14.0	8.1	-1.9	22.7	16.7
1982	0.08	22.3	10.3	12.0	12.9	4.1	28.7	12.4
1983	0.09	17.3	7.6	9.7	15.6	9.6	27.1	18.2
1984	0.05	18.0	7.1	10.9	14.1	7.5	24.7	18.3
1985	0.08	18.4	6.6	11.8	12.3	4.7	25.4	15.7

SOURCE: OECD, *Geographical Distribution of Financial Flows to Developing Countries*, several issues; Banco de México, *Indicadores Económicos*.

The Mexican development process and the patterns of aid.

The 1940s and 1950s. Mexico did not start receiving official loans from multilateral sources until the late 1940s.[5] These amounts, however, were so small that until 1955 Mexico's external public debt remained practically constant in current dollars. It was not until the second half of the 1950s that Mexico began to rely, albeit on a small scale, on net foreign indebtedness (Gil Díaz 1984). The main public spending priority was infrastructure, to allow the agrarian and urban sectors to become more productive and efficient.

These projects included economically successful dams and irrigation facilities in regions with low population density, such as those constructed in the northern states of Sonora and Sinaloa. As evidence of their success, wheat production increased by 67 percent between 1949 and 1954 and cotton production by 300 percent between 1947 and 1954 (Table A10.9). This growth in production allowed the country to become nearly self-sufficient in wheat and created an export supply of cotton. The irrigation projects permitted an influx of people into remote, low-density regions of the country.

Between 1945 and 1955, many other projects were carried out with no net foreign indebtedness or aid. Most of these projects were extremely successful, even though there was little use of evaluation techniques. The projects were well chosen, probably because the amount of funds available to invest was extremely small; the ratio of government spending to GDP throughout 1940–55 averaged only 6.8 percent (see Table A10.10).

The 1960s. The years 1961–67 represent the only period when Mexico enjoyed a comparatively significant positive transfer of foreign aid. From 1960 to 1969, multilateral loans (IDB and IBRD) also rose.

The focus on infrastructure continued and even grew. In agriculture, for instance, there were additional successful irrigation systems constructed in

the northern states, permitting such increased production of wheat that in this decade Mexico became a net exporter for the first time since 1925 ("Consumos Aparentes" 1983). The first loans from multilateral organizations for irrigation appear in 1961, contributing to an already successful, locally initiated enterprise (although, as argued below, the U.S. government and the Rockefeller Foundation played an important role in the development of improved seeds).

As in the case of India, documented by Lele and Goldsmith (1987), the success of agricultural research in Mexico is the result of a high level of political support, concentration on a few crops, and the availability of indigenous research capabilities. The commitment is documented by the following quote from Eduardo Suárez, then Mexico's secretary of the Treasury:

> Mr. Henry Wallace, the U.S. secretary of agriculture, visited Mr. Marte R. Gomez (Wallace's Mexican counterpart) and asked him if he was willing to try producing hybrid and improved seeds in Mexico. Mr. Wallace's father had been an American farmer who had made a fortune growing and selling hybrid corn seeds, so Wallace had great confidence in their potential benefits for Mexico. Unfortunately, one could not simply import these seeds; they had to be produced in the country that was going to use them. Therefore, there was a need for a complete organization in that country. Mr. Gomez accepted his colleague's suggestion and the latter persuaded the Rockefeller Foundation to send experts to Mexico, and to begin the necessary plantings of hybrid corn in the Agricultural School of Chapingo. Later, the Rockefeller Foundation sent Dr. Borlaug, who was awarded the Nobel prize for his great contributions to feed the world (Suárez 1977: 143).

Other infrastructure projects supported by public investment included transportation projects such as the construction of secondary roads, regional airports, fishing and commercial ports, and public transportation networks in the bigger cities.

The 1960s were also characterized by some of the first outright failures. The agrarian Chontalpa project, for example, was developed in the southern state of Tabasco to produce large amounts of tropical fruits and vegetables. Multilaterally supported, the project was a financial failure and as well as being seriously questionable from the ecological point of view (Toledo 1984).

In the industrial sector, the number of multilaterally financed projects increased rapidly during this period. From six projects financed by IDB during the 1950s, the number increased to thirty-nine during the 1960s. There were some industrial loans, many of them for the private sector, but as Table 10.9 shows, industry and mining loans represented only 1.8 percent of the total between 1960 and 1969. The lion's share went to agriculture (38.7 percent), electricity (30 percent), and communications and transport (18.6 percent).

TABLE 10.9 Total Loans to Mexico from IDB and IBRD, 1950–86

	Agriculture	Industry and mining	Communications and transport	Urban and rural development	Public and environmental health	Electricity	Tourism	Promotion of exports	Scientific and technological education	Total
Loans from IBRD and IDB										
1950–1959										
Millions of US$	0.0	0.5	61.0	0.0	0.0	100.7	0.0	0.0	0.0	162.2
% of total	0.0	0.3	37.7	0.0	0.0	62.0	0.0	0.0	0.0	100.0
1960–1969										
Millions of US$	426.1	20.3	203.7	10.0	14.0	330.0	21.3	70.6	3.5	1,099.5
% of total	38.7	1.8	18.6	0.9	1.3	30.0	1.9	6.5	0.3	100.0
1970–1979										
Millions of US$	2,340.5	743.4	723.3	337.2	33.0	250.0	150.4	6.9	21.8	4,606.5
% of total	50.8	16.2	15.7	7.4	0.7	5.4	3.3	0.1	4.0	100.0
1980–1986										
Millions of US$	3,329.1	1,289.3	815.4	910.1	839.7	0.0	188.1	350.0	267.3	7,988.6
% of total	42.0	16.0	10.2	11.4	10.5	0.0	2.3	4.3	3.3	100.0
Loans from IBRD										
1950–1959										
Millions of US$	0.0	0.5	61.0	0.0	0.0	100.7	0.0	0.0	0.0	162.2
% of total	0.0	0.3	37.7	0.0	0.0	62.0	0.0	0.0	0.0	100.0
1960–1969										
Millions of US$	161.5	0.0	155.0	0.0	0.0	330.0	0.0	0.0	0.0	646.5
% of total	25.1	0.0	24.0	0.0	0.0	51.0	0.0	0.0	0.0	100.0
1970–1979										
Millions of US$	868.5	448.0	451.8	337.2	0.0	250.0	88.7	0.0	0.0	2,444.2
% of total	35.6	18.3	18.5	13.8	0.0	10.2	3.6	0.0	0.0	100.0
Concessional loans from IDB										
1960–1969										
Millions of US$	264.6	20.3	48.7	0.0	14.0	0.0	21.3	70.6	3.5	443.0
% of total	59.7	4.5	11.0	0.0	3.1	0.0	5.0	16.0	0.7	100.0
1970–1979										
Millions of US$	1,472.0	295.4	271.5	0.0	33.0	0.0	61.7	6.9	21.8	2,162.3
% of total	68.1	13.6	12.5	0.0	1.6	0.0	2.8	0.3	1.1	100.0
1980–1986										
Millions of US$	1,203.5	421.9	129.4	0.0	370.5	0.0	162.8	0.0	96.3	2,384.4
% of total	50.6	17.7	5.4	0.0	15.5	0.0	6.8	0.0	4.0	100.0

SOURCE: "Statement of Loans," International Bank for Reconstruction and Development, June 1986; "Statement of Approved Loans," Inter-American Development Bank, 1987.

TABLE 10.10 Financial Requirements of Mexico's Public Sector, 1941–86 (percentage of GDP)

Year	Financial deficit	Domestic borrowing	External borrowing
1941–49	1.2	1.3	-0.1
1950–59	0.7	0.2	0.5
1960–71	2.9	1.7	1.2
1972	4.7	3.5	1.2
1973	7.5	3.7	3.8
1974	8.2	3.7	4.5
1975	10.4	5.0	5.4
1976	9.8	2.7	7.1
1977	6.2	2.1	4.1
1978	6.5	3.1	3.4
1979	7.1	4.0	3.1
1980	8.5	2.8	5.7
1981	13.4	5.9	7.5
1982	17.2	15.8	1.4
1983	12.1	10.0	2.1
1984	9.7	9.1	0.6
1985	10.5	9.7	0.8
1986	16.2	15.8	0.4

SOURCE: Banco de México.

Public sector investment in all the social welfare fields as a percentage of public investment averaged less than 15 percent a year between 1935 and 1960, and only during the 1950s did it rise above 13 percent.

It is difficult to know how much aid was behind all these projects and how many were built as a consequence of grants provided by foreign governments or multilateral institutions, for it took a long time to implement modern appraisal techniques. For example, in Mexico's Department of Agriculture, adequate project evaluation techniques were first introduced at the end of the 1960s. It became apparent in later years that most of the non-infrastructure investments of the public sector during this decade were directed toward price-distorted sectors such as the automotive (DINA and VAMSA), steel, and sugar industries.

The 1970s. The situation during the 1970s changed markedly from the previous decades. Deficit spending, which until then had remained at affordable levels, began to increase substantially starting in 1972 (Table 10.10). Between 1972 and 1976, the public sector deficit averaged 8 percent of GDP while the value added of state enterprises grew from 6.2 percent of GDP in 1971 to 8.5 percent in 1976. Furthermore, although in the 1960s the agrarian sector's surplus in the balance of payments financed more than 50 percent of

TABLE 10.11 Net Official Development Assistance to Mexico, 1960–85

Year	Flows in millions of U.S. dollars			Flows in millions of pesos[a]			Flows as a percentage of GDP		
	DAC[b]	MULT[c]	Total	DAC[b]	MULT[c]	Total	DAC[b]	MULT[c]	Total
1960	6.1	10.4	16.5	76.3	130.0	206.3	0.048	0.081	0.129
1965	46.6	18.7	65.3	582.5	233.8	816.3	0.218	0.087	0.305
1970	19.4	60.7	80.1	242.5	758.8	1,001.3	0.555	0.171	0.226
1975	9.1	52.3	61.4	113.8	653.8	767.6	0.010	0.059	0.069
1980	55.0	1.0	56.0	1,262.3	23.0	1,285.3	0.030	0.001	0.031
1981	102.4	-2.8	99.6	2,509.8	-68.6	2,441.2	0.043	-0.001	0.042
1982	142.1	-2.2	139.9	8,162.2	-126.4	8,035.8	0.088	-0.001	0.086
1983	135.9	-4.2	131.6	16,331.1	-504.7	15,826.4	0.095	-0.003	0.092
1984	75.3	8.1	83.4	12,633.1	1,538.9	13,992.0	0.044	0.005	0.049
1985	122.6	22.0	144.6	31,503.3	5,653.1	37,156.5	0.069	0.013	0.082

NOTE: Data include net loans of official development assistance (ODA). These loans represent all the concessional loans coming from country members of the OECD, multilateral agencies, and governments, with the prime objective of promoting economic development.
a. Converted at the average controlled exchange rate of the year.
b. Official bilateral assistance from Development Assistance Committee (DAC), country members of OECD.
c. Official multilateral assistance from multilateral agencies.
SOURCE: OECD, *Geographical Distribution of Financial Flows to Developing Countries*, several issues.

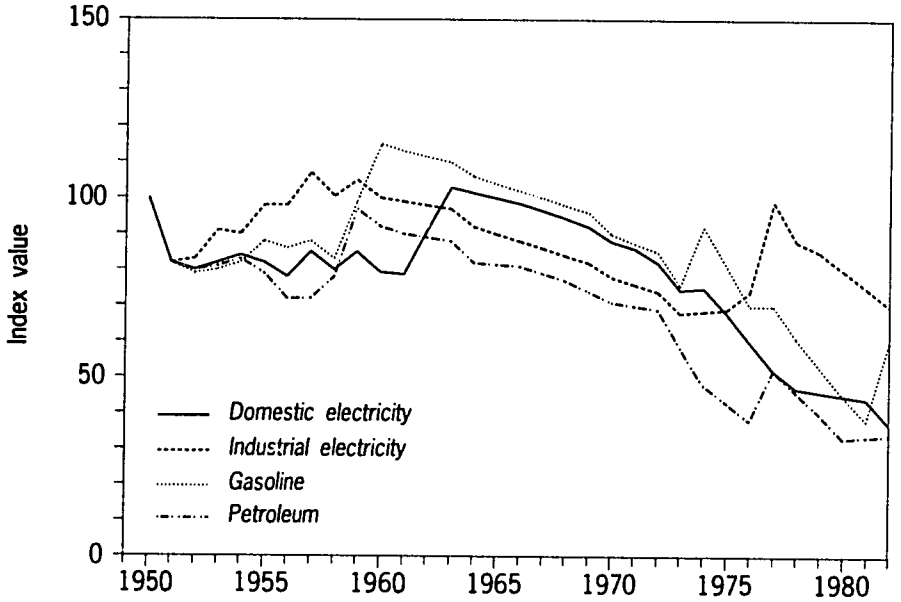
the industrial sector's hard currency deficit, by 1974 this surplus had disappeared.

The 1970s also differed from past decades in terms of the amount of credits available in world capital markets. Because of the increased need to recycle the huge sums of petrodollars, the availability of such credits increased considerably. This led, according to the OECD/DAC (1984: 5–166), to unusual lending terms, since the rapid expansion of aid and conditioned lending budgets led many institutions to press their officers to lend in quantitative, and not in qualitative, terms. As a direct consequence of this "fund channeling," several public spending projects were undertaken that were too ambitious and of doubtful viability. One example is the nuclear reactor at Laguna Verde, begun during the early 1970s. In 1986, its real cost in dollars was calculated to be ten times higher than originally projected. Another instance was the overambitious expansion of the Las Truchas steel mill, due to poor evaluation of conditions.

As Table 10.11 shows, the amount of official loans provided by foreign nations and institutions diminished considerably as a proportion of GDP during this period. This fall was more than compensated, however, by the large amounts of nonconcessional loans from commercial banks that flowed into Mexico.

The total gross amount of multilateral (IDB and IBRD) loans increased substantially, from $1 billion in 1960–69 to $4.6 billion in 1970–79. Agriculture was again the main recipient, with 51 percent of the total, followed by flows to industry and mining (16 percent) that rivaled those to communications and transports (15.7 percent). Scientific and technological education began to emerge as a recipient, though still at a minute 0.5 percent of the total.

FIGURE 10.5 Mexico's Wholesale Relative Price Indexes, 1950–82



SOURCE: Banco de México, *Indicadores Económicos*.

The salient feature of these loans was their support for the increasing role of the state in industrial activities, particularly in areas that were becoming heavily subsidized, such as electricity (Figure 10.5). The availability of these foreign resources allowed Mexico to undertake the least worthwhile projects. When subsidies become too large, however, multilateral agencies have a policy of withdrawing their support, as the World Bank did in the case of electricity.

The share of public investment in these areas, however, does not appear to have been influenced by the availability of multilateral financing (Table A10.11). Agriculture's share in public investment fell from 18 percent in 1950–54 to 13 percent in 1955–59. It fell further to 10 percent in 1960–69, and while it rose in the second half of the 1970s to average 16 percent for the decade, an important part of the increase was attributable to rural development and other projects, which probably include some of the less efficient or downright questionable expenditures exemplified by the Chontalpa project.

Government expenditures on social investments, some of which have been marginally related to aid, increased from 12 percent of government investment in the 1950s to 23 percent in the 1960s, then fell to 20 percent in the 1970s and 17 percent in the 1980s. The average for the 1980s is lowered by crisis year 1983, although in real (wage) terms it probably did not decrease, since the relative price of the largest input required by these expenditures

has fallen markedly in recent years. Undoubtedly, the improvement in social statistics shown at the beginning of this chapter are related to this increase in social investment. Official social welfare aid had an indirect positive impact on the economy in the 1970s, by supporting institutions such as the following:

- The CONACYT (National Council for Science and Technology), begun in 1970, promotes, develops, and applies research-oriented studies. This institution has had its strongest impact on the economy through its support of graduate study abroad by Mexicans. Its financing of scientific education and application has not been very successful, perhaps because of the institution's unwieldly bureaucracy.
- The DIF (Integral Development of the Family) and the IMAN (Mexican Institute for Childhood Assistance), both started in 1974, promote family planning and child care throughout the nation. These projects may have contributed to the use of contraceptives and to the reduction of Mexico's high fertility rate. This is hard to pinpoint, however, because other economic and social changes were making "natural" contributions in the same direction, such as greater female participation in the labor force and growing urbanization.
- The INFONAVIT (Housing Institute for Workers), started in 1972, attempts to raise the living standards of workers by providing them with better housing facilities. The program's main source of support has been a flat payroll quasitax of 5 percent.

During the 1970s, the impact of official aid was felt mostly in the agrarian sector. One of these projects was the Integral Project for Rural Development (PIDER), 1973, which provided funds and infrastructure to the less-developed states (see Schumacher 1985). Between 1973 and 1978, the project cost the federal government more than $800 million. During its first operative years, it managed to provide some relief to 8.5 million people in 8,473 localities nationwide. Unfortunately, at the end of the decade, PIDER was far from achieving its goals, as a result of mismanagement; because of inadequate evaluation of farmers' needs, state planners mismanaged funds in each locality (Schumacher 1985).

Other programs implemented during the decade were the Coordination Agreement (CUC) in 1977 and the Coordination Program for Marginal Zones (COPLAMAR) in 1979 (see Schumacher 1985). The objective of the CUC was to build, with the cooperation of federal, state, and local governments, small-scale infrastructure such as feeder roads, schools, badly needed water supply systems, and hospitals. The objective of the COPLAMAR was to coordinate the resources given by the government in order to reach regions where the PIDER had not had much success. In order to achieve the goals of CUC and COPLAMAR, the public sector spent over $4 billion between 1977

TABLE 10.12 Selected World Bank Lending Programs in Mexico for FY 1987 (millions of U.S. dollars)

Program	Amount
Approved	
Technology development program	48
Industrial equipment program (FONEI)	150
Being processed	
Agricultural credit program	420
Urban transportation program	130
Highway maintenance program	130

SOURCE: Mexico, Treasury Department.

and 1982. As in the case of PIDER, the results of these projects were limited by a lack of understanding of the farmers' real needs and problems.

The 1980s. Compared with the preceding decades, the 1980s proved to be a period of profound reconsideration of the entire Mexican development strategy. Project selection has improved as a consequence of the economic crisis brought about by the internal disequilibria and by the suspension of foreign credits in 1982. Perhaps more significant, older projects that in 1982 were either already operating or under construction have been reevaluated, and the authorities have attempted to eliminate the burden these projects impose on the economy. Those projects that could not be modified at a reasonable cost or sold to private investors were closed down.[6]

From the supply side, an interesting reform during this decade was the change in emphasis of World Bank lending programs. This is best exemplified by Mexico's acceptance in 1986 of conditioned programs, such as the $500 million trade policy loan and the $250 million export development program, which are designed to help Mexico to restructure its industry to become more competitive. Other approved or projected programs for the 1987 fiscal year are shown in Table 10.12. The grand total for these seven programs for 1987 is $1.628 billion.

Because of the negative net availability of foreign resources to Mexico,[7] programs such as the trade policy loan were welcome for buttressing the balance of payments. Even so, the administration was opening the economy independently and at a much faster pace than required by the program.

Conclusion

Foreign aid has made a small contribution to Mexico's access to foreign resources, and since the 1950s, its relative importance has been decreasing. During the 1940s and early 1950s, before access to foreign capital markets and foreign aid, Mexico had a relatively open economy and a small public

sector whose investment averaged only 4.7 percent of GDP. These conditions were conducive to high growth, first with relatively low inflation and eventually with almost no inflation. With similar claims on savings made by the government in the two periods, the noninflationary period can be attributed to increasing financial intermediation and availability of foreign finance on a voluntary basis.

This increasing availability of multilateral finance was in turn due to the outside perception that Mexico had, on an ongoing basis, properly handled macroeconomic and growth variables. In addition, Mexico's participation in the creation of and subsequent membership in the IMF and the World Bank—from whom credits were obtained in the late 1940s and early 1950s—contributed to the image of a creditworthy Mexico. Thus Mexico gained access to international voluntary lending in the second part of the 1950s and acquired an increasing foreign debt that was reasonable and manageable.

The availability of limited amounts of aid and a somewhat larger role for multilateral credits did not perceptibly influence the growth of the economy or the sectoral distribution of public investment. Aid made important contributions, however, to the development and modernization of some areas of agriculture, especially the development of hybrid seeds for wheat and corn.[8]

Part of the growth of the Mexican economy from the late 1950s through the 1960s can be attributed to the artificial stimulus of protectionism, which hampered what would have been an even more dynamic agricultural sector. Nonetheless, the slow growth in exports created by protectionism was compensated by the influence of foreign credit, which allowed the financing of imports and the maintenance of a fixed nominal exchange rate in a rapidly growing economy.

The use of multilateral aid contributed to the adoption of project evaluation methods, although it is debatable whether public investment became more efficient as a consequence, since the ratio of public investment to GDP doubled while growth improved only marginally. Project evaluation was used then, as it is now, to justify credits rather than to evaluate alternative investments.

Foreign aid focused on various social expenditures, such as food for children, the financing of studies abroad, and resources for schools and hospitals. Although its contribution in these areas was important, it probably did not perceptibly affect growth or macroeconomic behavior until the 1970s. During this time, the increased availability of all types of credit, commercial and multilateral, nurtured the rapid and inordinate expansion of the public sector and its investment in some highly questionable megaprojects.

This conclusion is not a sad comment about the negative consequences of aid, but an indication of the sole responsibility of governments for the fate of their governed. It also highlights the minimum contributions that aid will make in qualitative and quantitative terms when market and monetary policies are not geared either to efficient growth or to stability. Debt, on the other hand, has become a deadweight to growth, and only greater cooperation and

farsightedness by commercial banks, together with the continuation of structural reforms and budgetary corrections, will allow growth to resume. The banks' limited acceptance of subscriptions and discounts is an indicator of the small distance they have so far been willing to go.[9] The recent support of the World Bank and the Inter-American Development Bank has been significant on the margin, but clearly insufficient to "bail the ox out of the ditch."

APPENDIX TO CHAPTER 10

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TABLE A10.1 Social Indicators for Mexico, 1900–85

Year	Population: Millions of persons	Population: Average yearly growth rate (%)	Population: Density (persons/km²)	Population: Birth rate[a] (per 1,000 persons)	Population: Death rate[a] (per 1,000 persons)	Population: Infant mortality[a] (per 1,000 persons)	Urbanization: Urban population as % of total population[b]	Urbanization: Urbanization index[c] (%)	Literacy (% of total population)	GDP per capita (1970 pesos)
1900	13.6	n.a.	6.95	34.0	32.7	n.a.	28.6	n.a.	22.3	2,529
1910	15.2	n.a.	7.75	31.8	32.1	n.a.	28.7	8.2	27.7	3,103
1921	14.3	−0.51	7.32	31.4	25.3	n.a.	31.1	10.7	33.9	3,533
1930	16.5	1.61	8.45	49.5	26.7	131.6	33.5	13.7	38.5	3,109
1940	19.6	1.73	10.04	48.1	22.8	125.7	35.1	16.3	46.0	3,558
1950	25.8	2.75	13.17	45.6	16.2	96.2	42.6	23.7	56.8	4,838
1960	34.9	2.89	17.83	46.1	11.5	74.2	50.7	31.8	66.5	6,443
1970	48.2	3.49	24.63	44.2	10.1	68.5	58.7	40.4	76.3	9,212
1980	69.6	3.30	35.55	35.0	8.5	62.0	66.3	46.4	83.0	12,131
1981	71.3	2.44	36.42	33.8	8.1	60.6	66.8	n.a.	n.a.	12,745
1982	73.0	2.38	37.28	32.6	7.8	59.2	67.3	n.a.	n.a.	12,386
1983	74.6	2.19	38.10	31.5	7.4	57.7	67.9	n.a.	n.a.	11,472
1984	76.3	2.28	38.97	30.3	7.1	56.3	68.4	n.a.	n.a.	11,635
1985	77.9	2.10	39.79	29.1	6.7	54.9	68.9	n.a.	n.a.	11,696

NOTE: n.a. = not available.
a. From 1981 to 1985, estimates prepared by the Mexican Academy of Medical Demographic Research.
b. The figures for 1910 and 1921 refer to population in locations of 4,000 and more inhabitants; after 1921 the figures refer to population in locations of 2,500 and more inhabitants.
c. The index was calculated in the following manner:
$0.25\,P_1 + 0.50\,P_2 + 0.75\,P_3 + P_4$, where
P_1 = population that lives in locations of 15,000 to 20,000 inhabitants
P_2 = population that lives in locations of 20,000 to 50,000 inhabitants
P_3 = population that lives in locations of 50,000 to 100,000 inhabitants
P_4 = population that lives in locations of 100,000 and more inhabitants
SOURCE: Banco de México, with information from Budget and Programming Secretariat, *Censos Generales de Población*.

TABLE A10.2 Mexico's Financial Intermediation and Interest Rates in Domestic and International Markets, 1960–85

Year	Total financial intermediation[a] (annual avg. as % of GDP)	One-year accumulated yield in pesos[b]					
		Nominal			Real[e]		
		Mexico[c] (1)	Eurodollar[d] (2)	Difference (1) – (2)	Mexico (1)	Eurodollar (2)	Difference (1) – (2)
1960	16.8	8.14	5.56	2.58	2.26	–0.18	2.44
1961	17.4	8.21	5.96	2.25	8.21	5.96	2.25
1962	18.5	8.88	5.26	3.62	6.43	2.89	3.54
1963	19.9	9.01	4.76	4.25	8.63	4.39	4.24
1964	20.3	8.99	5.50	3.49	3.26	–0.05	3.31
1965	21.8	8.94	6.57	2.37	8.73	6.36	2.37
1966	23.2	9.00	6.78	2.22	5.97	3.81	2.16
1967	25.4	9.11	6.67	2.44	7.24	4.85	2.39
1968	27.3	9.13	7.65	1.48	6.96	5.51	1.45
1969	28.8	9.33	9.60	–0.27	5.15	5.41	–0.26
1970	30.7	10.15	8.28	1.87	5.22	3.43	1.79
1975	27.6	10.73	6.97	3.76	–0.51	–3.89	3.38
1980	26.8	23.81	15.61	8.20	–4.65	–10.97	6.32
1985	27.6	73.87	113.21	–39.37	6.16	30.20	–24.04

a. Includes banking and nonbanking instruments.
b. The reinvestment of interest is taken into account.
c. Average weighted by the shares of the most representative instruments.
d. Average of time yields up to 12 months. It includes the yield from exchange rate depreciation in the free market, but it excludes the costs that arise from the difference between the purchase and sales price of foreign currency.
e. Deflated by the Dec.–Dec. inflation rate in Mexico.
SOURCE: Banco de México, *Indicadores Económicos* and *Estadísticas Históricas de Precios*; Office of Financial Studies, Banco de México.

TABLE A10.3 GDP Growth Rate in Mexico by Sector, 1940–86 (percentage)

Year	Total GDP growth	Agriculture, livestock, fishing, and forestry	Mining[a]	Manufacturing	Construction	Electricity	Commerce, restaurants, and hotels[b]	Transport and communications	Financial services	Government	Other[c]	GDP per capita
1940	1.4	−4.9	−3.1	6.5	21.4	2.6	1.1	4.6	n.a.	n.a.	3.3	−0.5
1945	3.1	−1.6	7.1	3.5	30.0	11.7	2.0	6.4	n.a.	n.a.	3.8	−0.2
1950	9.9	9.7	13.3	12.6	17.8	2.1	10.1	6.1	n.a.	n.a.	6.2	6.3
1955	8.5	9.2	10.9	9.7	11.3	11.5	8.1	7.3	n.a.	n.a.	6.4	5.2
1960	8.1	5.2	4.4	8.5	14.5	9.8	8.8	3.7	n.a.	n.a.	21.1	4.7
1965	6.5	5.4	3.1	10.0	−1.5	9.5	6.5	3.0	n.a.	6.6	6.5	3.1
1970	6.9	4.9	8.6	8.7	4.8	11.3	6.5	7.8	n.a.	9.7	4.9	3.5
1975	5.6	2.0	5.8	5.0	5.9	5.4	5.2	10.0	4.9	11.6	6.2	2.4
1980	8.3	7.1	22.3	7.2	12.3	6.5	8.1	14.1	4.6	9.9	5.3	5.0
1981	7.9	6.1	15.3	7.0	12.0	8.4	8.5	10.7	4.8	9.1	6.1	5.5
1982	−0.5	−0.6	9.2	−3.0	−5.0	6.6	−1.9	−3.8	2.9	5.5	4.2	−2.8
1983	−5.3	2.9	−2.7	−7.3	−18.0	−0.7	−0.1	−4.8	2.1	3.5	−2.3	−7.4
1984	3.7	2.5	1.8	4.8	3.4	7.4	3.0	6.4	2.9	4.3	2.2	1.4
1985[d]	2.7	2.2	0.9	5.8	2.5	6.9	1.8	2.7	2.5	−0.5	−0.6	0.6
1986[d]	−3.8	−4.7	−7.1	−7.1	−11.6	3.2	−3.5	11.6	1.8	0.5	8.5	5.7

NOTE: n.a. = not available.
a. From 1950 to 1965, mining includes petroleum processing; from 1970 on, petroleum processing is included in manufacturing.
b. From 1940 to 1965, does not include restaurants and hotels.
c. Includes communal and banking services adjustment. From 1940 to 1959, includes public administration and defense. From 1940 to 1969, includes restaurants and hotels and financial services.
d. Preliminary.
SOURCE: 1940–65: Banco de México, *Producto Interno Bruto y Gasto*; 1970–85: Budget Secretariat, *Sistema de Cuentas Nacionales*.

TABLE A10.4 Mexico's Imports Subject to Quantitative Restrictions, 1956–86

Year	Percentage of imports subject to restrictions	Year	Percentage of imports subject to restrictions
1956	17.1	1972	66.3
1957	35.1	1973	69.6
1958	42.5	1974	82.0
1959	43.2	1975	68.4
1960	37.8	1976	90.4
1961	53.8	1977	67.7
1962	52.5	1978	64.2
1963	63.5	1979	60.0
1964	65.5	1980	76.0
1965	60.0	1981	78.3
1966	62.0	1982	82.8
1967	65.2	1983	80.1
1968	64.4	1984	58.4
1969	65.1	1985	54.8
1970	68.3	1986	38.7
1971	67.7		

SOURCE: Banco de México, balance of payments statistics.

TABLE A10.5 Structure of Mexico's GDP at Constant Prices, 1940–86 (percentage)

Year	Agriculture, livestock, fishing, and forestry	Mining	Manufacturing	Construction	Electricity	Commerce, restaurants, and hotels[a]	Transport and communications	Financial services	Government	Other[b]	GDP per capita (1970 pesos)
1940	19.4	6.4	15.4	2.5	0.8	30.9	2.5	n.a.	n.a.	22.1	3,558.8
1945	17.9	5.1	15.9	3.4	0.7	32.6	2.9	n.a.	n.a.	21.5	4,043.3
1950	19.2	5.0	17.1	3.6	0.7	31.6	3.3	n.a.	n.a.	19.5	4,558.0
1955	18.7	4.8	17.5	3.7	0.9	31.2	3.5	n.a.	n.a.	19.7	5,281.8
1960	15.9	4.9	19.2	4.1	1.0	31.1	3.3	n.a.	4.9	15.5	6,081.2
1965	14.2	4.7	21.3	4.0	1.3	31.7	3.0	n.a.	5.6	14.1	7,311.0
1970	11.6	4.8	22.3	4.6	1.8	31.9	3.2	11.3	5.8	2.9	8,681.2
1975	9.8	4.7	23.1	4.7	2.1	31.8	4.1	10.9	6.5	2.3	10,140.4
1980	8.6	6.2	24.1	4.8	2.3	31.6	6.9	9.8	6.8	1.0	12,086.1
1981	8.4	6.6	21.7	4.9	2.3	31.7	5.1	9.5	6.8	2.9	12,744.8
1982	8.4	7.2	20.2	4.7	2.5	31.3	4.9	9.8	7.3	3.6	12,386.8
1983	9.2	7.4	22.4	4.1	2.7	29.7	4.9	10.6	7.9	1.2	11,471.8
1984	9.1	7.3	22.8	4.1	2.8	29.5	5.0	10.5	8.0	1.0	11,634.7
1985[c]	9.6	5.4	23.0	4.7	1.9	23.8	7.6	10.5	7.4	6.1	11,705.9
1986[c]	9.7	5.3	25.7	4.4	2.0	23.3	7.7	10.9	7.6	3.4	11,040.3

NOTE: n.a. = not available. Figures may not add because of rounding.
a. From 1940 to 1969, does not include restaurants and hotels.
b. Includes communal, private educational, and medical services, other services, and banking services adjustment. From 1940 to 1959, includes educational services, medical services, public administration, and defense. From 1940 to 1969, includes restaurants and hotels and financial services.
c. Estimated.
SOURCE: Banco de México, with information for the period 1940 to 1965 from *Producto Interno Bruto y Gasto* published by Banco de México, and for the period 1970 to 1985 from *Sistema de Cuentas Nacionales* published by the Budget and Programming Secretariat.

TABLE A10.6 Mexico's Public Sector Revenues and Expenditures, 1965–86 (percentage of GDP)

Year	Total		Federal government		Organizations and firms					
					Revenues			Expenditures		
	Revenues	Expenditures	Revenues	Expenditures	Total	Pemex	Other	Total	Pemex	Other
1965	18.0	18.8	8.2	9.8	9.8	3.2	6.6	9.0	3.0	6.0
1970	18.9	22.3	9.0	10.9	9.9	2.8	7.1	11.4	3.0	8.4
1975	23.1	31.9	11.5	15.5	11.6	2.5	9.1	16.4	4.8	11.6
1976	23.8	32.0	11.9	16.4	11.9	2.8	9.1	15.6	4.4	11.2
1977	24.6	30.0	12.5	15.8	12.1	3.8	8.3	14.2	4.7	9.5
1978	25.9	31.4	13.0	15.9	12.9	4.5	8.4	15.5	5.9	9.6
1979	26.7	32.9	13.5	16.7	13.2	5.6	7.6	16.2	6.8	9.4
1980	28.1	34.9	16.0	19.1	12.1	7.5	4.6	15.8	9.0	6.8
1981	27.8	41.4	15.9	22.7	11.9	7.6	4.3	18.7	10.7	8.0
1982	30.9	46.3	16.3	28.7	13.8	10.3	3.5	17.6	11.7	5.9
1983	34.3	42.8	18.6	27.1	15.7	14.8	0.9	15.7	12.9	2.8
1984	33.0	40.3	17.3	24.7	15.7	13.4	2.3	15.6	11.6	4.0
1985	32.6	40.9	17.6	25.4	15.0	12.0	3.0	15.5	11.1	4.4
1986	30.9	45.8	16.3	29.6	14.6	9.2	5.4	16.2	9.2	7.0

SOURCE: Treasury Department, *Estadisticas de Finanzas Publicas.*

TABLE A10.7 Nominal Gross Fixed Investment and GDP Growth in Mexico, 1950–86 (percentage of GDP)

Year	GDP growth	Gross fixed investment		
		Total	Public[a]	Private
1950	9.9	12.8	7.3	7.4
1955	8.5	15.5	4.9	10.6
1960	8.1	16.0	5.3	10.7
1965	6.5	17.2	6.1	11.1
1970	6.9	20.0	6.6	13.4
1975	5.6	21.4	9.0	12.4
1980	8.3	24.2	10.9	13.3
1981	7.9	25.7	11.7	14.0
1982	-0.5	22.3	10.3	12.0
1983	-5.3	17.3	7.6	9.7
1984	3.7	18.0	7.1	10.9
1985[b]	2.7	18.4	7.0	11.5
1986[b]	-3.8	17.6	6.1	11.5

a. The figures from 1950 to 1965 are authorized public investment.
b. Estimated in base to the real values published in the National Accounts System and the Producer Price Index for each item.
SOURCE: 1950–65: Banco de México, *Producto Interno Bruto y Gasto*; 1970–84: Budget and Programming Secretariat, *Sistema de Cuentas Nacionales*.

TABLE A10.8 Financial Flows to Mexico from Bilateral and Multilateral Organizations, 1976–85

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
In millions of U.S. dollars										
Bilateral organizations										
a. Total ODA net	9.9	5.8	8.4	49.4	55.0	102.4	142.1	135.9	75.3	122.6
b. Total other official net	105.6	154.2	84.1	−35.2	171.2	410.2	1,301.6	−434.1	237.9	37.7
c. Total official net (a+b)	115.5	159.9	92.5	14.3	226.2	512.6	1,443.7	−298.2	313.2	160.3
d. Other flows net (e−c)	937.1	1,377.9	2,182.3	2,914.8	3,580.2	5,677.4	2,857.6	3,949.8	12,734.1	−2,503.0
e. Total receipts net (c+d)	1,052.6	1,537.8	2,274.8	2,929.1	3,806.4	6,190.0	4,301.3	3,651.6	13,047.3	−2,342.7
Multilateral agencies										
f. Total ODA net	53.4	44.7	9.4	25.0	1.0	−2.8	−2.1	−4.2	8.0	21.8
g. Total other official net	193.4	265.8	215.3	424.9	655.1	722.6	430.3	203.4	768.2	668.2
h. Total official flows (f+g)	246.8	310.5	224.7	449.9	656.1	719.8	428.2	199.2	776.2	690.0
Total bilateral + multilateral										
i. Total ODA net (a+f)	63.3	50.5	17.8	74.4	56.0	99.6	140.0	131.7	83.3	144.4
j. Total other official net	299.0	420.0	299.4	389.7	1,826.3	1,132.8	1,731.9	−230.1	1,006.1	705.9
k. Total official net (i+j)	362.3	470.5	317.2	464.1	882.3	1,232.4	1,871.9	−99.0	1,089.4	850.3
As percentage of GDP										
Bilateral organizations										
a. Total ODA net	0.011	0.007	0.008	0.037	0.030	0.043	0.087	0.095	0.044	0.069
b. Total other official net	0.119	0.188	0.082	−0.026	0.092	0.171	0.794	−0.304	0.139	0.021
c. Total official net (a+b)	0.130	0.195	0.090	0.011	0.121	0.214	0.881	−0.209	0.183	0.090
d. Other flows net (e−c)	1.055	1.682	2.126	1.921	2.369	1.743	2.769	2.769	7.428	−1.410
e. Total receipts net (c+d)	1.185	1.878	2.216	2.178	2.043	2.583	2.624	2.560	7.611	−1.320
Multilateral agencies										
f. Total ODA net	0.060	0.055	0.009	0.019	0.001	−0.001	−0.001	−0.003	0.005	0.012
g. Total other official net	0.218	0.325	0.210	0.316	0.352	0.301	0.262	0.143	0.448	0.37[illegible]
h. Total official flows (f+g)	0.278	0.379	0.219	0.335	0.352	0.300	0.261	0.140	0.453	0.389
Total bilateral + multilateral										
i. Total ODA net (a+f)	0.071	0.062	0.017	0.055	0.030	0.042	0.085	0.092	0.049	0.081
j. Total other official net (b+g)	0.337	0.513	0.292	0.290	0.443	0.473	1.056	−0.162	0.587	0.398
k. Total official net (i+j)	0.408	0.574	0.309	0.345	0.473	0.514	1.142	−0.069	0.635	0.479

SOURCE: OECD, *Geographical Distribution of Financial Flows to Developing Countries*, several issues.

TABLE A10.9 Mexico's Agricultural Production and Trade Balance for Cotton and Wheat, 1945–59

	Cotton			Wheat		
Year	Cultivated area (thousands of hectares)	Production (thousands of tons)	Trade balance (thousands of tons)	Cultivated area (thousands of hectares)	Production (thousands of tons)	Trade balance (thousands of tons)
1945	365	97	+ 8	468	346	−311
1946	327	91	+ 47	415	340	−259
1947	332	95	+ 65	498	421	−279
1948	404	119	+ 48	576	477	−286
1949	548	207	+ 122	534	503	−242
1950	760	260	+ 162	644	587	−427
1951	883	287	+ 177	672	589	−378
1952	784	264	+ 229	593	512	−452
1953	753	273	+ 234	657	670	−249
1954	922	390	+ 259	764	839	−68
1955	1,058	508	+ 352	799	849	−9
1956	873	425	+ 421	936	1,242	−84
1957	915	477	+ 283	957	1,376	−19
1958	1,027	526	+ 340	839	1,336	0
1959	751	380	+ 405	937	1,265	0

SOURCE: "Consumos aparentes de productos agricolas 1925–1983," *Econotecnia Agricola* (September 1983).

TABLE A10.10 Federal Government Expenditures of Mexico, 1940–86 (percentage of GDP)

Year	Total expenditures	Current expenditures				Investment[a]	Other expenditures
		Total	Consumption	Transfers	Other		
1940	6.3	3.8	2.5	1.2	0.1		2.5
1945	5.1	3.3	2.1	1.0	0.2		1.8
1950	7.3	3.6	2.2	1.3	0.1		3.7
1955	9.0	4.4	2.8	1.5	0.1		4.6
1960	9.6	5.2	2.9	1.4	0.9	1.2	3.2
1965	9.8	6.4	2.6	2.6	1.2	0.6	2.9
1970	10.9	6.9	2.8	1.6	2.5	0.9	3.1
1975	15.5	9.5	3.9	3.5	2.0	1.2	4.9
1980	19.1	14.2	4.2	5.3	4.7	1.6	3.3
1981	22.7	16.0	4.6	4.9	6.4	1.5	5.2
1982	28.7	23.1	5.0	5.3	12.8	1.5	4.0
1983	27.1	23.1	3.9	5.8	13.3	0.8	3.2
1984	24.7	21.6	4.1	4.6	12.9	0.9	2.2
1985	25.4	21.6	4.0	4.7	12.8	0.9	2.8
1986	29.6	25.8	4.1	4.2	17.5	1.0	3.8

a. From 1940 to 1955, investment is included in other expenditures.
SOURCE: Banco de México, with information from Treasury Department, *Estadisticas de Finanzas Publicas.*

TABLE A10.11 Structure of Public Investment in Mexico, 1950–86 (percentage of total public investment)

Year	Agricultural development	Industrial development	Communications	Tourism	Public services	Administration and defense	Other
1950	19.3	29.8	40.4	0.0	9.6	0.9	0.0
1955	13.8	39.6	32.1	0.0	13.5	1.0	0.0
1950–59	15.6	31.5	36.9	0.0	13.6	2.3	0.0
1960	8.1	37.4	29.7	0.0	22.5	2.3	0.0
1965	8.6	44.3	26.1	0.0	18.5	2.5	0.0
1960–69	9.9	40.2	23.5	0.0	23.9	2.5	0.0
1970	13.4	38.0	18.9	0.0	28.1	1.6	0.0
1975	18.1	41.5	20.7	1.1	16.5	2.1	0.0
1970–79	15.9	41.2	19.8	0.8	19.7	2.2	0.4
1980	15.8	45.6	12.1	1.4	16.6	3.2	5.3
1981	13.8	49.5	13.7	1.2	15.4	3.5	2.9
1982	15.3	51.6	14.6	1.5	8.8	2.3	5.9
1983	9.1	48.3	21.1	1.2	17.0	2.8	0.5
1984	10.1	39.9	23.7	1.6	19.9	3.6	1.2
1985	9.2	41.6	22.0	0.6	21.1	4.5	1.0
1986	9.2	38.7	18.7	0.7	21.1	2.1	9.5
1980–86	11.8	45.0	18.0	1.2	17.1	3.1	3.7

SOURCE: 1950–79: *La Economía Mexicana en Cifras*, NAFINSA 1981; 1980–85: *Informe Presidencial*, various issues.

CHAPTER 11

JOSÉ ANTONIO OCAMPO

Foreign Assistance and Economic Development in Colombia

With only limited help from foreign assistance, Colombia has established a notable record of economic management and growth in the postwar period. It has been a democracy since 1958, and its moderate macroeconomic policies permitted it to grow an average of 4.8 percent per year (2.1 percent per capita) from 1945 to 1987.

Until the mid-1980s, foreign assistance made substantial contributions to Colombia's economic development. It played an essential part in the construction of a sizable public infrastructure; it provided crucial foreign exchange in the late 1950s and most of the 1960s; it supported the 1967–74 boom; and it helped build a system of modern economic analysis, planning, and policy-making. Moreover, the access to multilateral lending facilitated the transition from U.S. bilateral aid to commercial bank lending in the 1970s.

Despite these positive contributions, foreign assistance has also had adverse effects on economic development. In the critical years of foreign exchange strangulation in the 1960s, the irregular supply of funds from donor agencies was one of the major factors in the instability of economic

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policy. Tied-aid clauses, requiring purchases from donor sources, also became a subject of heated controversy in the late 1960s. And although foreign assistance has encouraged higher investment rates with no apparent adverse effect on domestic savings, it has biased the choice of public sector investment toward those sectors having greater access to foreign resources and created inflexibilities in foreign exchange management, and may have induced a higher than optimal import coefficient of public investment.

Colombia was not immune to the overborrowing tendencies of the late 1970s and early 1980s, but it kept ratios considerably lower than those in other Latin American countries. Despite this record, Colombia has recently experienced serious difficulties in renewing access to private capital markets on a truly voluntary basis. Thus, multilateral and bilateral institutions have been crucial in maintaining positive capital flows to the country since the outbreak of the Latin American debt crisis. Colombia's experience suggests that since a country may lose access to commercial lending for reasons beyond its own control, the progression from aid to commercial capital flows may not be an irreversible process.

This chapter analyzes Colombia's experience with foreign assistance in the postwar period. The first section presents general background information on economic, social, and political development in this period. The second considers the macroeconomic context and the role of external financing during major phases of economic development in the past four decades. This section emphasizes balance of payments policies, since the management of foreign exchange shortages and booms has figured prominently in postwar economic policy. The third section analyzes the sectoral use of external resources and the effects of economic assistance on savings, investment, and other domestic variables, as well as its qualitative effects on economic policymaking. The final section considers Colombia's prospects in the face of current conditions in international capital markets.

General Development and Political Trends

Colombia's first major macroeconomic boom in the 1920s was based on the rapid expansion of coffee and oil exports and significant inflows of foreign capital for public investment in the infrastructure. In the 1930s, the sudden interruption of capital flows precipitated a major crisis; in response Colombia declared a moratorium on its foreign debt repayment and began a phase of rapid import substitution. By the end of World War II, Colombia had built up both competitive export activities and an incipient manufacturing sector that produced light consumer goods and some standard intermediates (Ocampo and Montenegro 1984: chs. 1 and 2). Thanks to the favorable renegotiations of the foreign debt in 1940–42 and 1948, the country was also free of its debt overhang. In fact, with its significant accumulation of foreign exchange reserves during the war, Colombia was actually a net creditor in

the early postwar period (Ocampo 1988). The economy, however, remained largely traditional, with nearly two-thirds of the population living in rural areas, more than 40 percent of GDP produced in agriculture, and a per capita GDP in the lower range of middle-income countries as classified by the World Bank.

Although rapid by historical standards, Colombia's postwar economic and social development has been no faster than average for the Third World. Between 1945 and 1987, GDP increased by a factor of 7 and per capita GDP by a factor of 2.4. The corresponding growth rates—4.8 and 2.1 percent—are far from spectacular, and indeed are quite close to average for the Third World or Latin America. Growth was accompanied by fairly rapid urbanization—67 percent of the population lived in urban areas by 1985—and an increasing share of GDP in secondary and service activities (see Table 11.1).

The population grew by slightly over 2 percent in the first half of this century, up from 1.5 percent in the nineteenth century. With falling mortality rates, population growth accelerated to over 3 percent in the third quarter of the century, but beginning in the mid-1960s, a sharp decline in fertility caused population growth to fall to 2.1 percent in the 1973–85 period and 1.7 percent in recent years. The decreasing mortality rates increased the expected life span at birth from 30–34 years in the early 1900s to 49 years in 1951 and 62 years in 1981. Rural mortality rates remained high, however, reflecting the uneven coverage of the health system (Flores et al. 1987; Vivas 1987).

Education levels in Colombia rose beginning in the 1950s, when the first massive school programs were started. Between 1951 and 1985, the percentage of the population over age fifteen with no education declined from 42 to 12 percent; the percentage with some secondary or university education simultaneously increased from less than 10 percent to almost 40 percent. The illiteracy rate for the population over age ten fell from 39 percent to 12 percent, but remained relatively high in rural areas (see Table 11.1).

Income distribution remained skewed in the postwar period, reflecting the weak redistribution policies. Major studies indicate that a secular worsening of income distribution extended from the 1950s (or even the 1930s) to the early 1970s. By then, the top 10 percent of urban households were receiving some 38–40 percent of urban income, and the poorest half, 16–19 percent; the top 10 percent of rural income recipients, including absentee landlords, received 57 percent of rural income. In the second half of the 1970s, distribution in urban areas improved, particularly if personal rather than household data are used. This period was followed by a relative stabilization in the 1980s. Currently, urban household income distribution is similar to estimates for the mid-1960s: the top 10 percent receive 35–36 percent of urban income and the poorest half, 19 percent. Comparable rural estimates are less abundant, but they also indicate an improvement of income distribution from the early 1970s to the early 1980s.[1]

TABLE 11.1 Major Social and Economic Indicators for Colombia around Census Years, 1951–85

Indicator	1951[a]	1964[b]	1973[c]	1985[d]
Population				
Total (millions)	11.5	17.5	22.9	29.3
% urban[e]	38.7	52.0	59.3	67.2
Growth rate between census years (%)	2.2[f]	3.2	3.1	2.1
Education (% among population 15 years or older)[g]				
None	41.9	27.1	20.8	12.4
Primary	48.6	58.6	54.5	48.8
Secondary[h]	8.8	13.2	21.9	32.7
University	0.7	1.1	2.6	6.1
Illiteracy rates (% in population 10 years or older)				
Urban[f]	21.3	14.4	9.9	7.2
Rural	50.5	40.6	31.1	23.4
Total	38.5	26.6	17.7	12.2
Life expectancy at birth (years)				
Urban	n.a.	59.4	60.9	63.8
Rural	n.a.	56.0	56.5	58.3
Total	48.7	58.6	59.8	62.1
Child mortality (per thousand)				
Urban	n.a.	76.4	68.5	53.5
Rural	n.a.	95.3	91.6	81.0
Total	n.a.	81.0	74.1	60.9
Employment structure (% of workers)				
Primary sector	55.5	48.9	35.2	33.8
Manufacturing and construction	15.8	17.1	22.4	21.4
Services	28.7	34.1	42.5	44.8
GDP structure at 1975 prices (%)				
Primary sector	36.8	32.0	26.2	23.9
Manufacturing and construction	20.2	23.5	26.1	25.0
Dynamic services[i]	10.7	13.0	15.4	18.3
Other services	32.2	31.5	32.4	32.7

NOTE: n.a. = not available. Totals may not add due to rounding.
a. 1950–54 for GDP structure.
b. 1966 for life expectancy and child mortality rates; 1960–64 for GDP structure.
c. 1971 for life expectancy and child mortality rates; 1978 for employment structure; 1970–74 for GDP structure.
d. 1981 for life expectancy and child mortality rates; 1984 for employment structure; 1980–84 for GDP structure.
e. Refers to population living in the municipal heads.
f. 1938–51.
g. Refers to population with some education at the indicated level.
h. Includes technical education.
i. Public services (electricity, gas, and water), financial activities, transportation, and communications.
SOURCE: Population, education, and illiteracy rates: population censuses. Life expectancy and child mortality: 1951, Vivas (1987); other years, Flores et al. (1987). Employment structure: Misión de Empleo (1986). GDP structure: National Accounts, Banco de la República (1950–70), and the Departamento Administrativo Nacional de Estadística (1970–86).

Studies on poverty trends are, unfortunately, scarce, particularly if the household rather than the individual is the unit of analysis. The methodology developed by Carrizosa (1987) combines data on personal incomes with dependency and employment rates to estimate the ability of poor, employed individuals (construction workers and unskilled rural laborers) to support their families. These estimates indicate little or no fall in poverty levels from the 1950s to the early 1970s. In the second half of the 1970s, however, poverty levels improved considerably. These conclusions are consistent with both trends in income distribution and estimates by Carrizosa on changes in per capita food consumption. Until the early 1970s, per capita food consumption marginally decreased; in the second half of the 1970s, it grew significantly. This result also agrees with the improvements in nutrition levels in 1972–81 that have been identified in recent studies. Nonetheless, malnutrition continues to affect the poorest 20 to 30 percent of households in urban areas and a slightly lower proportion in the countryside (Uribe 1987).

The reasons for the rapid improvement in income distribution and poverty indicators in the second half of the 1970s are the subject of controversy. In particular, it is unclear what role, if any, macroeconomic policies played. Booming demand for labor in the countryside due to rising coffee incomes (see next section) and falling labor surpluses in rural areas resulting from previous migration to the cities are certainly important factors. In urban areas, significant changes in the relative supply of skilled and unskilled laborers may explain the rapid fall in wage differentials (Misión de Empleo 1986: ch. 3). Finally, the fall in dependency rates and better overall employment opportunities meant that an increasing proportion of household members became income earners.

On the political front, Colombia faced a transition in 1946 from the Liberal party, which had ruled the country since 1930, to an elected Conservative government. In April 1948, after the assassination of Jorge Eliécer Gaitán, the head of the Liberal party and a popular urban leader, an undeclared civil war—called simply *La Violencia* in Colombia—broke out throughout the country. In this unstable political climate, the Liberal party refused to participate in the 1950 presidential elections for lack of political safeguards, and a new Conservative government was elected. This regime was overthrown in 1953 by a military coup, interrupting more than four decades of elected governments. In 1957, the military president was in turn overthrown by a transitional military junta, and the two dominant political parties joined in a "National Front," through which they agreed to alternate the presidency and share power in the administration, the Congress, and the judiciary. The first National Front president was elected in 1958.

Political conditions during the first two governments of the National Front (1958–66) were extremely difficult. The bipartisan government was not successful in demobilizing the Conservative and Liberal guerrillas. Some of them evolved into *bandoleros* (bandit gangs) and were severely repressed in the first half of the 1960s. In the aftermath of the Cuban Revolution, a number

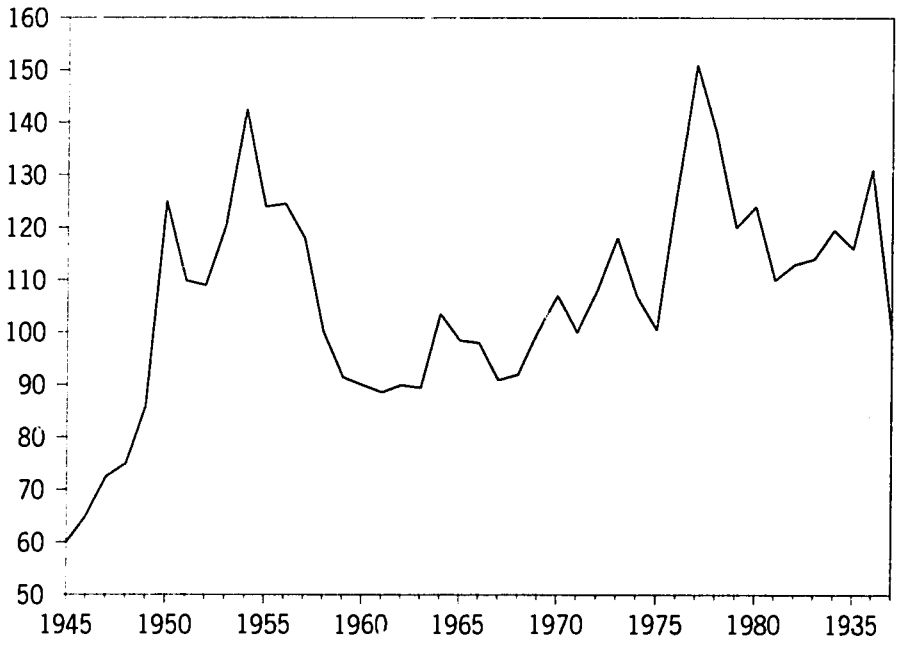
of them also became leftist guerrillas. They were soon joined by new armed groups of a more urban extraction, creating an increasingly complex network of guerrilla organizations. Despite this threat, the National Front was successful in its attempt to stabilize a restricted democratic regime. This political arrangement formally ended in 1974, when the first unrestricted presidential election since 1946 was held. In many ways, however, the National Front lasted until 1986, when the first one-party government in more than three decades was elected. Even today, with the division of judicial power, an element of the National Front remains.

Since the late 1970s, the country has been facing renewed violence created both by guerrilla activities and by narcotics trafficking, leading the country into the most severe social and political crisis since the days of *La Violencia*. The crisis has deepened in recent years, despite the attempts at an ambitious peace process started by the 1982–86 Conservative government, and continued in a somewhat different form by the current Liberal administration.

External Financing and Economic Development

Macroeconomic behavior in the postwar period has been significantly affected by oscillations in world coffee prices. Figure 11.1 shows five major

FIGURE 11.1 Colombia's Terms of Trade, 1945–87 (1975 = 100)



SOURCE. National Accounts of ECLA (for 1945–50), Banco de la República (for 1950–70), DANE (for 1970–86), and ECLA foreign trade indexes (for 1987).

phases in the evolution of relative export prices: (1) a period of rapid improvement of terms of trade, which peaked in 1954 but remained high until 1956; (2) a phase of collapse (1957–59), followed by low relative export prices during most of the 1960s; (3) a period of slowly improving terms of trade beginning in the late 1960s and ending in 1974; (4) the coffee boom of the second half of the 1970s; and (5) a period of low relative terms of trade in the 1980s, which was temporarily interrupted in 1986. An association between economic growth and the evolution of the terms of trade is suggested by the periodization of the business cycle in Table 11.2. However, the relationship between these two variables has also reflected the quality of economic policy in the different periods.[2]

The early postwar boom (1946–56). Between 1946 and 1956, the adequate supply of foreign exchange provided the resources for economic expansion. This favorable condition was highly dependent on rising coffee prices, as exports grew very slowly because of the aging of coffee plantations, violence in rural areas, and falling production of alternative export products,

TABLE 11.2 Economic Indicators during Major Phases of the Business Cycle in Colombia, 1946–87 (annual % growth rates, except when indicated)

Indicator	1946–56	1957–67	1968–74	1975–80	1981–85	1986–87
Foreign trade						
Coffee as % of exports (end year)	74.9	62.1	46.4	51.4	45.0	29.2
Export quantum	2.3	3.5	4.8	7.1	1.4	20.6
Purchasing power of exports	9.3	0.6	7.2	10.0	-0.3	11.8
Import quantum	9.3	0.1	9.2	8.0	-1.5	-0.8
Growth						
Industrial production	8.4	5.6	8.3	4.0	1.0	7.0
GDP	5.1	4.5	6.5	4.8	2.1	5.1
GDP per capita	2.4	1.2	3.4	2.6	0.2	3.3
GDP per capita at end year (1975 US$)	377	431	546	639	645	689
Capital accumulation (fixed capital)						
Investment rate	21.6	17.0	16.6	15.8	17.3	15.8
Growth of capital stock	7.1	3.9	4.7	4.7	4.8	4.1
Marginal capital-output ratio						
Gross	4.19	3.89	2.55	3.20	8.18	2.99
Net	2.89	2.18	1.49	1.91	5.02	1.64

NOTE: Calculations for capital accumulation assume a rate of depreciation of 2% for construction and 5% for machinery and equipment, and an initial capital-output ratio (in 1925) of 1.75.
SOURCE: Coffee as % of exports: 1956 and 1967, exports of goods from Departamento Administrativo Nacional de Estadística (DANE), "Anuarios de Comercio Exterior"; nonmonetary gold according to Banco de la República balance of payment statistics; since 1974, balance of payment statistics. Export and import quanta and purchasing power of exports: National Accounts of the Economic Commission for Latin America (ECLA) (1945–50), Banco de la República (1950–70), and DANE (1970–86); 1987 from ECLA foreign trade indices. Growth: National Accounts of ECLA (1945–50), Banco de la República (1950–70), DANE (1970–86), FEDESARROLLO (1987). Population estimates based on adjusted census data. Capital accumulation: National Accounts, as indicated above, and author's estimates of capital stock.

TABLE 11.3 Major Sources of External Financing for Colombia, 1946–86 (millions of U.S. dollars)

	1946–56	1957–61	1962–66	1967–70	1971–74	1975–78	1979–82	1983–86
Public sector (medium and long term)[a]								
U.S. Export-Import Bank	7	115	-103	22	-10	-13	34	500
USAID		2	235	282	205	23	-65	-84
World Bank	60	35	149	115	208	189	596	1,202
IDB			27	105	120	109	223	753
Other bilateral and multilateral			16	21	56	79	242	743
Commercial banks and suppliers	51	-30	53	23	289	298	2,174	2,539
Bonds	-20	-19	-17	-11	33	-9	-22	23
Valuation changes[b]				-14	-21	7	125	-778
Subtotal	97	103	358	543	880	683	3,307	4,898
Public decentralized agencies (short term)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	379	-687
Direct foreign investment	121	8	144	179	117	156	719	2,656
Domestic financial sector	238	-138	49	146	438	-45	1,070	-778
Nonfinancial private sector	65	6	396	95	143	171	1,216	333
Banco de la República (short term)	35	92	21	-42	-87	-8	-9	32
Total financing	556	72	969	921	1,491	957	6,669	6,454
Memo items								
Change in gross international reserves	-33	26	-27	113	179	2,057	2,400	-1,381
Current account deficit	444	7	709	693	1,140	(782)[c]	3,991	5,837
Exports (goods and nonmonetary gold)	5,040	2,640	2,722	2,615	4,392	9,819	14,490	16,067
Current account deficit/exports (%)	8.8	0.3	26.0	26.5	26.0	(8.0)[c]	27.5	37.5
External financing/exports (%)	11.0	2.7	35.6	35.2	33.9	9.7	46.0	40.2
External financing/GDP (%)	1.3	0.4	3.5	3.6	3.7	1.3	4.6	4.1
Foriegn aid/GDP (%)	n.a.	0.3[d]	1.1	1.9	1.1	0.3	0.2	0.2[e]

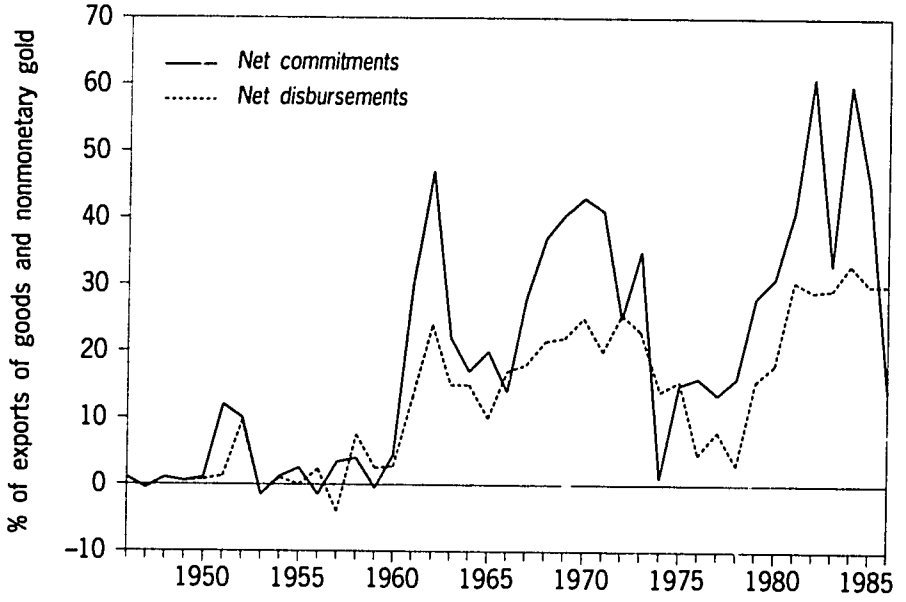
NOTE: n.a. = not available. Blank indicates zero.
a. Includes Banco de la República medium- and long-term debts and private debts guaranteed by the public sector.
b. Changes in dollar valuation of debts associated with fluctuations in international exchange rates.
c. Current account surplus.
d. 1960–61.
e. 1983–84.
SOURCE: Ocampo (1988) from Banco de la República debt tables and balance of payment statistics, World Bank (1972), and OECD data on aid flows.

particularly gold—and inflows of foreign capital were limited. External financing represented only 11 percent of export earnings and 1.3 percent of GDP; it was highly concentrated in direct foreign investment in the early postwar period and in credit financing for the private sector in the last phases of the boom (see Table 11.3 and Figure 11.2).

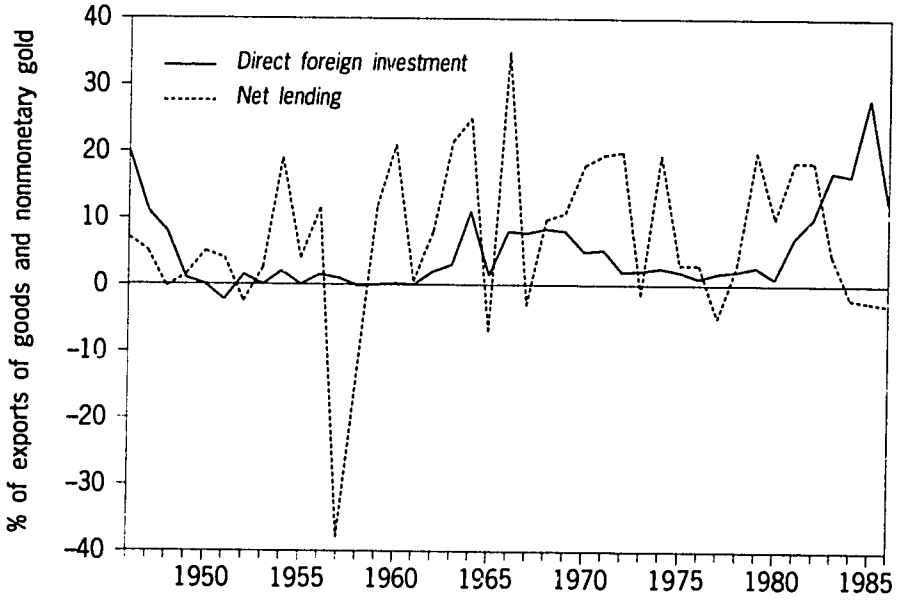
High export income facilitated a rapid increase in private capital stock (see Table 11.2). The high investment coefficient typical of the period was associated with fast growth in manufacturing and in the use of automobiles, but also with the repressed demand for imported capital goods that had built up during the 1930s and 1940s. Indeed, despite rising coffee prices, high

FIGURE 11.2 Colombia's External Financing, 1946–86

a. Public sector financing



b. Private sector financing



SOURCE: a. Net commitments: Banco de la República debt tables. Net disbursements: 1950–59, World Bank (1972); 1960–86, Banco de la República. b. Direct foreign investment and net lending 1946–70: Banco de la República balance of payments statistics. Net lending 1971–86, Banco de la República debt tables.

TABLE 11.4 Colombia's Foreign Debt and Debt Ratios, 1945–87

Year	Nominal (millions of U.S. dollars)		Real (millions of 1980 U.S. dollars)		Debt ratios	
	Total debt	Net debt[a]	Total debt	Net debt	Debt/exports[b]	Net debt/exports[b]
1945	135	-42	619	-193	0.85	-0.27
1956	642	498	1,529	1,186	0.96	0.75
1961	628	457	1,521	1,107	1.32	0.96
1966	1,403	1,259	3,865	3,468	2.63	2.36
1970	1,930	1,672	5,079	4,400	2.49	2.15
1971	2,164	1,899	5,606	4,920	2.92	2.56
1974	3,382	2,934	5,403	4,687	2.32	2.02
1978	4,417	1,924	5,341	2,326	1.37	0.60
1980	6,809	1,389	6,809	1,389	1.58	0.32
1982	10,271	5,378	9,466	4,957	3.13	1.64
1985	14,080	11,767	13,617	11,380	3.72	3.11
1987	15,401	11,918	16,127	12,480	2.88	2.23

a. Debt minus gross international reserves.
b. Goods and nonmonetary gold.
SOURCE: Ocampo (1988), based on Banco de la República debt tables, balance of payments statistics, and international reserves. Deflator: Colombian import price index (in U.S. dollars), according to the Economic Commission for Latin America (1945–55) and the International Monetary Fund (1955–87).

investment demand generated continuous strains on the balance of payments, hindering economic growth during these years. As the 1948 and 1951 devaluations did not significantly increase the real exchange rate (see Figure 11.3), the government had to rely on strong import controls and restrictive monetary and fiscal policies to maintain the balance of payments equilibrium. Attempts to ease controls in some years, particularly 1945–46 and 1954, forced the authorities to reestablish drastic import rationing and aggregate demand policies. It is unclear whether this *stock* disequilibrium could have been better managed by a more active exchange rate policy, as suggested by Lauchlin Currie, the head of the first World Bank Mission in 1949–50. It can be argued that, in spite of adverse effects on export diversification, the overvalued exchange rate functioned as a second-best solution, whereby coffee growers subsidized private investment in dynamic new sectors. A similar process in the face of devaluation would have been possible only with high taxes on coffee income, a policy with bleak political prospects, given the resistance of the highly powerful coffee growers to similar (and weaker) experiments after the 1933 and 1951 devaluations.

Although the country faced only a moderate net external debt at the end of the boom (see Table 11.4), substantial commercial arrears accumulated in 1955 and 1956. By December 1956, the short-term private commercial debt was equivalent to 260 percent of Banco de la República gross international reserves. Moderate coffee and noncoffee public sector deficits (Figure 11.3) were also placing increasing pressure on the money supply. Existing disequilibria were the backdrop for the stabilization program of 1957, which

included a sharp devaluation, correction of fiscal imbalances, and renegotiation of commercial debt.

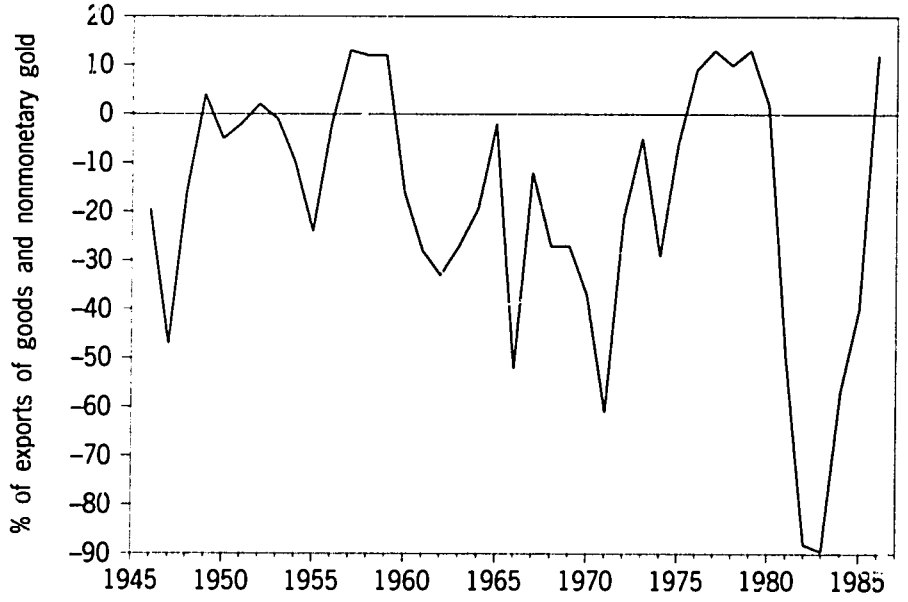
The decade of foreign exchange strangulation (1957–66). The stabilization program of 1957 initiated a decade of foreign exchange strangulation. Economic authorities faced falling and later scant export revenues. Political conditions were also difficult, because of the impact of the Cuban Revolution and the expectations raised by Colombia's return to democracy in 1958. A strong labor union movement generated significant pressure on urban wages, which became a basic constraint on effective exchange rate adjustments, and was successful in postponing some fiscal reforms. At the same time, the rise of leftist guerrilla movements pressured a reformist response from the establishment, reflected in major social programs (such as education, health, and housing) and a weak attempt at agrarian reform. The unstable political climate of this period also played a role in the relatively high levels of foreign assistance Colombia received under the Alliance for Progress.

The strategy followed by economic authorities after 1958 has been generally characterized as a second phase of import substitution. The 1959 and 1964 tariff reforms strengthened protectionist policies (Martínez 1986). Direct import rationing was also on the rise during most of the period. The government directly contributed to the creation of new manufacturing sectors through the Industrial Development Institute. The development banks were also created in the late 1950s to finance new private endeavors, and the 1960 tax reform granted important incentives to new investment, particularly in import-substitution activities.[3] Following the traditional stereotype of this policy regime, the short-term exchange rate was kept overvalued, despite periodic readjustments of the dual or multiple exchange rates (1962 and 1965).[4] This was, however, largely a reflection of structural imbalances in external accounts rather than a lack of adjustment in relative prices. In fact, the 1957 devaluation was effective in generating a 66 percent real devaluation for imports, excluding the effects of higher tariffs, quotas, and import deposits (see Figure 11.3). The real depreciation of the currency was even stronger for nontraditional exporters (73 percent), as they were allowed to sell their export earnings at one of the preferential exchange rates typical of the period. They also benefited from a limited drawback mechanism starting in 1957 and were granted direct tax incentives in 1960.

Although growth was concentrated in production for the domestic market, the industrialization pattern overcame most biases of similar policies in other countries. In the late 1960s, traditional manufactures were not significantly overpriced in the domestic market, despite high nominal tariffs and restrictive quotas. Overall, effective protection for manufacturing was then relatively low by Latin American standards (25 percent), and the share of "middle" and particularly "late" industries in GDP remained significantly

FIGURE 11.3 Macroeconomic Indicators for Colombia, 1945–87

a. Current account deficit



b. Real import exchange rate

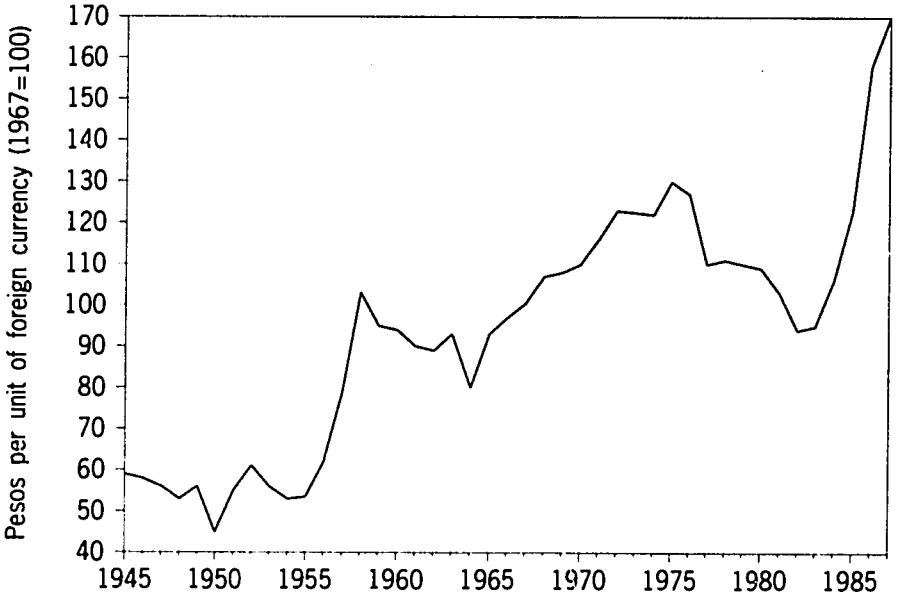


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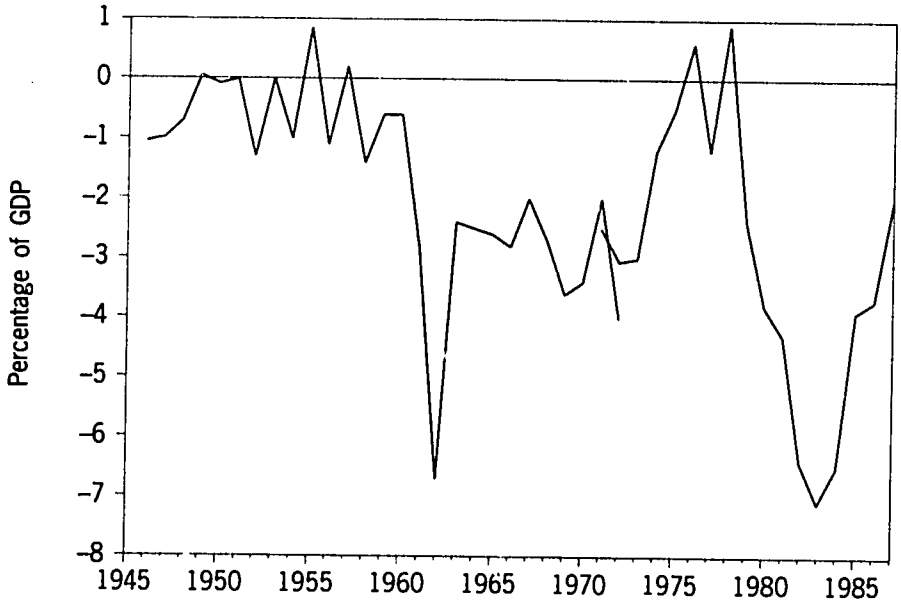
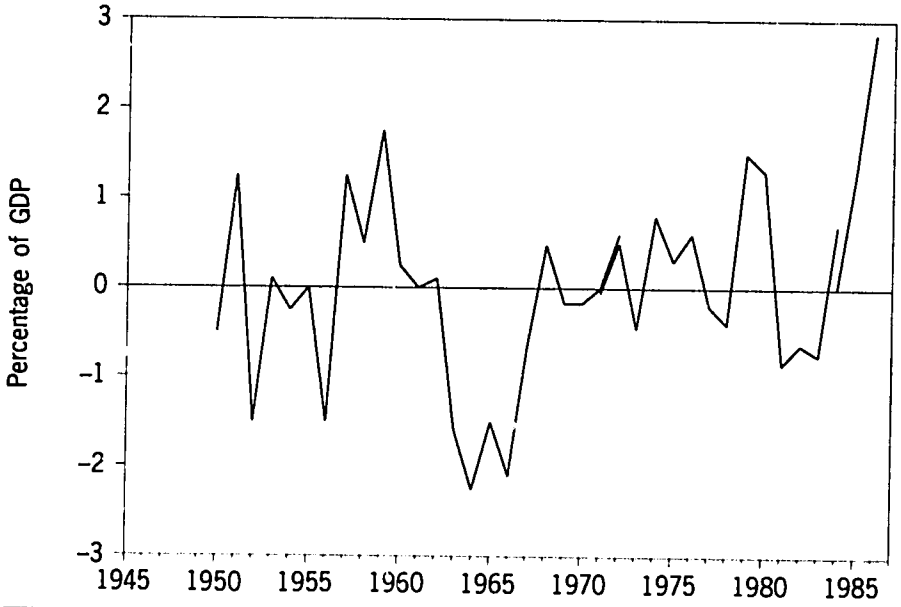
FIGURE 11.3 (continued)

c. Consolidated public sector surplus or deficit



d. Coffee sector surplus or deficit



SOURCE: a. Banco de la República balance of payments statistics.
b. FEDESARROLLO. 1945–67: against U.S. dollar. 1967–87: against a basket of 22 currencies.
c. 1945–72: Estimated on the basis of net disbursements of foreign debt and net domestic borrowing. 1971–87: DANE National Accounts and estimates of the National Planning Office.
d. 1950–72: Estimated as value of exports minus value of the coffee harvest. 1971–86: DANE National Accounts and estimates of the National Planning Office.

lower than international patterns predicted (Hutchenson 1973; Echavarría et al. 1983; Syrquin 1987). Moreover, import substitution did not preclude significant export diversification. Coffee exports fell from 75 percent of total sales abroad (goods plus nonmonetary gold) in 1956 to 62 percent in 1967 (see Table 11.2). Noncoffee, nonoil primary exports increased 336 percent between 1955–59 and 1967, and manufacturing exports increased 290 percent between 1960–62 and 1967 (Villar 1983).

External financing underwent two distinct phases during this period. The early years, 1957–61, were dominated by the renegotiation of commercial arrears. At this time, overall net financing was low or nil. Private liabilities were, however, transformed into public debts, particularly in the form of government obligations with the U.S. Export-Import Bank (Ex-Im Bank) and Banco de la República short-term liabilities with the International Monetary Fund (IMF) and other institutions. With the birth in 1961 of the Alliance for Progress, a U.S.-sponsored program to promote Latin American development, bilateral and multilateral agencies took a leading role in external financing. The most important source of new funds in 1962–66 was the U.S. Agency for International Development (USAID), followed by the World Bank. A significant part of USAID financing during these years, however, was counterbalanced by repayments of medium-term credits contracted with the Ex-Im Bank during the years of conversion of commercial debts, thus reducing the net effect of U.S. bilateral assistance. Private financing was also important in 1962–66, as a result of both the recovery of direct private investment and renewed growth of commercial lending.[5] Total external financing was equivalent to 36 percent of exports and 3.5 percent of GDP, and the foreign debt of the country increased rapidly; by 1966 it reached the equivalent of 263 percent of exports—236 percent if gross international reserves are excluded—levels that the country had not experienced since the 1920s and early 1930s (see Tables 11.3 and 11.4).

Although capital flows were significant after the initial period of renegotiations, their erraticism was a major drawback, reinforcing the instability of both exchange rate policies and public investment and generating the stop-and-go policy pattern typical of this period (Díaz-Alejandro 1976).[6] After the large and rather unconditional outburst of new lending in 1961 and 1962—which fueled the fiscal deficit—net loan commitments fell significantly and became increasingly conditional on periodic negotiations with the IMF, the World Bank, and USAID. Net disbursements fell at a slower rate, as they benefited from credits contracted during the first years of the decade. From 1962 onward, foreign exchange management and deficits in noncoffee and coffee public sector finances (see Figure 11.3) were the focus of continual controversy between the Colombian government and the donor agencies. In 1965, the agencies led the country into one of the greatest fiascos in the history of economic policy, which has been admirably documented by Díaz-Alejandro (1976: ch. 7). Discontent with long delays in the import-rationing process and large differentials between the capital-market and the basic

exchange rates led the donor agencies to press for gradual liberalization accompanied by a transfer of goods from the preferential to the intermediate exchange rate that was created in September 1965 (an effective 50 percent devaluation). The experiment resulted in a record current account deficit and a foreign exchange collapse in 1966 (see Figure 11.3). The agencies then demanded a large open devaluation to correct the disequilibrium. The Colombian government refused, halted negotiations with the agencies in November 1966, and decreed import and exchange controls overnight. Soon after, in March 1967, it established a crawling peg and permanent exchange controls on all capital movements and current account transactions, and replaced the tax and exchange rate preferences for nontraditional exports with a tax-free subsidy and the differential coffee exchange rate with an ad valorem tax.[7]

The great expansion (1967–74). The adoption of the new foreign exchange regime was the prelude to the most successful performance of the Colombian economy in the postwar period (see Table 11.2). There was a gradual real devaluation throughout the period, which was probably an element of the success in exports. The size of the peso's real depreciation (25 percent between 1959–66 and 1968–74) was moderate, however, when compared to the permanent effects of the 1957 devaluation. Undoubtedly, a more important factor was greater flexibility in exchange rate management—on which foreign agencies had contradictory views[8]—that eliminated the instability of the real exchange rate typical of the previous decade (see Figure 11.3). In the context of a booming world economy, stability in the exchange rate and in special incentives for nontraditional exports accelerated the process of export diversification. By 1974, coffee made up less than 50 percent of Colombian exports. However, import-substitution policies were not dismantled, and stiff exchange controls were maintained. Import controls were very gradually liberalized in the late 1960s and early 1970s; even so, in June 1974 less than 30 percent of items in the tariff schedule were in the free licensing regime. Import tariffs were somewhat reduced in the early 1970s, but average nominal tariffs remained rather high (close to 50 percent in 1973).

Fiscal austerity was certainly not part of the story. Although coffee sector finances were brought under control, the noncoffee deficit actually increased over the critical years of the mid-1960s, reaching more than 3 percent of GDP by the latter part of the decade, and stabilizing at 2.5–3.0 percent of GDP in the early 1970s. Moreover, since the current income of the public sector increased rapidly during these years, government expenditure rose as a proportion of GDP (from 11.7 percent in 1960–64 to 14.1 percent in 1965–69 and to 17.6 percent in 1970–74, according to the Banco de la República National Accounts), and public investment rose as a share of total fixed capital accumulation (from 19.2 percent to 26.7 percent and to 29.6 percent in the same periods).

The greatest difference from the previous phase of external strangulation was the availability of external financing on an adequate and regular basis. Increased financing from USAID, the Inter-American Development Bank (IDB), and the World Bank was not counterbalanced by repayments to the Ex-Im Bank; thus net financing to the government grew. Favorable domestic conditions and the expansion of international capital markets also allowed the country to initiate the transition from aid to commercial bank lending. In 1972, as USAID approved the last sectoral loans to Colombia, the national government contracted the first credit in the Eurodollar market for general development programs. This increased inflow of resources to the government was reinforced by the renewed access of domestic financial institutions to external lending, which had been restricted since the crisis of the mid-1950s (see Table 11.3).

Overall, external financing stabilized near 35 percent of exports and 3.6 percent of GDP during the years of rapid economic expansion. Aid flows actually increased from 1.1 percent of GDP in 1962–66 to 1.9 percent in 1967–70 before falling again to 1.1 percent in 1971–74 and to low levels in the following years, when the country phased out USAID lending (Table 11.3). More important, external financing was free of the instability typical of the mid-1960s. The only sharp fluctuation of capital flows shown in Figure 11.2 was that experienced by net lending to the private sector in 1973, resulting from government policies to reduce the rapid accumulation of international reserves (Jaramillo and Montes 1977). Despite the significant inflows of foreign capital, debt ratios did not increase significantly in the late 1960s and early 1970s, except temporarily in 1971. The sharp acceleration of world inflation in the following years generated significant windfall gains for Colombia, which, together with the favorable evolution of the current account, induced a fall in real outstanding liabilities and debt ratios (see Table 11.4).

From a macroeconomic point of view, capital flows played three roles during this period. First, from 1967 to 1971, they financed the sharp deterioration of the current account that was associated with the excess import demands accumulated during the years of foreign exchange shortage. Indeed, in 1971 the current account deficit as a proportion of exports reached a new postwar peak (see Figure 11.3). Second, since repressed import demand was concentrated in capital goods, external financing also facilitated the early recovery of investment. Note, however, that the investment rate was not very high during these years and the marginal capital-output ratio declined significantly, indicating that the boom relied largely on a better use of the capital stock accumulated in previous periods (see Table 11.2). Third, external financing also facilitated the fiscal expansion of the late 1960s. At this time, and even in the early 1970s, nontraditional exports still represented a minor proportion of GDP, making it difficult to argue that the early part of the boom was in any sense export-led. On the contrary, it was largely an externally financed Keynesian recovery.

Finally, it should be pointed out that although macroeconomic policy ceased to be a major issue of confrontation with donor agencies in the late 1960s, a new issue temporarily came to the foreground in 1967: the costs of tied aid. Restrictions on the use of foreign exchange obtained from USAID had not been an effective constraint in previous years. In 1967 and 1968, however, USAID implemented strict "additionality" clauses in order to encourage new imports from the United States. The costs of additionality climbed from the equivalent of 10–15 percent of the value of eligible imports in 1967 to 30–35 percent in 1968, thus eliminating most of the grant element of USAID lending in the latter year. As a result of pressure by the Colombian and other Third World governments, restrictions were eased again in mid-1969 and tied aid ceased to be an important issue in relations with the donor community (Hutchenson and Porter 1972).

From coffee boom to crisis (1975–82). In 1974 the boom of the previous seven years came to an end. The new López administration, inaugurated in August 1974, adopted contractionary fiscal and monetary policies to reduce the inflation rate of some 25 percent that had appeared in 1973 and 1974, after one-digit inflation through the late 1960s and early 1970s. Falling coffee prices and the effects of world recession on nontraditional exports initially had an adverse effect on external accounts, but the Brazilian frost of mid-1975 boosted world coffee prices. The major preoccupation of economic authorities soon became the management of five consecutive years of booming coffee exports and current account surpluses (see Figure 11.3). Since it was decided from the outset that the coffee sector would not play the major role in the stabilization effort (real domestic coffee prices were raised significantly in the early part of the boom to accelerate technical renovation of plantations), fiscal austerity was enhanced, a harsh monetary policy was adopted, and devaluation was temporarily suspended in 1977, leading to a significant appreciation of the currency for the first time since the crawling peg had been adopted (Sarmiento 1982; Jaramillo 1979; Ocampo and Reveiz 1979).

An essential element of the stabilization package was also the adoption of strict controls on private capital flows. Controls particularly affected the domestic financial sector and induced a net capital outflow in 1975–78. Fiscal austerity reduced net borrowing by the national government, but its impact on decentralized national agencies and local governments and enterprises was not extensive. Most of the cut in net lending to the public sector was concentrated in USAID financing, the major source of capital funds for the national government. Overall, controls on foreign indebtedness were effective in reducing the nominal growth rate of the debt from 11.6 percent in 1966–74 to only 6.9 percent in 1974–78. As the 1974–78 rate was quite similar to world inflation, there was no real growth in the debt. Moreover, since the country was running consistent current account surpluses, all capital inflows were reflected in the accumulation of additional

international reserves. Thus, the debt/export ratio and particularly the *net* debt/export ratio declined substantially during this period (see Table 11.4).

The inauguration of the Turbay administration in August 1978 led to radically different macroeconomic and foreign debt strategies. The major macroeconomic elements of the new policy were the adoption of an expansionary public investment program, a contractionary monetary policy, and a significant liberalization of import controls. The expansionary fiscal policy was justified on developmental grounds: there was a need both to integrate the domestic market through a better transport system and to face the energy crisis through public investment in the electricity and oil sectors. Because the expansionary investment program was combined with rapid increases in public sector wages (largely to compensate reductions in 1972–77) and reduced national tax efforts, the consolidated noncoffee public sector deficit rapidly increased from virtual equilibrium in 1978 to 7.1 percent of GDP in 1982 (Figure 11.3). Given that the fiscal expansion was conceived to take place in an economy close to full employment, import liberalization and monetary control were thought to play an essential role in preventing the development of a new inflationary spiral. The government, however, aimed to stabilize the real peso-dollar exchange rate, and so the peso appreciated with the dollar in 1981 and 1982.

This new macroeconomic policy was accompanied by a sharp turnaround in the foreign debt strategy. As the administration conceived it, a large proportion of the expansion of public investment had to be externally financed. Although lending from multilateral institutions—particularly the World Bank—increased, the leading role in the public sector borrowing strategy was played for the first time in the postwar period by syndicated loans from commercial banks (see Table 11.3). Borrowing by the public sector on a large scale was accompanied by a sharp liberalization of controls on private foreign indebtedness. Private sector borrowing increased sharply after 1978, representing one-third of the peak levels of external financing in 1979–82 (Table 11.3).

As a result of this radical change in policy, foreign debt increased rapidly after 1978. Moreover, because of the high reliance on commercial bank lending, the exposure of private banks in the country increased from $2.0 billion (equivalent to 46 percent of the total debt) in 1978 to $6.6 billion (64 percent of the debt) in 1982, representing some 80 percent of net borrowing in the period. By 1982, the debt/export ratio had reached a new postwar peak. Nonetheless, as in 1979 and 1980, Colombia continued to run current account surpluses, and net debt actually decreased, reaching the equivalent of only four months of exports by 1980. Falling coffee revenue, together with the strong import liberalization and overvalued currency, resulted in new record current account deficits in 1981 and 1982 (Figure 11.3). The net debt/export ratio then started to deteriorate at a rapid rate (see Table 11.4).

With the exception of 1978, economic growth was not fast in the second half of the 1970s. Slower expansion particularly affected manufacturing,

which for the first time in the postwar period grew at a slower rate than aggregate GDP, and commercial agriculture. It also led to a significant reversal of efforts to diversify the export structure. These mild "Dutch disease" features, associated with currency revaluation and the contractionary effects of import liberalization, explain most of the slowdown after the 1967–74 boom.[9] The early 1980s witnessed a dramatic deterioration of economic conditions. As Colombia accumulated historically high external and fiscal deficits and faced a substantial deterioration of all debt indicators, it experienced the worst recession of the postwar period (see Table 11.2).

Adjustment and recovery (1983–87). Adjustment to existing disequilibria was implemented in two phases. The first relied on a traditional (by Colombian standards) combination of gradual devaluation, stronger exchange and import controls, larger export subsidies, and a series of tax reforms. These policies, which were adopted in 1983 and most of 1984, led to a reversal of current account disequilibria, a minimal turnaround of fiscal imbalances, and a temporary recovery of economic activity. In 1985 a more radical program was implemented; it centered on a sharp cut in the fiscal deficit and a rapid crawl of the exchange rate, combined with gradual import liberalization. External and fiscal disequilibria were further reduced, and economic growth slowed down temporarily (Junguito 1986; Garay and Carrasquilla 1987; Ocampo 1986; Lora and Ocampo 1986).

The adjustment policies were the backdrop for the acceleration of economic growth in 1986 and 1987, but the recent recovery was also associated with two largely exogenous events: the coffee boom of 1986 and the discovery of new oil fields beginning in 1983. These favorable developments allowed Colombia to run a current account surplus, to return to a net oil-exporting position in 1986, and to maintain a substantial overall trade surplus in 1987 despite the collapse of world coffee prices. Government policy was successful in consolidating the adjustment of external and fiscal accounts and in averting the adverse domestic effects of sharp movements in the coffee cycle.

A cursory look at Tables 11.3 and 11.4 seems to indicate that Colombia avoided the financial crunch experienced by most Latin American countries since 1982. Indeed, the country was able to increase its global debt at a fairly high rate—11.1 percent per year from 1982 to 1985—reaching record debt ratios by 1985. This impression is not confirmed, however, by a closer look at the facts. In particular, Colombia has not been able to capitalize on its historical record, or even its most recent and highly praised adjustment experience, to gain access to truly voluntary commercial bank lending. Like most countries in the region, Colombia has faced extremely scarce net resources from commercial banks since 1982. The exposure of the banks in Colombia increased by 17 percent between 1982 and 1986, from $6.6 billion to $7.7 billion—representing only 24 percent of net borrowing in the period. This modest increase has been accompanied, however, by a favorable shift in the

composition of the debt with these banks: short-term liabilities of public enterprises and the domestic financial sector have decreased, as medium- and long-term public sector obligations have increased (Table 11.3). On the other hand, although formal reschedulings have been limited to the private sector, negotiations with the banks have followed a pattern not unlike that experienced by other Latin American countries. New loans have been obtained after long and painstaking negotiations with major lenders, and the success of these deliberations has depended on strong political pressure by the United States, other developed-country governments, and the heads of major multilateral institutions. Moreover, the distribution of the loans among participating banks—on the basis of amortizations due and liabilities outstanding—indicate that they are, in fact, concealed refinancing operations. Further, banks have imposed both macroeconomic conditions (IMF surveillance in 1985–86, and presentation to the banks of the 1987 and 1988 IMF Article IV consultation reports) and specific conditions (recognition of the debts of Colombian banks' subsidiaries in Panama and adoption of policies favorable to heavily indebted private firms). Finally, although the terms of the new loans have improved in the last few years, they are worse than those obtained by other Latin American countries in recent reschedulings. For example, the so-called Concorde loan for $1 billion signed in January 1988 effectively has less than ten years of maturity and a 0.94 percent margin over the London Interbank Offered Rate (LIBOR), compared to 16.8 years and 0.89 percent obtained by other Latin American countries in the most recent round of multiannual reschedulings (see Ocampo 1988).

Because of the collapse of commercial bank lending, Colombia has relied since 1983 on two sources of funds for external financing. The first is direct private investment; this source, associated with large-scale oil and coal projects, reached record figures in 1983–86 The second is lending from multilateral and bilateral agencies. These agencies have actually *increased* the supply of funds to the country since the outbreak of the debt crisis, from less than $1.1 billion in 1979–82 to $2.7 billion in 1983–86 (see Table 11.3). Moreover, this supply has not only taken the traditional form of project financing, but has also involved disguised balance of payments loans under several "sectoral" headings (export promotion, agricultural development, support for the financial sector, industrial recovery, etc.), and has led to the design of a rollover mechanism managed by Banco de la República to accelerate disbursements. In this way, official lenders have assumed a new and unexpected role in the face of a regression in the transition from aid to commercial bank lending, thus preventing the country from becoming an unnecessary nuisance with regard to the debt crisis.

The Domestic Effects of Foreign Assistance

The sectoral use of external resources by the public sector. Following a pattern that dates from the nineteenth century, the public sector used the

TABLE 11.5 Sectoral Use of Public Sector Debt in Colombia, 1956–86 (millions of U.S. dollars)

Sector	1956 outstanding debt	1957–June 1961	July 1961–1966	1967–70	1971–74	1975–78	1979–82	1983–86
General financing[a]		78.0	220.0	202.9	163.4	86.4	1,159.5	543.3
Electricity and gas	26.5	75.9	136.5	173.4	211.5	441.1	2,141.2	1,678.0
Water and sewerage	4.3	8.1	26.6	32.9	105.0	27.0	161.5	131.6
Transport	89.0	-25.4	128.9	183.2	-8.5	74.2	434.5	1,194.0
Communications	29.4	-5.7	16.7	25.0	35.1	105.6	147.6	98.8
Social expenditure[b]			14.1	38.1	105.0	81.3	36.5	230.6
Development funds			39.1	81.9	94.3	241.2	31.7	142.3
Agriculture and rural development	19.3	-13.4	76.6	60.3	58.1	88.6	129.3	191.8
Mining	8.9	-6.6	-2.3	1.1	6.0	142.3	601.1	1,172.9
Manufacturing	12.2	-11.9	49.8	15.3	-16.2	-22.6	9.6	1.0
Housing[c]			57.0					
Urban development					72.0	53.8	37.9	78.7
Military			0.4	0.7	3.9	71.5	310.7	312.1
Other	11.5	-5.5	14.0	24.3	27.5	17.6	-21.9	20.9
Debt refinancing					71.1	113.5	194.3	82.1
Total	201.2	93.5	777.5	839.2	928.2	1,521.3	5,373.5	5,878.1

NOTE: Data refer to changes in total commitments. Blank indicates zero.
a. General budget financing, balance of payments and import financing, public administration, and bonds (since 1971).
b. Education, health, nutrition programs, and cultural services.
c. Included in other after 1978.
d. Excludes debt refinancing until 1961, bonds until 1970, and food aid through the whole period of analysis.
SOURCE: Banco de la República debt tables.

new credits obtained in the first decade of the postwar period largely to develop the transportation infrastructure. Electricity, the other sector favored by the World Bank, and telephone communications followed in importance (see Table 11.5). Together, these sectors absorbed three-fourths of public sector external borrowing until 1956. The remainder was essentially allocated to the Agrarian Bank (Caja Agraria) for credits to agriculture, and to the two most important nonfinancial enterprises created during the period—the government oil company (Ecopetrol) and the Paz del Rio steel mill.

From the late 1950s through the 1960s, program lending had a predominant role in public sector financing. General financing obtained during these years includes credits granted by the U.S. Ex-Im Bank during the years when commercial arrears were renegotiated and USAID program loans from 1962 onward. From 1962 to 1966, however, USAID loans had a reduced net financing effect, because of repayments of medium-term loans contracted with the Ex-Im Bank in the late 1950s. Thus, although general funds provided a large share of new credits, more than 70 percent of external financing was project or sectoral funding. While electricity and transportation continued to absorb a large proportion of new resources, one of the most important features of the 1960s was the increasing diversification in the sectoral use of

external resources. Most loans for the agricultural sector were used to increase domestic credit. External financing for the new development funds created at Banco de la República also added to credit. Government housing projects for the middle and lower classes received substantial external resources in 1961–66, as did the second-phase import-substitution sectors, which the government invested in directly.

The reduced role of general financing since the late 1960s reflects USAID's increased emphasis on sectoral rather than program loans, eventually resulting in the termination of program lending after 1972. The Colombian government tried to encourage new forms of program financing—particularly syndicated loans from commercial banks, bond issues, and program loans from the World Bank—but it could not avoid the trend toward increasing dependence on project financing. Nonetheless, sectoral diversification continued and became more pronounced, particularly in the early 1970s. Funding for education, health, water, sewerage, and urban development programs increased in the late 1960s and early 1970s. Resources for agriculture fell, however, and manufacturing and housing ceased to receive new loans, except those channeled through the development funds.

Since the mid-1970s, the most important trend in sectoral composition has been the increasing concentration of external financing in the energy sector—electricity and, more recently, oil and coal. Transportation and military equipment purchases have been the only other activities able to compete successfully for external resources. As a whole, these sectors received half of net lending in 1975–78, two-thirds in 1979–82, and three-fourths since the outbreak of the debt crisis, excluding refinancing operations (see Table 11.5). Social services—water, sewerage, and urban development programs—were hardest hit by this trend, although communications, development funds, and agriculture were also affected, particularly since the late 1970s, and manufacturing and housing received no new funds. Finally, lending for general development programs had a brief resurrection in the late 1970s and early 1980s, thanks to syndicated loans from commercial banks. During the recent crisis, however, general program lending was dealt a hard blow. Indeed, the only program loans that increased net lending in 1983–86 were, strictly speaking, sectoral loans—those granted by the World Bank to finance imports used in the production of nontraditional exports.

The domestic effects of external financing. The conventional criticism of foreign assistance is that it is a substitute for domestic savings and is thus partially used to finance consumption rather than investment. In the Colombian context, it has also been argued that external borrowing biases the composition of public investment away from desirable activities, that it increases the import content of public investment, and that it generates inflexibilities in foreign exchange management (see Londoño and Perry 1985; Sarmiento 1977).

TABLE 11.6 Effect of External Financing on Colombia's Domestic Saving and Investment, 1950–80

	Constant	External financing 1950–69	External financing 1970–80	Urban non-wage income	Average tax rate	Deviation of GDP on trend	Relative price of capital goods	Lagged dependent variable	R^2
Saving rates									
Coffee sector	0.11	−0.401[a]	0.334[b]						0.395
	(0.56)	(−3.35)	(1.87)						
Private non-coffee sector	−19.99[b]	−0.255	−0.718[c]	0.771[a]					0.270
	(−1.75)	(−0.91)	(−1.48)	(2.97)					
Total private sector	−20.78[b]	−0.598[b]	−0.431	0.716[a]				0.255[b]	0.523
	(−1.84)	(−2.23)	(−0.92)	(2.67)				(2.24)	
Public sector	−2.84[a]	−0.408[b]	−0.986[a]		0.600[a]				0.736
	(−3.18)	(−2.34)	(−4.94)		(8.43)				
Total saving	−23.78[b]	−0.575[a]	−0.566[c]	0.906[a]	0.135			0.283[a]	0.635
	(2.21)	(−2.49)	(−1.62)	(2.99)	(0.52)			(2.74)	
Investment rates[d]									
Private sector	6.20[b]	−0.136	0.323			0.333[b]	7.57[b]		0.352
	(1.86)	(−0.47)	(0.56)			(1.94)	(2.16)		
Public sector	2.31[a]	0.449[b]	0.125		0.128[b]			0.228[b]	0.596
	(2.71)	(2.40)	(0.66)		(1.71)			(1.98)	
Total investment	5.78[c]	−0.131	−0.081		0.286	0.278	10.16[b]		0.532
	(1.69)	(−0.57)	(−0.23)		(1.05)	(1.27)	(2.24)		

NOTE: All variables (except deviation of GDP on trend and relative price of capital goods) are expressed as a percentage of GDP at current prices.
a. Statistically significant at a 99 percent confidence level.
b. Statistically significant at a 95 percent confidence level.
c. Statistically significant at a 90 percent confidence level.
d. Public sector investment refers to "public construction," private investment to other forms of capital accumulation, including inventory accumulation.
SOURCE: All data, except external financing and coffee sector savings, are from Banco de la República National Accounts. External financing is from Ocampo (1988); dollar figures have been converted into pesos at average import exchange rates. Coffee sector saving is estimated as exports in pesos minus the value of the coffee harvest; it is thus assumed that the difference between these two variables is appropriated or financed by the National Coffee Fund.

Some evidence of the effects of external financing on domestic savings and investment is presented in Table 11.6. Financing rather than external savings (current account deficits of the balance of payments) is used as the explanatory variable in the analysis, as large fluctuations of foreign exchange reserves, particularly in the 1970s, have reduced the correlation between those two variables in the past. On the other hand, savings and investment data from Banco de la República National Accounts for the period 1950–80 are used. Unfortunately, National Accounts from the National Statitistics Department (Departamento Administrativo Nacional de Estadística, or DANE) for recent years cannot be used, as definitions are not consistent with previous data.

The econometric estimates differentiate the effects of external financing on domestic savings and investment rates in two different periods: one of foreign exchange "shortage" (1950–69) and one of "abundance" (1970–80).[10]

According to previous studies (Ocampo et al. 1985), additional independent variables in the savings equations include the share of urban nonwage income in total income and the average tax rate. In turn, the average tax rate, the deviations of GDP on its long-term trend, and the relative price of capital goods are included in the investment equations. Since investment is measured in current prices (as a share of GDP) and the demand for capital goods is price-inelastic in Colombia, the coefficient of the latter variable is expected to be positive.

Although the econometric estimates presented in Table 11.6 indicate a significant negative correlation between external financing and domestic savings, they cannot be taken simply as a sign of "substitution" in the traditional sense of the term. Rather, these results reflect the nature of countercyclical policy management in Colombia. The fairly high substitution factor obtained for private savings in the period of foreign exchange shortage is largely related to coffee sector finances; noncoffee private savings were not significantly affected by external financing during this period. However, although the large negative effect of external financing on public sector savings may be read as a sign of substitution in the correct sense of the term, it also reflects the countercyclical use of public sector finances to smooth the effect of coffee sector cycles. This is especially true of the 1970s, when government finances were very actively used to reduce the effect of the coffee boom on aggregate demand. Controls on public sector indebtedness, particularly by the national government, were thus accompanied by enhanced public savings efforts.

Given the overwhelming role of the public sector in external borrowing, it is not surprising to find that private investment has not been significantly affected by external financing in the postwar period, while public sector investment has been positively associated with foreign lending. The results presented in Table 11.6 indicate, however, that if the rate of public sector investment rather than its level is used as the dependent variable, this relation was only significant in the years of foreign exchange shortage. During this period, an increase of public sector borrowing by 1 percent of GDP was associated in the long run with an increase in the share of public sector investment by some 0.6 percent. In 1970–80 this increase fell to less than 0.2 percent and became statistically insignificant. These results are consistent with previous studies, which have shown a positive association between the level of public investment and external borrowing. However, contrary to what has been argued by Perry and his collaborators.[11] Table 11.6 does not show a strong complementarity between external financing and the domestic resources used to finance public sector investment (that is, a regression coefficient larger than 1).

Aside from the aggregate effects just mentioned, it has been argued that the lending policies of leading financial institutions bias the composition of public sector expenditure. In particular, it has been claimed that the inadequate supply of external financing for social services, combined with the

TABLE 11.7 Sectoral Use of Colombia's Public Sector Debt according to Lending Agency (percentage)

	Until 1970					1971–78 (net commitments)			1979–86 (net commitments)		
	USAID (1951–June 1970)	World Bank 1949–65	World Bank 1966–70	IDB commitments (Dec. 1970)	Total commitments (Dec. 1970)	World Bank	IDB	Total	World Bank	IDB	Total
General financing[a]	74.3			8.2	26.2	5.4	-1.4	10.2	29.2	-0.5	15.1
Electricity and gas	0.2	50.4	25.8	28.5	21.6	16.2	61.4	26.6	37.0	63.3	33.9
Water and sewerage	0.7		9.5	6.7	3.8	13.5	0.6	5.4	7.0	5.1	2.6
Transport		39.8	19.7	33.1	19.7	11.3	2.0	2.7	10.8	6.5	14.5
Communications			4.7		3.4	8.4	4.8	5.7	-0.5	-0.2	2.2
Social expenditure[b]	4.0		4.1	5.1	2.7	4.4	0.0	7.6	1.5	5.4	2.4
Development funds	3.2		18.3	4.1	6.3	30.1	7.0	13.7	0.8	3.8	1.5
Agriculture and rural development	13.7	2.4	17.8	7.9	7.5	5.8	7.9	6.0	10.2	5.7	2.9
Mining					0.1			6.1	2.8	2.9	15.8
Manufacturing		7.3		5.3	3.4	1.5	-3.6	-1.6	-0.2	0.0	0.1
Urban development						2.5	20.5	5.1	-0.1	7.7	1.0
Military					0.1			3.1			5.5
Other	3.8[c]			1.0	5.3	0.8	0.7	1.8	1.6	0.3	0.0
Debt refinancing								7.5			2.5
Total in millions of U.S. dollars	622.7	408.5	341.9	231.7	1,932.1	978.1	332.0	2,449.5	2,351.9	1,572.0	11,251.6

NOTE: Blank indicates zero.
a. General budget financing, balance of payments and import financing, public administration, and bonds (since 1971).
b. Education, health, nutrition programs, and cultural services.
c. U.S. dollar credits only.
SOURCE: USAID: *Briefing Papers on U.S. Economic Assistance to Colombia*, Table E, and Espinoza (1970: 295); World Bank, 1949–70: World Bank (1972), Annex Table 2.3; others: Banco de la República debt tables.

domestic counterpart funds required by lending institutions, crowds out desirable expenditure on these services. This argument is not entirely convincing; in the 1960s, the clear bias of World Bank (until 1965) and IDB lending toward infrastructure expenditure was counterbalanced by USAID program lending, as Table 11.7 indicates. Thus, there was a significant complementarity between major lending institutions. Moreover, in the late 1960s and early 1970s, the use of external resources was increasingly diversified, favoring social development programs, and the World Bank was included in this trend (see previous section and Table 11.7).

Since the mid-1970s, however, the increasing concentration of foreign resources in a few sectors was also a reflection of priorities established by the Colombian government, and not just a reflection of biases in lending institutions. Indeed, World Bank lending in 1979–86 was less biased toward electricity, transportation, and mining than was overall external borrowing in this period. The IDB lent disproportionately for electricity development, but it partially compensated for this by also lending large shares for water,

sewerage, social expenditure, and rural and urban development. Moreover, syndicated loans from commercial banks until 1982 also operated as a (certainly imperfect) substitute for program lending, giving the government considerable room in determining its expenditure pattern.

Thus, Colombia has not faced significant constraints in lending policies of major financial institutions until recent years. The collapse of commercial bank lending has considerably reduced general budget financing, and there is also a scarce, if not nonexistent, supply of funds for the social domestic-cost-intensive projects in which the Colombian government has become increasingly interested (such as rehabilitation of regions subject to political violence and programs to eradicate poverty). Therefore, the government has had to rely increasingly on sectoral loans from the World Bank and IDB, which are a very imperfect substitute for general development loans or the diversified lending pattern typical of the 1960s and early 1970s.

Project lending introduced other problems that became increasingly important in the 1970s and early 1980s. The first was the import bias of project financing. Generally, project lending provides resources that cover only the import component of specific projects. However, there are reasons to believe that the *availability* of this form of lending actually increases overall import demand in the economy, as there is no medium- or long-term financing for the purchase of domestic capital goods. Moreover, protection margins permitted by multilateral lenders are usually insufficient to compensate for the direct and indirect costs of tariffs on intermediate goods. These factors may largely explain the underdevelopment of "late" industries in Colombia relative to international patterns.

Project financing also generates significant inflexibilities in foreign exchange management. On the one hand, in periods of foreign exchange shortage, external financing is required to finance domestic-cost-intensive projects. On the other hand, in periods of foreign exchange abundance, domestic financing should be used increasingly to pay for imports. This problem was not very important in the 1960s and early 1970s, as USAID program lending, syndicated loans for general budget financing, and external resources for domestic sectors (agriculture, housing construction, and even social services) were available. The problem became serious, however, in the mid-1970s and particularly in the 1980s. During the coffee boom of the 1970s, as the government tried to control reserve accumulation, many public enterprises continued to borrow abroad in the absence of alternative sources of financing (see the section From Coffee Boom to Crisis). In turn, the lack of mechanisms similar to USAID program lending and external resources to finance domestic-cost-intensive projects, in addition to growing amortization costs and the refusal of the Colombian government to reschedule its foreign debt obligations, have generated increased financing difficulties in recent years. These problems are, no doubt, partly responsible for the slow

implementation of socially desirable projects to rehabilitate regions subject to political violence and, more recently, to eradicate absolute poverty.

The qualitative effects of foreign assistance on economic policy-making. Foreign advisers and assistance have significantly influenced the development of governmental institutions and economic analysis and policy-making in Colombia (Currie 1984; Cepeda and Mitchell 1977; Perry 1974; Urrutia 1986). The most important precedents in this regard were the two Kemmerer Missions of 1923 and 1931, which resulted in the development of a modern central banking system and fiscal practices in the 1920s and in tax reforms in the early 1930s. In the postwar period, the first World Bank Mission, headed by Lauchlin Currie, presented the first public investment plan and overall analysis of the Colombian economy. Soon after this mission, steps were taken to establish planning committees, the first of which was the Committee on Economic Development, led by Currie, which carried out fruitful work, particularly in the transport sector.

In the late 1950s, foreign missions contributed to the understanding of Colombian economic and social conditions. The Lebret Mission published the first comprehensive report on social conditions in the country. A joint mission from the Economic Commission for Latin America (ECLA) and the Food and Agriculture Organization (FAO) presented the first global analysis of the coffee sector's production conditions as part of a comparative study of the major coffee-producing countries. In the late 1950s ECLA also provided a new overall treatment of Colombian economic conditions. The most important development was, however, the drafting of the first official development plan of the country. The plan was presented in 1960 by the newly created National Planning Department, largely following ECLA advice. In the following years, the Harvard Advisory Missions helped considerably to strengthen the planning capacity of the Department. In the 1960s and early 1970s, a stock of highly trained economists was gradually built with foreign official and private support. The accumulation of domestic expertise led to the first Colombian-drafted development plans in the late 1960s and early 1970s. The growing stock of economists also improved the quality of economic analysis at other governmental institutions, universities, and research centers.

Other foreign missions also played an important role in the late 1960s and early 1970s. The Taylor, and especially the Musgrave, Missions had significant effects on the analysis of the Colombian tax system and on the reforms implemented in the 1960s and in 1974. Some missions, however, met with less success. For example, the ILO Mission on employment, headed by Dudley Seers, had little impact on economic policy.

In later missions, foreign advisers actually operated as heads of fundamentally Colombian endeavors, such as the Bird Mission on intergovernmental finances (1980–81) and the Chenery Mission on employment

(1985–86). Finally, although the World Bank's periodic analyses of the Colombian economy did not have the same impact as the 1950 Currie report, at least two of them—the Avramovic report of 1970 and the more recent study by Thomas (1986)—were published in the country and made important contributions to ongoing economic debates.

Another significant effect of foreign assistance was the development of extensive evaluation and follow-up procedures for public investment projects, practices that were almost unknown in Colombia until the 1940s. Moreover, these new procedures improved planning both at the national level and at the level of decentralized government agencies and local governments and enterprises (particularly in large cities). In fact, as the World Bank evaluation of its own activities in Colombia argued, this institution-building effect was one of the great virtues of project financing in the 1950s and 1960s (World Bank 1972). In 1970, and more recently in 1986, 70–90 percent of lending by the World Bank and the IDB was distributed to agencies other than the national government, whereas USAID lending was strongly concentrated in the national government (98 percent in 1970). More recently, commercial bank lending also had a similar though weaker bias toward flows to the national government. Finally, institution-building effects included the creation of new public bodies to coordinate efforts in the World Bank's two favorite sectors, transportation and electricity; the Colombian National Railways (1954), the National Road Fund (1967), the Utility Tariff Board (1968), the Electrical Interconnection Company (1967), and the National Electrical Financing Company (1982) are some of the most important examples.

Prospects

Despite low coffee prices and increasing service deficits, Colombia's current account deficit is expected to be moderate in the next few years (see Table 11.8).[12] Favorable prospects are partly related to the exchange rate adjustments of recent years—which have led to the rapid growth of industrial exports and a reduction of import demand—but, more important, to long-term investments in energy, which have paid handsomely in the last few years in terms of oil discoveries. In fact, oil accounts have gone from a $366 million annual trade deficit in 1981–84 to a $1,758 million surplus in 1987–92, or, if service transactions are included, from an annual deficit of $319 million to a $1,336 surplus. The net change is equivalent to 69 percent and 106 percent, respectively, of the overall expected improvement in the trade and current accounts. Since, according to the government, direct investment will finance a large proportion of the current imbalance, net indebtedness is expected to be quite modest, at $500 million a year, equivalent to 3 and 4 percent annual growth rates in gross and net foreign debt, respectively. This growth is consistent with a further fall in the net debt/export ratio and unchanged exposure of commercial banks.

TABLE 11.8 Balance of Payments and Financial Requirements for Colombia according to Official Projections, 1981–84 and 1987–92 (millions of U.S. dollars)

	1981–84	1987–92
Trade and services		
Exports[a]	3,362	6,599
Imports	4,645	4,868
Trade balance	-1,283	1,731
Nonfinancial services and transfers (net)	-406	-370
Financial services (net)	-682	-2,169
Financial requirements		
Current account deficit	2,371	808
Public debt amortizations	395	1,530
Multilateral	142	440
Bilateral	75	200
Commercial banks	115	770
Others[b]	63	120
Total financial requirements	2,766	2,338
Sources of financing		
Direct foreign investment	410	395
Other private flows (net)	107	-27
Public sector (medium and long term)	1,424	2,029
Multilateral	442	792
Bilateral	220	297
Commercial banks	629	752
Others[b]	135	189
Public sector (short term)	119	-21
Total sources of financing	2,060	2,377

a. Goods and nonmonetary gold.
b. Suppliers and bonds.
SOURCE: 1981–84: República de Colombia (1987a: Tables 2 and 10); 1987–92: República de Colombia (1987b: Appendix Tables 17 and 18).

Nonetheless, with large amortization payments falling due in the next few years, gross financial needs are substantial. As Table 11.8 indicates, public sector amortization payments will be four times higher than those typical in the early 1980s. Thus, if international reserves are to be kept at present levels, the public sector will have to borrow on a larger scale than it did in 1981–84. Amortization payments to commercial banks will be equivalent to total loans contracted with these agencies at the end of 1986. Amortization payments to official lenders, however, will be equivalent to only 40 percent of commitments from these institutions at the end of 1986.

The risks and costs implicit in the voluntary-financing strategy adopted by the government under these conditions has been subject to a heated academic and political debate since mid-1987.[13] Commercial bank resistance to granting new credits continues to be the overriding constraint. Indeed, the return to truly normal relations with the banking community seems remote

in the light of recent experience. Increasing dependence on multilateral institutions faces growing limitations, because of the shortage of funds held by these institutions (particularly the IDB), their already high exposure in Colombia, and some unfortunate strings attached (sectoral conditionality). The problem is further complicated by the fact that financing from these institutions is an inefficient way to obtain funds that are needed largely to rollover and pay interest on debts contracted since the late 1970s. In this context, it is natural that some sectors find the possibility of a global renegotiation of the debt or at least a rescheduling of public sector liabilities with commercial banks increasingly attractive.

Whether the voluntary-lending strategy continues depends on future developments in the Latin American debt scenario. Events in 1987 showed that the debt crisis may enter a confrontational stage if more aggressive solutions, such as partial write-offs and securitization of debts, are not adopted by Latin American creditors. If such solutions are to succeed, Colombia will have to rethink its commitment to the voluntary-lending strategy. Indeed, it would be greatly to the government's advantage to seek these unorthodox solutions, because a *certain* reduction in debt service obligations is more desirable than highly *uncertain* access to new commercial capital on a voluntary basis. Only the unfair threat of retaliation from multilateral institutions and the governments of the developed countries could prevent Colombia from pursuing these potential solutions.

CHAPTER 12

JOSÉ L. CARVALHO

Aid, Capital Flows, and Development in Brazil

Brazil is the largest country in Latin America, and its population of 135 million places it fifth among countries in the world. Although it is well endowed with natural resources, Brazil has pursued a development strategy based on industrialization rather than agriculture.[1] In the postwar period it has enjoyed a strong record of economic growth, with real GDP rising by at least 4 percent annually except for the periods 1963–65 and 1981–83. Brazil has attained this success with large inflows of foreign capital—mostly in the form of direct investment and commercial loans rather than concessional foreign aid—and now faces a serious debt problem.

In the 1950s and early 1960s Brazil achieved these growth rates while pursuing an import-substitution strategy, in which domestic industry was protected by high import tariffs and an overvalued currency. After a prolonged domestic political crisis in 1961–64, Brazil underwent a stabilization program, and import substitution was replaced by an export-promotion strategy favoring manufactured goods. This new program produced Brazil's "economic miracle," which lasted from 1968 to 1973, with an average annual GDP growth rate of 11.1 percent.

After the petroleum price shock of 1973, the trend toward liberalization ended, as the government returned to a reliance on import substitution.

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Brazil began to borrow abroad in order to maintain domestic consumption of oil, as well as to sustain a huge government investment program that included some noneconomical projects.[2] The second petroleum price shock and the rise of international interest rates in 1979 pushed Brazil into a severe recession in the early 1980s. By 1983 GDP growth fell to –2.5 percent and inflation was at 152 percent and rising. In response to changes in the international environment, Brazil managed to compress imports and expand exports, creating a trade surplus that barely covered foreign debt interest payments. In 1985 foreign debt reached 47 percent of GDP.

Although several studies have shown that inequality of income distribution has risen in Brazil during its development process, high GDP growth rates have also led to significant social mobility.[3] Since 1978, however, per capita GDP has presented a downward trend that will not only increase inequality, but also reduce social mobility.

Foreign capital has been an important source of development finance. Direct foreign investment—although it has at times been restricted from certain economic activities because of nationalistic pressures—has been significant both in financing development and in transferring technical expertise. Until the mid-1960s, loans from multilateral and official institutions were also important, while private loans predominated after the mid-1960s as restrictions on foreign borrowing were lifted.

As a case study, Brazil is noteworthy for several reasons. Although foreign aid to Brazil, primarily from bilateral donors, especially the United States, has never been large in dollar terms, it was most abundant during Brazil's foreign debt crises of the early and mid-1960s and early 1980s. Second, the pattern of aid also reflects the political interests of donors: flows were high precisely when Brazil faced challenges to its capitalist system in the early 1960s. Third, aid was given primarily for stabilization purposes rather than for development. Fourth, bilateral donors, especially the United States, have been most important. Finally, Brazil has a large foreign debt that is presenting economic difficulties.

This chapter will examine the conditions under which Brazil used foreign aid. The first three sections give an overview of postwar economic policy and performance in Brazil.[4] (All monetary amounts in this paper are given in 1980 U.S. dollars.) Brazil's postwar history has been divided into three periods, according to the development strategy adopted in each period. Next is a discussion of the volume of foreign aid Brazil received between 1960 and 1984 and a look at the sources of aid. Then we analyze the characteristics of aid to Brazil and the impact of aid on the economy. Finally, we consider Brazil's prospects for the future in the light of the debt crisis.

The Import-Substitution Strategy: 1947--64

Although the import-substitution process had started in the 1930s, it did not become an explicit development strategy until after 1950, when trade policy

aimed to protect domestic industry through import licensing. Tariffs were specific and had no economic meaning in terms of reducing imports until the reform of 1957, which introduced a new *ad valorem* tariff system and created a council (Conselho de Política Aduaneira) that could raise or lower tariffs when it deemed necessary. The exchange rate was fixed by the government and subject to large devaluations from time to time, until a regime of multiple exchange rates was introduced in the early 1950s.

Table 12.1 presents some economic indicators for the entire period and averages for four subperiods. The period from 1947 to 1964 was characterized by expansionary monetary and fiscal policies and increasing inflation, which rose from 5.9 percent in 1948 to almost 90 percent in 1964. Only on two occasions, in the early 1950s under Getúlio Vargas and in the early 1960s under Jânio Quadros, were short-lived efforts to reduce inflation undertaken.

The real rate of GDP growth averaged a strong 6.8 percent a year; it was around 8 percent a year from 1956 to 1960 and dropped sharply in 1963. Per capita GDP presented an inverted-U shape with a peak in 1954. Savings and investment rates fluctuated between 12 percent and 17 percent of GDP, and government savings were as high as 4 percent of GDP in the 1947–49 and 1958–60 periods.

As Getúlio Vargas took office as president in 1951, nationalism generated moderate pressure against foreign investment; borrowing abroad was considered a superior way of financing the increasing balance of payments deficit.[5] The attitude toward foreign capital became more favorable during President Kubitschek's term in the late 1950s, but it turned hostile again during the crisis of 1961–64. Given this preference for foreign borrowing, the foreign debt increased consistently during the period, reaching a peak in 1962 of about 2.5 times total exports (or 17.5 percent of GDP). It did not represent a problem, however, except for the years 1953, 1961, and 1964, when there were high concentrations of amortizations, resulting from the strategy adopted by policymakers to finance imports through commercial arrears.

The trade balance was generally positive throughout the period, while the current account was generally negative. International reserves declined consistently after World War II, reaching in 1961–64 an annual average about 40 percent of that registered in 1947–50.

In the period from 1947 to 1964 Brazil had six presidents—until 1950, Eurico Gaspar Dutra; 1951–54, Getúlio Vargas; 1954–55, Café Filho (vice-president under Vargas); 1956–60, Juscelino Kubitscheck de Oliveira; 1961, Jânio Quadros; 1961–64, João Goulart (vice-president under Quadros)—and three important political crises (in 1954, 1961, and 1964). For our purpose, it is useful to consider three subperiods: 1951–55, 1956–60, and 1961–64.

The transition to import substitution: 1951–55. The period from 1951 to 1955 was a transitional one in two senses. First, the change in the exchange rate

TABLE 12.1 Selected Economic Indicators for Brazil, 1947–64 (values in millions of 1980 U.S. dollars)

	1947–50	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1951–55	1956–60	1961–64	1947–64
Trade balance	820	200	-866	1,303	454	979	1,293	308	185	204	-65	321	-252	319	976	414	385	341	480
Current account	-90	-1,188	-1,890	169	-598	6	169	-761	-704	-881	-1,354	-631	-1,103	-324	397	-700	-706	-415	-503
Balance of payments	-200	-858	-1,863	49	-622	52	574	-519	-718	-436	-1,161	327	-981	-694	11	-648	-452	-334	-424
Autonomous capital flows	-147	-32	106	181	-55	9	447	735	522	516	164	818	513	-154	233	41	476	352	190
Loans and financing	92	112	106	135	334	257	684	919	1,059	1,244	986	1,645	922	711	627	188	978	976	562
Amortization	-253	-79	-99	-141	-411	-428	-553	-697	-919	-1,068	-1,181	-929	-878	-1,036	-786	-231	-883	-907	-568
Direct investment	58	-12	27	68	34	132	263	412	312	351	280	307	196	85	79	49	323	166	154
External debt (Dec. 31)	2,009	1,683	1,932	3,560	4,037	4,421	4,675	4,374	5,803	6,330	6,728	8,056	8,522	8,788	8,969	3,126	5,582	8,583	4,773
Interest paid (t)/debt ($t-1$) in %	3.0	3.6	3.9	5.3	4.1	2.7	4.6	4.2	3.8	4.5	5.1	4.8	4.2	2.9	4.2	3.9	4.4	4.0	3.9
Amortization plus interest as % of exports	8.0	2.6	3.9	5.2	17.7	12.3	17.1	22.2	30.7	36.5	41.9	31.4	35.2	32.1	28.5	8.3	29.0	31.0	19.0
Debt as % of exports	50.0	32.2	45.1	75.3	84.5	101.8	106.5	109.1	164.3	174.3	187.0	201.8	247.3	219.7	220.9	67.7	148.0	222.4	120.0
Debt as % of GDP	5.7	3.4	3.5	5.3	6.0	8.3	7.9	6.6	10.0	11.2	10.9	12.6	17.5	20.2	15.2	5.3	9.3	16.3	9.0
International reserves	2,459	1,524	1,602	1,858	1,480	1,502	1,808	1,371	1,320	1,039	977	1,335	950	1,007	695	1,593	1,303	996	1,572
Real GDP per capita	724	917	1,012	1,178	1,154	885	959	1,030	886	832	888	890	659	572	752	1,029	919	718	852
Real GDP rate of growth (%)	7.1	4.9	7.3	4.7	7.8	8.8	2.9	7.7	10.8	9.8	9.4	8.6	6.6	0.6	3.4	5.7	8.1	4.8	6.8
Inflation (%)	5.8	18.4	9.3	13.8	27.1	11.8	22.6	12.7	12.4	35.9	25.4	34.7	50.1	78.4	89.9	16.1	21.8	63.2	25.9
Total investments as % of GDP	13.3	15.4	14.8	15.0	15.7	13.4	14.4	15.0	16.9	17.9	15.7	13.1	15.5	17.0	14.9	14.9	16.0	15.1	14.9
Domestic savings as % of GDP	12.6	12.6	12.2	14.8	15.8	15.2	14.6	16.3	17.1	19.2	15.2	14.2	15.6	17.3	17.4	14.1	16.5	16.1	14.9
Government savings as % of GDP[a]	3.7	4.6	3.5	1.2	3.6	2.1	1.1	1.8	4.5	4.6	4.7	1.3	-0.2	0.3	-0.2	3.0	3.3	0.3	2.6
External savings as % of GDP	0.6	1.7	3.3	-0.1	0.9	-0.1	-0.9	0.7	1.2	0.7	1.8	-0.5	2.0	1.6	0.0	1.1	0.7	0.7	0.8

a. Until 1969 from the national accounts as computed by Getúlio Vargas Foundation.

SOURCE: Balance of payments items and external debt: Central Bank of Brazil; national accounts: Fundacão Instituto Brasileiro de Geografia e Estatística (IBGE).

policy in 1953 paved the way for an import-substitution industrialization drive. Second, the suicide of President Getúlio Vargas in 1954 triggered a political transition. Although the political events were of paramount importance to subsequent political and economic developments, we will only consider them briefly here; interested readers may refer to Skidmore (1967) or Burns (1970) for details.

Getúlio Vargas had been an important leader in Brazil since 1930, when a revolution led to the overthrow of the constitutional government. First a member of the provisionary government, Vargas became dictator in 1933 and remained in power until 1945. He then played an important role in the election of President Dutra.

It was in Dutra's government that quantitative restrictions on imports were systematically imposed. Since then, commercial policies have been used as instruments to adjust balance of payments and to achieve development goals. Exchange rates were set by the government, which consistently resisted devaluing the cruzeiro, despite domestic inflation.[6]

During the Korean conflict, the United States government, which was interested in obtaining strategic raw materials in case the conflict generalized, took action to improve its relationship with Brazil. In July 1950, President Dutra proposed the establishment of a joint commission to prepare studies and projects for the economic reequipment (that is, the rebuilding of the transportation and energy infrastructure) of the country. As part of this cooperation between the two countries, the Brazilian government would also facilitate exports of strategic raw materials to the United States, which in turn would help Brazil to establish a Military Defense Plan.[7]

In January 1951, Getúlio Vargas, elected in October 1950, took office with the goals of reducing inflation within two years and reequipping the economy through large infrastructure investments, particularly in electricity, transport, and seaports. In July 1951 the Joint Brazil–United States Commission (Comissão Mista Brasil–Estados Unidos) was formalized. The Commission concluded that the main deterrents to growth were the bottlenecks resulting from deficiencies in infrastructure, especially in energy and transportation. It therefore proposed a five-year reconstruction program, amounting to $1.0 billion. The World Bank would finance about half, to allow Brazil to import the necessary equipment. The other half would be provided by the Brazilian government to cover expenditures for domestic products and services. To avoid monetary expansion, the Commission recommended that an income tax surcharge be levied to finance the Brazilian share of the program. This tax surcharge would be paid back after five fiscal years, not in cash but in government bonds (Obrigações de Reaparelhamento Econômico, or ORE) plus the corresponding interest.

The tax surcharge was in fact levied, and by Law 1628 of July 20, 1952, the corresponding government bonds were created together with the National Bank for Economic Development (Banco Nacional de Desenvolvimento Econômico, or BNDE), which would manage the fund that resulted from the

compulsory lending to the government. Unfortunately, domestic resources directed to BNDE were not restricted to the proceeds of the tax surcharge, and other federal government transfers were made. As credit expanded, so did inflation. (The importance of the BNDE to the private sector increased after 1965 when the bank began to provide subsidized credit to the industrial sector.)

The Joint Commission ended its activity in July 1953. It had approved forty-one projects amounting to a total of $387 million, but only projects amounting to $186 million were effectively carried out. The foreign financing was not subject to any conditionality, despite the difficulties the Brazilian government had with the World Bank and the U.S. government with respect to foreign investments when it approved a law that did not consider, for purposes of profit remittance or capital repatriation, the profit reinvestments by foreigners. Although this disagreement did reduce the total World Bank financing provided to the country, a conflict between the World Bank and the U.S. Export-Import Bank mitigated the World Bank retaliation against Brazil.[8] This conflict ended in 1953 with the understanding that the World Bank would finance energy and agriculture projects while the Ex-Im Bank would finance transportation projects; both banks would fund mining projects. In fact, both banks financed projects on manganese mining in Brazil, probably because of strong U.S. interest in this mineral.

Another source of donor dissatisfaction with Brazilian policy was the country's multiple exchange rate regime, and both the World Bank and the Joint Commission pressed the government to establish a free exchange market. Faced with balance of payments problems and World Bank conditions for lending, the Brazilian Congress approved Law 1807 implementing the free exchange market in January 1953.[9] Nonetheless, it was not a free exchange market as economists normally understand the term but was in fact a dual exchange rate market: the market was free for financial transactions but fixed for some exports and imports.

As mentioned above, nationalistic pressures created an antagonistic attitude toward foreign investment during Vargas's term. After Vargas's suicide, however, the official attitude toward foreign capital changed. The most important new measure adopted by the Ministry of Finance in January 1955 allowed foreign firms to import capital goods and equipment at the exchange rate for financial transfers, which was lower than the rate for imports. The corresponding payments were registered as foreign capital investment through the acquisition of equity in existing or newly established firms. With the two-tiered system of exchange rates, the lower rate for financial transfers (but used for imports by foreign firms) tended to reduce the overall (average) rate for imports. This measure, together with other government incentives for capital transfers, including the prohibitive exchange rate and the quantitative restrictions imposed on imports of some goods (especially consumer durables), induced a large inflow of direct investment, especially toward the most protected industrial activities.

"Fifty years in five": 1956–60. The late 1950s were dominated by the import-substitution industrialization process made possible by large public investment in infrastructure and a highly protective commercial policy. The period was also marked by significant inflows of foreign capital, particularly in the form of direct investment. It ended with higher inflation and an external debt crisis.

A public investment drive beginning around 1950 concentrated resources on energy, steel, and transportation, especially roads. For the first half of the 1950s, public investment as a proportion of total investment in Brazil had averaged approximately 18 percent. From 1957 on, public investment doubled in relative importance, reaching about 50 percent of total investment by 1960.

The import-substitution industrialization process required a complete transformation of the existing commercial policy. A new tariff law, passed in August 1957, underlined the commitment to protect "infant industries." Under this new system, tariffs became *ad valorem*, with their rates varying on three steps. For goods that were supplied only from abroad, the tariff rates varied from 0 percent to 10 percent. They varied from 10 percent to 60 percent for goods that were mildly competitive with domestic production, and from 60 percent to 150 percent for products that were largely available from domestic sources.

The 1957 tariff reform also completely modified the auction of exchange. Imports of petroleum products, wheat, newsprint, and fertilizers were still subject to the lowest exchange rate, approximately equal to *custo de câmbio* (foreign exchange cost)—that is, the average export rate. The five other categories were reduced to two: special (for consumer goods and all products which were also produced domestically) and general (for all other goods). Both categories of exchange rates were set by auctions, with the rate for the special category some two or three times that of the general category.

With the industrialization campaign, the government increasingly intervened in the Brazilian economy, not only as a producer, in providing infrastructure or steel, but also as a strong regulator. It revived the Law of Similars to create councils with discretionary power, such as the Council on Customs Policy (Conselho de Política Aduaneira, or CPA), which is still in operation. The law also prohibits the importation of any goods for which CACEX, a directorate of Banco do Brasil, certifies that there are similar goods produced in the country.

The anti-export exchange rate policy resulted in a poor performance by exports during this period. Coupled with the deterioration of the terms of trade, this confirmed to some policymakers the theories advanced by the Economic Commission for Latin America (ECLA) of the "inelasticity" of exports and the need for industrialization through import substitution. (The theories about the inelasticity of exports proved to be completely false in the period after 1965.)

From 1956 to 1960 the industrial sector grew at an average rate of 10.1 percent a year (see Table 12.2). After the tariff reform, that is, in the 1958–60 period, the sector had an average growth rate of 12.7 percent a year! The costs of this faster industrial growth were not apparent. Industrial protection, associated with a domestic policy of cheap food through price controls of food commodities, penalized the agricultural sector, yet agriculture was maintaining impressive growth (especially if bad weather years are disregarded). The use of more land through expansion of the agricultural frontier accounted for a large part of this growth. This expansion required government investments on roads, a development compatible with the newly created automobile industry. It also required the government to invest in storage facilities, because the private sector would not do so, for two reasons. First, government policies favored industrial investments, thus reducing the availability of funds investible in other sectors; second, the profitability of warehouses for agricultural products was quite limited and subject to a relatively high risk because of the policy of price controls on agricultural commodities. The federal government had to supply this service to keep food prices from being driven up by commercialization bottlenecks. Another implicit cost associated with this acceleration in industrial growth was inflation, which averaged 21.8 percent a year between 1956 and 1960 as compared to 16.1 percent between 1951 and 1955.

Industrialization *cum* import substitution does not necessarily reduce imports but it dramatically changes the import structure of the country. This was the case for Brazil.[10] Our primary interest here, however, is the general condition of the balance of payments. The trade balance steadily declined from a positive $1,293 million in 1956 to a deficit of $65 million in 1960. During the period, current import value increased by 23.6 percent while exports declined by 14.4 percent. The current account was positive only in 1956, at $169 million, and negative for the rest of the period. On average, the current account deficit was $706.0 million a year, about the same as the average registered for 1951–55.

It is no surprise that direct foreign investment increased during this period. Three facts contributed to this growth. Politically, Brazil did not represent a risk at that time,[11] and President Kubitschek was determined to implement his promises of "fifty years in five" through a five-year government program (*Plano de Metas*) that artificially increased the profitability of industrial projects in Brazil, especially favoring foreign investment with the exchange rate policy. Finally, legislation of foreign capital through Law 1807 was quite liberal in terms of profit remittance.

From 1947 to 1955 direct foreign investment in Brazil amounted to $483 million, averaging $53.7 million a year. In 1956–60 direct foreign investment averaged $323.6 million a year. Borrowing abroad during this period averaged about three times as much, at $978.4 million a year. This foreign borrowing was made up in part of suppliers' credits and rescheduling of the

TABLE 12.2 GDP Growth and Inflation Rate for Brazil, 1947–85 (percentage)

Year	GDP growth			Inflation rate
	Total	Agriculture	Industry	
1947	4.2	-0.1	4.6	n.a.
1948	9.7	4.3	12.9	5.9
1949	7.7	6.2	11.5	8.1
1950	6.8	2.6	10.3	9.2
1951	4.9	-1.7	7.9	18.4
1952	7.3	8.3	6.5	9.3
1953	4.7	0.5	11.2	13.8
1954	7.8	4.8	6.5	27.1
1955	8.8	12.7	10.1	11.8
1956	2.9	-6.2	7.0	22.6
1957	7.7	12.6	5.3	12.7
1958	10.8	3.1	15.7	12.4
1959	9.8	6.9	10.8	35.9
1960	9.4	6.8	11.6	25.4
1961	8.6	5.0	9.9	34.7
1962	6.6	3.9	8.0	50.1
1963	0.6	0.4	0.8	78.4
1964	3.4	-1.3	5.6	89.9
1965	2.4	20.1	-2.6	58.2
1966	6.7	-14.6	9.9	37.9
1967	4.2	9.2	3.1	26.5
1968	9.8	4.5	13.3	26.7
1969	9.5	3.8	12.2	20.1
1970	10.4	1.5	10.5	16.4
1971	11.3	10.1	11.8	20.4
1972	12.1	4.0	14.2	19.5
1973	14.0	0.4	17.0	22.6
1974	9.0	1.0	8.6	34.3
1975	5.2	7.2	4.9	33.9
1976	9.8	2.4	11.7	47.4
1977	4.6	12.1	3.3	46.2
1978	4.8	2.9	6.4	38.9
1979	7.2	4.9	6.7	55.6
1980	9.1	9.6	9.2	91.7
1981	-3.4	6.1	-9.2	102.5
1982	0.9	-1.9	-0.1	92.9
1983	-2.5	1.8	-6.6	151.9
1984	5.7	3.2	6.1	210.5
1985	8.3	8.8	8.9	225.5

NOTE: n.a. = not available. Figures for agriculture and industry growth from 1971 to 1985 have been rounded off.
SOURCE: Total GDP growth and inflation rate: national accounts 1987, Fundação Instituto Brasileiro de Geografia e Estatística (IBGE); agriculture and industry growth: Fundação Getúlio Vargas–Instituto Brasileiro de Economia.

Brazilian foreign debt. Net amortizations amounted to an average of $983.6 million a year.

From foreign debt crisis to a military takeover: 1961–64. The difficulties Brazil faced in the 1961–64 period resulted from the economic policies adopted in President Kubitschek's term, which was dominated by an increasing foreign debt and accelerating inflation fed by the government deficit. Foreign debt difficulties clearly emerged in 1959 when the president refused International Monetary Fund (IMF) loans to cover balance of payments deficits, because they were conditioned on a stabilization plan. Instead, Kubitschek borrowed abroad from other sources at higher interest rates and shorter terms.

On the domestic side, the "industrialization at any cost" program of 1955–60, along with other ambitious projects such as the construction of the capital city of Brasilia, had generated large government deficits. These deficits were mainly financed by borrowing from the monetary authorities, thereby substantially increasing the money supply and therefore inflation.

The newly elected President Jânio Quadros adopted orthodox measures in response to the internal inflation and external foreign debt. In March 1961, the cruzeiro was devalued by 40 percent against the U.S. dollar. The multiple exchange rate system was unified. Imports were penalized, with prior deposits in the full value of the contract required for 150 days. These deposits, which bore 6 percent interest, were more important in controlling the money supply than in reducing imports. From December 1960 to June 1961, the money supply increased 12 percent (inflation was about 30 percent a year) despite the large and increasing fiscal deficit. From 1960 to 1961, imports remained about the same in current value. Due to lags between the adoption of monetary policies and their effects on prices, inflation continued at a high rate in the first semester of 1961.

In August 1961, President Quadros resigned and the country entered a period of political turmoil in which it was difficult to sustain sound, or even coherent, economic policies. According to the Brazilian Constitution, the vice-president takes power when the president resigns. Vice-President João Goulart belonged to a different political party than President Quadros did, and his leftist ideology was in complete disagreement with that of Quadros. Since Quadros was elected with many more votes than Goulart, the military argued that Goulart's policies would not reflect the people's desire and imposed a constitutional reform, subject to a future popular referendum, to change the political regime to a parliamentary system. Later, however, a plebiscite resulted in a return to the presidential system.

When Goulart took over, he completely changed the executive policy orientation, proposing a set of anti-capitalistic reforms (related to agriculture, banking, and foreign capital) that would substantially affect the social and economic organization of the country. The government was

hostile to foreign capital and international institutions such as the IMF, the International Bank for Reconstruction and Development (IBRD), and the Inter-American Development Bank (IDB), and sent to the Congress a proposal to regulate the activity of foreign capital in Brazil. On August 3, 1962, after a year of discussion, the proposal was passed as Law 4131.[12]

The government abandoned the contractionary monetary policy in the last quarter of 1961, and from then on the growth rate of the money supply increased and so did inflation, which rose steadily from 34.7 percent in 1961 to 89.9 percent in 1964. The real exchange rate appreciated sharply from 1961 to 1964, and was devalued substantially only after the military takeover in 1964. Petroleum products and wheat were again imported at a very low subsidized rate. Therefore, not only was domestic policy unsuited for equilibrium in the balance of payments, but exchange rate policy was also unrealistic.

Overall economic performance was moderately favorable in Goulart's first two years, 1961–62. The growth of GDP averaged 7.6 percent a year; industry, 8.9 percent a year; and agriculture, 4.5 percent a year. During the second half of Goulart's term, all of these indicators declined. Even the weather had a negative effect on agriculture. Political instability and constant social conflict in the rural areas, triggered by pressures for agrarian reform, also account for the poor performance of agriculture, which grew at an average of –0.45 percent a year in 1963–64. Industry growth averaged only 3.2 percent a year. GDP growth averaged 2.0 percent a year in this period.

In the external sector conditions were also deteriorating. The current account was negative in the period except for 1964, and the average deficit for the entire period was $415.3 million a year. Imports and exports in current dollar values were about constant in the period. The external reaction came through the autonomous capital movement. The average annual inflow from 1961 to 1964 was $352.5 million, but in 1963 it was negative, at –$154 million. Direct foreign investment had been declining since 1960 and averaged $166.7 million a year in 1961–64, just about a third of the average registered for the 1956–60 period. Except for the year 1961, when Brazil signed a debt rescheduling agreement with the governments of European countries and Japan, external loans were smaller than amortizations.

A large fraction of the Brazilian foreign debt had a maturity of less than twenty-four months, and when Brazil experienced balance of payments difficulties in 1961 and 1964, rescheduling agreements with creditors were required. Besides this timing concentration, Brazilian debt was also regionally concentrated. Bilateral arrangements accounted for about 86 percent of total debt, while multilateral institutions as the International Development Association (IDA), IBRD, IDB, and others had a relatively small role. The United States was responsible for more than 50 percent of total debt, and the U.S. Ex-Im Bank provided about a third of total loans for development projects and to help with balance of payments.

Furthermore, from 1961 to 1967, foreign aid to Brazil was relatively high as compared to other periods. The Alliance for Progress (of USAID), U.S. Food for Freedom, and financing assistance provided by the IBRD and IDB were the main sources of aid. Nonetheless, as pointed out by Díaz-Alejandro (1972), because of the large short-run debt, "such inflow resulted in a lower transfer of real resources than had been accomplished during the 1950s."

Brazil's political instability of 1961–64 was driving out foreign capital. The long discussion period that had preceded the approval of Law 4131 generated high uncertainty, leading to reduced direct foreign investment in Brazil. The balance of payments could not be improved by cutting imports since the import-substitution program required raw materials and capital goods from abroad. Reduced imports would cause reduced domestic production and eventually exports. Thus, the solution was to promote exports, but not before reorganizing the economy and reducing inflation.

The economic difficulties of 1961–63 led the Goulart government to produce a three-year plan defining the new economic strategy. Structural change in the social organization and the revival of the import-substitution process for capital goods were the main elements of this strategy (*Revista Brasileira de Economia* 1962). After the military coup of March 1964, however, this strategy was replaced by a very different one.

The Export-Promotion Strategy: 1964–73

The new military regime began the Government Economic Action Program (PAEG), prepared by the Ministry of Planning, that was designed to stabilize the economy through monetary control and the elimination of the government deficit. To cope with the country's foreign debt difficulties, the government adopted a development strategy that placed special emphasis on the market economy and on export promotion.

The stabilization program was quite successful (see Table 12.3 for economic indicators for the period). The government eliminated the public deficit through fiscal reform, improvement of the tax collection system, and cuts in government subsidies and expenditures. The program also regulated wage increases and enlarged the existing price control system both in scope and institutionally, especially after 1968.

To enhance monetary control, a central bank was created. Although the foreign exchange market remained under the control of the government, the exchange rate regime was changed to a crawling-peg devaluation system in 1968, and the purchasing power rule was adopted. Thus, the cruzeiro was systematically devalued according to the inflation differential between the cruzeiro and the U.S. dollar.

In rejecting the old policy, when the cruzeiro devaluations had been large and sporadic, the Ministry of Finance advocated measuring the

TABLE 12.3 Selected Economic Indicators for Brazil, 1964–73 (values in millions of 1980 U.S. dollars)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1964–68	1968–73	1964–73
Trade balance	976	1,823	1,179	573	68	803	565	−809	−544	14	923	16	465
Current account	397	1,024	145	−637	−1,332	−709	−1,369	−3,086	−3,355	−3,369	−80	−2,203	−1,299
Balance of payments	11	921	412	−659	84	1,386	1,328	1,249	5,507	4,348	153	2,317	1,459
Autonomous capital flows	233	−17	334	73	1,419	2,199	2,473	4,352	7,884	7,009	408	4,222	2,596
Loans and financing	627	1,010	1,369	1,425	1,529	2,583	3,491	4,802	9,706	8,970	1,192	5,180	3,551
Amortization	−786	−846	−943	−1,194	−1,269	−1,245	−1,637	−2,004	−2,714	−3,338	−1,007	−2,034	−1,598
Direct investment	79	195	199	204	165	477	356	398	761	1,950	168	684	478
External debt (Dec. 31)	8,969	10,932	12,244	8,819	9,913	11,115	12,898	15,610	21,496	25,088	10,175	16,020	13,708
Interest paid (t)/debt ($t-1$) in %	4.2	4.9	3.9	4.0	4.4	4.8	5.3	5.7	5.4	5.4	4.2	5.1	4.8
Amortization plus interest as % of exports	28.5	28.8	38.1	37.9	33.4	29.2	33.1	39.7	39.1	35.2	33.3	34.9	34.3
Debt as % of exports	220.9	246.1	261.1	198.4	201.0	190.5	193.3	228.0	238.6	202.8	225.5	209.0	218.0
Debt as % of GDP	15.2	20.1	18.3	12.2	12.8	13.7	14.6	15.6	18.6	18.0	15.7	15.5	15.9
International reserves	695	1,347	1,144	534	674	1,681	2,891	4,106	9,444	12,803	878	5,266	3,531
Real GDP per capita	752	674	808	850	882	892	952	1,039	1,172	1,376	793	1,052	940
Real GDP rate of growth (%)	3.4	2.4	6.7	4.2	9.8	9.5	10.4	11.3	12.1	14.0	5.3	11.1	8.4
Inflation (%)	89.9	58.2	37.9	20.5	26.7	20.1	16.4	20.4	19.5	22.6	47.8	20.9	33.8
Total investments as % of GDP	14.9	17.7	15.9	16.2	18.7	19.1	18.8	19.7	20.2	21.4	16.6	19.6	18.3
Domestic savings as % of GDP	17.4	20.0	18.6	14.9	17.4	21.2	19.2	18.5	18.6	21.1	17.6	19.3	18.7
Government savings as % of GDP[a]	−0.2	0.9	2.9	0.5	3.2	0.9	5.5	5.8	5.7	6.3	1.5	4.6	3.1
External savings as % of GDP	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	−1.5	−1.3	−4.7	−3.1	−0.3	−2.0	−1.4

NOTE: n.a. = not available.
a. Until 1969 from the national accounts as computed by Fundação Getúlio Vargas.
SOURCE: Same as Table 12.1.

country's economic health by its international reserves and not by the frequency of the exchange devaluation. In fact, from 1970 to 1973, Brazilian international reserves, in 1980 dollar values, increased by about 4.5 times. Foreign debt exposure, however, did not change much: debt as a percentage of exports hovered around 220 percent, while its relative importance with respect to GDP was around 15 percent.

The inward development strategy adopted by Brazil after World War II, which was highly discriminatory against exports, was discarded after 1965. Disincentives to export were replaced by subsidies of manufactured exports. From 1964 to 1973, exports increased threefold in 1980 dollar values, and there was a trade surplus throughout the period, except for 1971–72. During the adjustment period, 1964–66, the trade surplus averaged $132.6 million a year. Moreover, subsidies led not only to the expansion of total exports, but to a gradual change in their product mix as well. The share of primary products in total exports declined from about 90 percent in the 1964–68 period to 64 percent in 1974, while the share of industrial products in exports, in the same period, rose from 8.95 to 35.6 percent. A substantial change occurred even in the composition of primary products. For example, there was a continuous fall in the relative importance of coffee and an increase in the relative importance of sugar and soybeans.

Export promotion also liberalized imports, and import values rose fourfold. Exchange premiums and prior deposits on imports were eliminated for the general category of imports, and premiums were substantially reduced for "special" category imports. In 1967, a tariff reform eliminated the special category of imports, and there was a nominal tariff reduction. After the reform the trade surplus fell to an average of $16 million a year in the 1968–73 period.

Beginning in the 1964–66 adjustment period, Brazil began to receive increasing flows of new foreign capital. Combined with the foreign debt rescheduling of 1964, these new flows—mainly loans and financing—kept Brazil's current account and overall balance of payments positive from 1964 to 1966. Direct foreign investment regained importance from 1965 on. As the country entered the international financial market, loans and financing provided by private banks became more important, provoking a consistent increase in the interest rate (as estimated in Table 12.2) paid by the country.

Foreign capital inflows averaged about $155.7 million annually in 1964–67, reaching $1,024 million in 1968. Direct foreign investment started to increase and averaged some $168.4 million a year in the period. Borrowing abroad (averaging $1,192 million a year) more than matched amortizations (averaging $1,011.2 million a year). This was in part a result of some improvements in the existing regulations on borrowing abroad. Up to the beginning of this period, according to Law 4131 of 1962, only Brazilian enterprises were allowed to borrow abroad from banks. In 1965 this possibility was enlarged to include borrowing abroad by commercial banks. Through Resolutions 63 and 64 of the central bank, Brazilian commercial banks and BNDE could

borrow abroad to lend domestically at the same credit conditions at which they borrowed, plus a fee of 4 percent of the total lent.

After the adjustment period of 1964–66, the new strategy produced a period of prosperity, known as the "economic miracle," in which GDP growth averaged 11 percent a year with declining inflation. Between 1968 and 1973, GDP grew at an average rate of about 12.7 percent a year, and agriculture grew at an annual average rate of 4.8 percent. Inflation dropped consistently from 26.7 percent in 1968 to 22.6 percent in 1973, and was on average about 21 percent a year in that period (an impressive performance that would be stopped by the first petroleum price shock). In 1968 the government introduced a monetary correction (indexing monetary values to correct for inflation), which activated the government bond market to finance government investments (ORTN, a five- to eight-year bond) and to promote monetary control (LTN, a short-run government bill). Government saving reached its highest level in this period, at 5.8 percent of GDP in 1971, and overall saving rose to an average of 19 percent between 1968 and 1973.

From 1968 to 1973, in terms of capital flows, Brazil was considered a must. The "economic miracle" attracted both direct investment and loans. Direct investments averaged $684.5 million a year, about four times the annual average, constant dollar value, registered in the 1964–68 period. Loans to Brazil amounted to on average $5,180 million a year, which was about 2.5 times the yearly average amortization in the period. The inflow of loans to Brazil was so strong that the government started to impose conditions on borrowing abroad. Initially these conditions referred to the maturity of the loans; later, the central bank retained a fraction of the amount borrowed abroad as a kind of required reserve, to restrain this capital inflow. Balance of payments presented increasing surpluses, from $84 million in 1968 to $4,348 million in 1973. Brazil was accumulating reserves.

Back to the Import-Substitution Strategy and into the Debt Crisis: 1974–85

The potential for another wave of import substitution based on capital goods did not vanish with the military coup of 1964. The first petroleum price shock of 1973 was the excuse to revive this strategy and to increase the direct participation of the state in the economy through state enterprises. Let us divide this period into two subperiods as follows: 1974–79 and 1980–85. Table 12.4 provides a summary of some economic indicators.

The first oil crisis: 1974–79. In the mid-1970s, the sharp increase in the world price of petroleum required Brazil, with its high proportion of imports in domestic consumption, to make adjustments.[13] Brazil had no way of substituting for petroleum in the short run. Policymakers, however, adopted a rather peculiar solution: they subsidized domestic consumption of oil and, to cope with the balance of payments difficulties, borrowed abroad, reduced

TABLE 12.4 Selected Economic Indicators for Brazil, 1974–85 (values in millions of 1980 U.S. dollars)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1974–79	1980–85	1974–85
Trade balance	−7,878	−5,443	−3,312	134	−1,315	−3,241	−2,823	1,102	629	5,739	11,342	10,853	−3,509	4,473	482
Current account	−11,962	−10,302	−8,839	−5,589	−8,978	−12,807	−12,807	−10,752	−14,654	−6,065	39	−233	−7,611	−7,412	8,533
Balance of payments	−1,573	−1,461	1,751	873	5,474	−3,669	−3,471	572	−7,932	−4,794	607	−3,068	232	−3,014	1,391
Autonomous capital flows	10,504	9,516	9,687	7,306	15,273	8,739	9,678	11,704	7,054	1,865	219	−2,375	10,170	4,690	7,431
Loans and financing	11,573	9,121	11,417	11,661	17,738	12,815	10,596	14,252	11,224	5,591	9,012	6,101	12,387	9,522	10,955
Amortization	−3,225	−3,339	−4,388	−5,621	−6,837	−7,287	−5,010	−5,719	−6,246	−6,088	−5,604	−7,737	−5,116	−6,067	5,592
Direct investment	1,587	1,544	1,677	1,323	1,537	1,923	1,487	1,644	1,231	764	973	691	1,598	1,131	1,365
External debt (Dec. 31)	28,831	32,550	38,173	44,348	55,883	59,955	53,848	56,273	62,581	72,136	78,928	83,426	42,790	67,865	55,328
Interest paid (t)/ debt ($t-1$) in %	5.2	8.7	8.5	8.1	8.4	9.6	12.6	17.0	18.5	13.7	12.5	10.5	8.1	14.1	11.1
Amotization plus interest as % of exports	32.4	42.3	47.4	50.9	63.4	69.3	56.2	66.1	90.7	74.9	61.7	72.1	50.9	70.2	60.6
Debt as % of exports	215.9	244.2	256.6	264.3	343.7	327.4	267.5	263.6	345.2	371.3	337.3	373.9	275.3	326.4	301.0
Debt as % of GDP	18.2	19.3	19.0	20.1	24.1	24.5	24.9	25.8	29.3	44.2	47.6	46.9	20.8	36.4	28.7
International reserves	8,854	6,205	9,613	10,044	15,276	11,056	6,912	6,880	3,587	4,046	10,394	10,103	10,174	6,987	8,581
Real GDP per capita	1,514	1,573	1,821	1,946	1,996	1,944	1,780	1,758	1,680	1,258	1,250	1,310	1,799	1,506	1,652
Real GDP rate of growth (%)	9.0	5.2	9.8	4.6	4.8	7.2	9.1	−3.4	0.9	−2.5	5.7	8.3	5.7	3.0	4.8
Inflation (%)	34.3	33.9	47.4	46.2	38.9	55.6	91.7	102.5	92.9	151.9	210.5	225.5	42.7	145.8	94.7
Total investments as % of GDP	22.8	24.3	22.5	21.3	21.8	22.7	22.0	22.2	20.6	17.1	16.5	18.0	22.5	19.4	21.0
Domestic savings as % of GDP	18.7	21.4	19.2	19.7	19.1	17.8	17.1	17.9	14.1	12.3	16.6	17.9	19.3	15.9	17.6
Government savings as % of GDP	4.5	3.9	4.3	3.9	2.4	2.3	1.1	1.1	−0.4	−1.4	−2.8	−8.0	3.5	−1.7	0.9
External savings as % of GDP	0.9	0.9	−0.9	−0.4	−2.4	1.6	1.6	−0.3	3.7	2.9	−0.4	1.7	−0.03	1.5	0.7

SOURCE: Same as Table 12.1.

imports other than petroleum, and engaged in a new import-substitution program for capital goods.

The Ministry of Planning initiated this strategy, supported by entrepreneurs in the capital goods production sector. To sustain the economy and activate the domestic capital goods industry, the government engaged in a large and varied investment program: hydroelectric power plants, nuclear energy–generating plants, steel, paper, railroads, petrochemical projects in association with private capital from domestic and foreign sources, new mining developments, and others. As part of the attempt to reduce consumption of petroleum imports, resources were directed to petroleum prospecting, and a special program was begun to replace oil-intensive equipment with electrical equipment.

Another plan designed to save petroleum was the Proalcohol program, established to subsidize the production of alcohol for carburetant purposes to replace gasoline. The pitfalls of this program are discussed elsewhere (see, for example, Carvalho 1986). It is sufficient to recall here that gasoline is not the most important petroleum derivative consumed in Brazil. Also, technologically, the petroleum-refining industry has very little freedom to change its output composition. Thus, the reduction of gasoline consumption alone would not reduce petroleum consumption.

With this strategy, the average rate of GDP growth was kept at 6.7 percent a year, with the industrial sector at 6.9 percent a year, and agriculture at 4.1 percent a year. Nonetheless, this growth exacted a high price in terms of inflation and public deficit as well as foreign debt.

Inflation increased from 22.6 percent in 1973 to 55.6 percent in 1979. Unfortunately, official statistics on the public deficit do not reflect the total of government expenditures. Specifically, government enterprises—an important instrument in borrowing the foreign reserves needed to finance the current account deficit—were not included.

The current account deficit averaged $7,611 million in the period. Imports increased beginning in 1973 when their value was 50 percent higher than in 1972. In 1974 they nearly doubled with respect to 1973, while exports increased by 28 percent. Also, past foreign debt became a significant burden. In 1975, interest payments doubled their 1974 values, averaging $2,868.2 million a year in 1974–79 (about 19 percent of average annual exports).

Foreign capital continued to flow into Brazil as the petrodollar surpluses accumulated by the Arabs were recycled by the international financial market. Foreign capital inflows averaged about $10,170 million a year. Loans from abroad continued, as in the previous period, to be about 2.4 times the amortization, and both values increased steadily during the period. Direct investment averaged $1,598 million a year and corresponded to about 16 percent of total net autonomous capital inflow to Brazil, about double the proportion observed in the 1968–73 period. Once again, the import-substitution strategy attracted foreign capital, especially to the petrochemical industry.

Capital inflows to Brazil produced a balance of payments surplus during the years 1976–78. Although deficits occurred in 1974, 1975, and 1979, the average balance of payments was $232 million a year during this subperiod. Since borrowing abroad was the strategy adopted to prevent the country from adjusting to the new world relative prices, foreign debt increased steadily, averaging 20.8 percent of annual GDP and 275.3 percent of annual exports.

The international interest rate shock and foreign debt management: 1980–85. By the end of 1978 the United States was applying pressure against Brazil's manufacture exports subsidy. Brazil responded by adopting a phase-out scheme for the subsidy; however, political pressure forced the government to compensate exporters with cheap credit. Similary, the government has compensated the agricultural sector for policy discrimination with subsidized credit since the early 1980s (see, for example, Brandão-Carvalho 1987).

The current account deficit induced borrowing abroad, which was forced by the authorities through the artificial increase of domestic interest rates, quantitative restrictions on lending out of domestic resources, and foreign borrowing by state-owned enterprises. Foreign debt was growing and feeding on domestic monetary expansion and, therefore, on inflation.

With the second petroleum price shock and the sharp rise in the international interest rates that occurred by the end of 1979, inflation increased to about 92 percent in 1980. Domestic policies contributed to this acceleration: the wage law was changed to permit cost-of-living wage adjustments at six-month intervals, and monetary policy accommodated the pressures to avoid unemployment; a 30 percent devaluation of the cruzeiro against the U.S. dollar took place in December 1979, penalizing those that borrowed dollars abroad and had to repay their debts in cruzeiros; export taxes were imposed on agricultural products to avoid shortages; the monetary correction and cruzeiro devaluation were prefixed at unrealistic levels for the year 1980; and as inflation accelerated so did subsidies and therefore the public deficit.

The domestic economic policy environment changed little in the following two years. In 1981 inflation was about 102 percent, and real GDP had a negative rate of growth, at −3.4 percent, for the first time in Brazil. This recession continued through 1982 and 1983; GDP rates of growth were 0.9 percent and −2.5 percent while inflation rates were 93 percent and 152 percent, respectively. A 30 percent devaluation of the cruzeiro against the U.S. dollar in February 1983, coupled with the lack of monetary control, contributed to a new jump in inflation. By the end of 1984, prices were rising at a rate of 210 percent, and in 1985 inflation was about 225 percent. This was the price paid for the short-lived output growth: 5.7 percent in 1984 and 8.3 percent in 1985.

With the Mexican moratorium in 1982 and the difficulties faced by the international financial sector, Brazil was forced to turn to the IMF, which

provided loans on the condition that a sound domestic economic policy be implemented and that, despite the export subsidy phaseout, the trade balance produce a surplus to minimize the need for additional borrowing.

By November 1985, the new government that had taken power in March of that year lost control of the inflationary process, and the inflation rate seemed to be moving toward a level of 400 percent a year. The government forestalled such a high level of inflation by imposing the so-called heterodox shock in February 1986. The heterodox shock, as opposed to an orthodox adjustment consisting of an anti-inflationary program based on tight fiscal and monetary policies that could lead to unemployment, aimed to bring inflation to zero and to promote economic growth and income redistribution through a general price and wage freeze and monetary reform.

The price and wage freeze was established for an initially undetermined length of time. The monetary reform replaced the cruzeiro with a new currency "as good as the U.S. dollar": the cruzado. The main purpose of this reform was to create a legal way to revise mid- and long-run contracts, by removing from the prevailing interest rate the inflationary expectation, set at about 14 percent a month, the official figure for inflation in February 1986. Four months later shortages of goods and relative price imbalances prompted the development of several prosperous black markets. The government blamed the speculators for creating shortages and overpricing and insisted on maintaining the initially popular price freeze until the general elections on November 15. The Partido do Movimento Democratico Brasileiro (PMDB), the most important party that supported the government, won the elections, but by January 1987, one month before the price defrost, inflation was about 17 percent a month, as the price freeze was disregarded by the entire population.

To avoid shortages the government restricted exports of some products (chicken and beef) and imported others (rice and beef). The impact of this policy was to reduce the trade surplus and, consequently, international reserves. Negotiations with foreign creditors were suspended, and Brazil finally stopped interest payments on foreign debt indefinitely. Management of the foreign debt situation was disregarded in the name of Brazil's sovereignty. The zero-inflation plan turned out to be a short-lived fiesta, and the people will eventually pay the bill, probably facing very high inflation with a severe recession.

An immediate consequence of the failure of the cruzado plan was Brazil's foreign debt moratorium. In fact, the moratorium had been part of the PMDB party program since 1982, when the party had been in opposition to the government. Thus, seeking popular support, in early 1987 the Brazilian government suspended all payments associated with foreign debt, except the interest payments on official loans provided under the Paris Club arrangements. The fact was that Brazil had wasted her reserves in 1986 and could not make those payments. The moratorium was a political gesture,

adopted by the minister of finance, that cost the country, according to recent calculations made by this ministry, $5 billion.

During the period from 1980 to 1985, the current account deficit averaged $7,412 million a year. With the Mexican moratorium, conditions in the international financial market changed and required an adjustment that came through high trade surpluses, obtained by compressing imports to the nominal dollar value of 1978 (about $13.5 billion a year) and expanding exports. The trade surplus averaged $9,311 million a year in the 1983–85 period, but it barely covered the foreign debt interest payments, which averaged $8,554 million a year in that period. For the entire 1980–85 period the situation was even worse. Interest payments were on average about 80 percent more than the average trade surplus or about 40 percent of average exports.

Foreign capital inflows were also affected by the financial crisis in 1982. Loans to Brazil had been for quite some time about 2.4 times the amortization paid by the country. This situation prevailed until 1981. In 1982, loans amounted to 1.8 times total amortization paid. This ratio dropped to 0.98 in 1983, increased to 1.61 in 1984, and dropped sharply to 0.79 in 1985. Direct investment also declined after 1982. In the 1983–85 period direct foreign investment averaged $809 million a year, the lowest amount registered in the country since 1973.

The ratio of foreign debt to GDP and total exports also represented an increasing source of worries during this period. Foreign debt rose from about 25 percent of annual GDP in 1980 to about 50 percent in 1984, and from 3.7 times total annual exports in 1980 to about 4.7 times in 1985.

The Volume of Foreign Aid

This section will describe the volume of aid, both broadly and narrowly defined, directed to Brazil from 1960 to 1984 (it will make use of a data set put together by OECD and reproduced in Tables A12.2 and A12.3 in the appendix to this chapter). The broad measure of aid, total receipts net (TRN), is composed of items that enter the asset side of the capital account of the balance of payments together with unrequited transfers (grants). It is called net because it takes into account repayments or repatriation of assets in connection with previous capital flows. TRN includes, specifically, official development assistance (ODA), other official flows, direct investment, securities and claims, and private export credits. ODA is a narrow definition of aid, which includes any official concessional flow containing a grant element of at least 25 percent. Table 12.5 clearly indicates that aid, in the broader sense, was relatively more important in the period 1980–84. In fact, as we described in the previous section, this is a particular period in terms of foreign debt problems. The annual average net inflow of receipts in this period is nearly twice (1.89) the annual average for the whole 1960–84 period. Nonetheless,

TABLE 12.5 Summary of Total Receipts Net to Brazil, 1960–84 (millions of 1980 U.S. dollars)

Period	Total value	Annual average	Period distribution (%)
1960–69	8,003.56	800.36	9.82
1970–79	42,717.80	4,271.78	52.40
1980–84	30,798.63	6,159.73	37.78
1960–84	81,519.95	3,260.80	100.00

SOURCE: Table A12.2.

TABLE 12.6 Summary of Official Development Assistance to Brazil, 1960–84 (millions of 1980 U.S. dollars)

Period	Total value	Annual average value	Period distribution (%)
1960–69	2,079.82	207.98	53.58
1970–79	1,170.61	117.06	30.16
1980–84	631.02	126.20	16.26
1960–84	3,881.45	155.26	100.00

SOURCE: Table A12.3.

the reduced importance of the 1960–69 period is misleading. Although the total inflow during that decade is less than 10 percent of the inflow of capital during the entire period, this is due in part to the foreign debt increase from the mid-1950s to 1960. Table A12.2 shows that all the negative inflows (net outflows) for the largest bilateral donors occurred in the 1960s. Only the United States made consistently positive contributions to TRN throughout the period.

The situation for multilateral donors is more striking. From 1960 to 1965, except for 1964, total multilateral contributions to TRN were negative. Except for the years 1978 and 1979, when the International Finance Corporation had a negative contribution, all negative TRN occurred in the 1960s.

Throughout the 1960–84 period, bilateral donors, contributing about 88 percent of total TRN, were much more important than multilateral donors. The United States contributed about 45 percent of total TRN, making it by far the most significant donor. Annually, the United States accounted for, on average, about 84 percent of TRN in the 1960s and dropped to an average of about 41 percent in the 1970s. In the first half of the 1980s, the annual average was about 40 percent, but if the year 1980 is excluded, this average becomes about 48 percent. In the case of multilateral institutions, IBRD is by far the most important donor, followed by IDB.

Table 12.6 reports the ODA values obtained by Brazil from 1960 to 1984. It is clear from the table that the 1960s were the most relevant decade in terms of ODA. The net ODA inflows were relatively high in the years of foreign debt rescheduling agreements (1961 and 1964) and also highly concentrated in the period that begins with the military takeover in 1964 to the end of the

TABLE 12.7 Total Unrequited Transfers to Brazil, 1955–84 (millions of 1980 US$)

Period	Total value	Average annual value	Period distribution (%)
1955–59	82.34	16.47	4.15
1960–69	1,207.74	120.75	60.82
1970–79	271.92	27.19	13.70
1980–84	588.13	117.63	29.62
1960–84	2,067.54	82.70	104.15
1955–84	1,985.20	66.17	100.00

NOTE: Original data in current U.S. dollars deflated by U.S. wholesale prices.
SOURCE: IMF, *International Financial Statistics*, various issues.

institutional reform period in 1968. In this period (1964–68) ODA inflows were about 33 percent of total inflow of the entire period.

From 1968 until 1973, ODA inflows declined systematically. This trend was interrupted in 1974–75, probably due to the negative impact on the balance of payments of the first petroleum price shock. The decline continued, however, until 1980, when the interest rate shock created an international crisis of particular importance to Brazil, given her large foreign debt. Between 1976 and 1980, Brazil received average yearly inflows of ODA of only $70.67 million.

This overall picture of ODA to Brazil is largely a reflection of the behavior of the United States. From 1960 to 1976 the United States was the most important donor. Between 1977 and 1983, however, the United States contributed negatively, in a significant way, to the ODA inflow to Brazil, substantially reducing the positive flow of ODA. Germany, the second most important donor, increased its flows after 1972 and particularly after 1977, and was the only bilateral donor with positive ODA flows to Brazil through the entire period. Japan, nearly as big a donor as Germany after 1975, gave a negative ODA contribution nearly every year from 1960 to 1973. France became quite important in the 1980s.

Multilateral donors were effectively limited to IDB, which contributed about 12.4 percent of total donations during the period. Except for the early 1960s and 1983, IDB contributions were positive. From 1969 to 1979, IDB contributed an average of about 29 percent of total annual ODA flows.

Table 12.7 summarizes the unrequited transfers to Brazil. Once more, a large fraction of this capital inflow was concentrated in the 1960–69 period. Transfers were especially high in the 1964–67 period, when their total inflow corresponded to about 39.5 percent of the total transfers of the 1955–84 period. Private transfers were more important than official transfers in 1964–67.

Characteristics of Foreign Aid

This section discusses some particular aspects of foreign aid to Brazil. It begins with a look at multilateral and bilateral aid and how this aid was

distributed over time. Next is an examination of the effect of foreign aid (in general terms, the inflow of foreign savings) on domestic savings. Then we try to identify how domestic policies, briefly described earlier, influence the inflow of foreign capital. Finally, we make some qualitative remarks on the effects of technical assistance provided to the country through foreign aid.

The 1960s were the most important period in terms of ODA inflows to Brazil, and until the 1970s the United States was the largest donor. Brazil received program, sector, and project loans during this period. Díaz-Alejandro (1972) makes clear in his discussion of Brazil's aid experience that USAID disbursements were dependent on subjective evaluation of domestic economic policy as well as on some U.S. commercial and political interests. Thus, in the period from 1961 to 1963 USAID adopted a stop-and-go disbursement policy in response to Goulart's anti-capitalistic economic policy (see Díaz-Alejandro 1972 for more details on the stop-and-go procedures of USAID and other donors). USAID was also the first donor to introduce in Brazil the program loan system, with a quarterly disbursement subject to a review of Brazilian policy performance.

Despite the stop-and-go behavior of donors, total U.S. inflows to Brazil were relatively smooth, because of the compensatory actions of individual donors. In the 1961–63 period, for example, when USAID was holding back disbursements, the U.S. Ex-Im Bank was providing the country with substantial net disbursements (see Díaz-Alejandro 1972).

Díaz-Alejandro also notes, correctly, that during the early 1960s foreign aid to Brazil was directed more to stabilization (in response to chronic balance of payments deficits) than to development. During the period considered here, development aid to Brazil was relatively most important from 1964 to 1969.

Toward the end of the 1960s, USAID program loans were replaced by project loans, but by the mid-1970s USAID stopped operating in Brazil. From the beginning of USAID operations in 1961 until 1971, the bulk of the resources were directed to programs (about 67 percent) while the remainder was used primarily on project loans (about 31 percent) and marginally on sectoral loans (2.0 percent). Table A12.4 presents total USAID loans by loan category, identifying the projects according to their objective. USAID concentrated financial support on energy, with agriculture, transport, and public health following in relative importance. Education received a significant relative share of total USAID loans only in 1975 (about 24.3 percent). However, as Díaz-Alejandro (1972) points out, this apparent bias against education was a result of Brazil's nationalistic reaction against any USAID action in this area.

Until 1978 the majority of IBRD loans to Brazil went to energy and transportation projects (see Table A12.5). As agriculture became a priority during President João Figueiredo's term (1979–84), loans to this sector increased in relative importance, reaching about 21 percent of total loans in 1983. Also after 1978 loans to finance projects on potable water and sewerage systems

TABLE 12.8 Foreign Aid, Savings, and Gross Investment in Brazil, 1960–84 (average annual percentage)

Period	Savings/GDP	TRN/gross investment	ODA/gross investment
1960–69	17.88	8.84	2.45
1970–79	22.83	3.16	0.46
1980–84	19.44	17.04	0.33
1960–84	20.17	8.23	1.23
Foreign debt rescheduling periods			
1961–64	16.91	11.50	3.32
1982–84	17.47	21.21	0.38

SOURCE: Fundação Instituto Brasileiro de Geografia e Estatística, national accounts 1987.

increased in relative importance, reaching about 27 percent in 1982. Loans to the industrial sector grew in relative importance after 1972, especially during 1973–75, probably because of the emerging petrochemical industry, and during 1979–81, probably because of the Proalcohol program.

IDB loans (see Table A12.6) also concentrated, though to a lesser degree, on energy, transport, and communication projects. During the 1978–81 period, education and technology accounted for about 12.6 percent of total loans. Agriculture had a higher share, about 31 percent, in 1982–83, while industrial projects in the 1974–81 period received on average about 24 percent of total annual loans.

Table 12.8 summarizes the importance of foreign aid to Brazilian capital formation as well as the importance of total savings in GDP. During the 1960s and the 1980s, foreign aid, measured by TRN or ODA, was relatively important as a percentage of gross investment. If we consider the periods of foreign debt rescheduling (1961–64 and 1982–84), the relative importance of aid becomes apparent. It is interesting to note that ODA as a percentage of total gross investment in the 1961–64 period is about ten times the average registered for the more recent period (1982–84), while TRN in 1982–84 is about two times its relative importance to gross investments in the 1961–64 period.

Total savings declined during the periods of foreign debt renegotiation, while foreign savings, as measured by TRN, increased in relative importance in both periods. The share of ODA in gross investment increased in the first period of foreign debt rescheduling, but not in the second.

In dealing with aid and savings, one question always emerges: Does foreign aid increase or decrease domestic savings? Several authors have considered this issue; Bhagwati and Srinivasan (1975) approached the question in a very simple manner, and we reproduce their reasoning in the appendix to this chapter. Applying their model to the Brazilian case indicates that contemporaneous flows of foreign capital have no impact on domestic savings, but *expected* flows are a substitute for domestic savings.

Domestic policies and foreign aid seemed to have no formal connection in Brazil until the mid-1960s when USAID introduced program lending that

conditioned disbursements on policy performance. This conditionality was certainly the rule for IMF loans. In the case of multilateral donors such as IBRD and IDB, the loans were mainly directed to projects and therefore restrictions and conditionalities were imposed at most for the benefited sector.

In general, foreign aid flows to Brazil seem to be strongly associated with the interests of foreign investors in the country, which could partly explain the difference in the amount of aid between the two periods in which the country faced foreign debt problems. During the first period, 1964–68, after the military coup when the country's capitalistic system was threatened, Brazil experienced the highest inflow of foreign aid in her history. Although international conditions were quite different, during the second foreign debt difficulty (1982 onward) Brazil received about the same level of ODA registered in the previous ten years.

During the 1970s, despite the first petroleum price shock, aid to Brazil in terms of both TRN and ODA was substantially reduced. This decline was probably a reaction in part to the "economic miracle" of 1968–73 when industrial growth in Brazil was spectacular. This period coincided with a trade liberalization in Brazil as well as with steady growth in world trade. Moreover, with the first petroleum price shock, world trade declined as the industrialized countries experienced smaller rates of GDP growth, a factor that may also have contributed to the reduction of aid to Brazil.

It seems, therefore, that in general terms aid does not influence domestic policy in Brazil. Foreign aid appears instead to be associated with the maintenance and stability of Brazil's capitalistic social organization. Domestic policies and priorities are the means by which foreign aid flows into the country. Thus the energy and transport sectors have drawn foreign aid because domestic industrialization policies require investments in these areas. Restrictions imposed by donors are usually designed to prevent misallocation and waste in a particular sector, not to directly influence macro policy. Inflows to the agricultural sector, for example, increased in 1974 with the establishment of a research program by the government (Brazilian Enterprise of Agricultural Research, or EMBRAPA) and after 1979 when the government placed emphasis on the sector. As mentioned above, inflows of foreign aid were also associated with the Proalcohol program, a priority defined domestically.

Post-1982 events seem to offer evidence contrary to the above conclusion, but such evidence is only apparent. All letters of intent signed by Brazilian authorities, as required by the IMF, implied policy targets that even those whose knowledge of Brazil was superficial knew could not be reached. The IMF, however, continued to accept new proposals as long as the trade balance was compatible with foreign debt interest payment—a decision that seems wise given the critical situation the international financial system was facing at the time. Nonetheless, in the eyes of the Brazilian people and authorities, the IMF's action confirmed the belief that its policy constraints

should not be taken seriously. Similar negotiation occurred during the 1950s, when Brazilian authorities signed agreements with the IMF but did not take actions to reach the announced policy goals.

It is extremely difficult to measure technological benefits appropriated by a country through foreign aid. Within a broad view of foreign aid, foreign investment is the most common way to transfer technology, and Brazil has benefited from that. During the two import-substitution waves, foreign investments played an important role. Although foreign capital in several sectors was restricted to less than 50 percent of the enterprise in the mid-1940s,[14] in the mid-1950s foreign capital could be used to establish enterprises in Brazil without a domestic partner.

During the import-substitution industrialization of the 1970s, since foreign funds were cheap and abundant, Brazil imposed restrictions on foreign investment. The goal was to impose a partnership with foreign capital to permit the transfer of technology. A new model of foreign capital participation was established, with relative success in terms of new investments, in the petrochemical industry: three partners—the federal government, a Brazilian private group, and a foreign group—would each contribute a third of total capital to build this industry. Why did foreign capital accept this partnership in the 1970s but not in the 1940s? Although the answer is unclear, it is probably associated with the benefits (tax exemptions, special credit lines, and protection through tariffs and input prices) given to the foreign capital that was to provide the technology.

Aid, in a more restricted sense, offers technical assistance by financing training programs. Unfortunately, data on the total number of people trained as well as the objectives of the training programs have not been collected. USAID played an important role during the late 1960s in patronizing such programs and maintained a program of technical assistance in which foreign personnel cooperated with Brazilians in developing research, in teaching activities, and occasionally in designing government policy.[15] An important example of the effects of such aid is that because of training programs developed by ECLA during the 1960s, Brazil created a Ministry of Planning.

Finally, some informal procedures associated with aid programs, such as the establishment of joint commissions, are quite relevant in terms of technical assistance. For example, the existence of BNDE, the first Brazilian development bank, is due to the U.S.-Brazil joint commission report in the early 1950s. Moreover, as a result of this report, projects on hydroelectric power plants and transport were given priority by policymakers.

Prospects for Brazil in the Wake of the Debt Crisis

Foreign capital inflows played an important role in the Brazilian development process. For nationalistic reasons, policymakers have favored loans and financing as opposed to direct investment. The adjustment process

adopted by the country as a response to the first petroleum price rise, based on borrowing abroad, coupled with the sharp increase in the international interest rates by the end of 1979, produced a foreign debt as large as 47 percent of GDP in 1985. Since Brazil is not the only developing country to face such a problem, foreign aid, which is limited, will play only a secondary role in solving this crisis. There is also a fundamental difference between this crisis and any of the previous ones faced by the country: multilateral and official creditors are much less important than on the other occasions. Therefore, interest rates on the bulk of Brazilian foreign debt are much higher and subject to many more fluctuations than before. In addition, the amortization periods, due to previous rescheduling and banking practice, are shorter.

These conditions faced by Brazil as well as other developing countries render a solution to the present crisis difficult. Without either foreign aid or a change in the current debt situation, it will be impossible for Brazil to overcome the difficulties imposed by her large deficit. Various simulation exercises performed for the Brazilian case all indicate that a very high rate of export growth, at least equal to the international interest rate, is needed just to maintain the current situation (see, for example, Simonsen 1985). Since the country has to sustain a GDP growth rate at least equal to its population increase, part of these exports will necessarily be used for the importation of goods and services. Thus, a solution will require a mix of debt rescheduling and some losses to some creditors.

Since the foreign debt moratorium, negotiations between the Brazilian government and creditors are moving very slowly, because of lenders' uncertainties about the country's political situation and expectations that a new constitution could change the social organization of Brazil by modifying the role of the state in the economy, limiting foreign capital, and reducing the extension of property rights. Braziiian protectionism has led the U.S. government to impose conditions for renegotiation of debt. Nonetheless, the financial market had anticipated its losses, and by September 1987 Brazilian debt claims had been traded in the New York secondary market at a rate of 55 cents to the dollar.

During the entire period considered in this chapter, a bias against direct foreign investment and in favor of borrowing abroad has existed in Brazil. As the foreign debt increased in the mid-1970s, Brazilian authorities created some fiscal incentives to convert external debt into direct investment. The market response to those incentives was not significant but prevented an even sharper decline in the inflow of direct foreign investment. Debt-equity swaps, as reported by the central bank, represented 15 percent and 18 percent of direct foreign investment in 1978 and 1979, just before the international financial crisis. During the recession years of 1980 and 1981, debt-equity swaps as a proportion of direct investment were very small—3.5 percent and 0.1 percent, respectively. From 1983 on, direct foreign investment declined sharply, except in 1984, but the relative importance of debt-equity swaps increased from 14.4 percent in 1982 to about 81 percent in 1985. The rules

imposed by the central bank in November 1984 reduced the incentive for converting debt into direct investment by blocking foreign investors from buying Brazilian debt claims in the secondary market at a discount price. The high percentage of debt-equity swaps in foreign investment registered for 1985 is a result of a stronger decline in the latter (33 percent) as compared to the former (22 percent). Later on, in July 1987, the government suspended all conversions in anticipation of a new policy. In fact, the new regulation on debt-equity swaps adopts the auction idea implemented by Chile. The first auction was scheduled for April 1988.

The bias against direct foreign investment is reflected in the current discussions in the Constituent Assembly about the definition of foreign enterprises. If the xenophobe ideology predominates, strong restrictions on foreign capital will appear in the new constitution and could reduce the importance of debt-equity swaps in solving the foreign debt crisis.

Thus there is no foreseeable long-run solution for the Brazilian foreign debt crisis until the new constitution is approved.[16] Short-run agreements will tend to conciliate the Brazilian government and creditors but will not last long. The lack of political and popular support facing the current government will not permit the implementation of domestic economic policies to curb inflation and liberalize the economy, including the opening up of foreign trade. Unfortunately, the new constitution might condemn the country to an isolationism that will reduce its development and ultimately deprive the Brazilian people of their economic freedom.

APPENDIX TO CHAPTER 12

The Relationship between Domestic and Foreign Savings

Take savings as a linear function of income. Consider now that this function depends on domestic rather than total expenditures. Thus, our simple consumption function can be written as

$$C_t = B_0 (Y_t + F_t)$$

where C_t = total consumption in year t; Y_t = total national income in year t; and F_t = foreign savings defined as the negative value of current account balance in year t.

With this assumption, Bhagwati and Srinivasan (1975) proposed to test the impact of foreign capital inflow (F_t) by estimating the simple savings function:

$$S_t = a_0 + a_1 Y_t + a_2 F_t + u_t$$

Note that $a_1 = (1 + a_2)$ and a positive (negative) value for the estimate of a_2 is consistent with the hypothesis that foreign savings complement (substitute for) domestic resources. They also suggest using F_{t-1} in the place of F_t assuming that expected inflows are relevant and their lagged value would be a proxy for this expectation. They do not suggest using Y_{t-1} since Y_t and Y_{t-1} are highly correlated. The table below summarizes a similar test for the Brazilian case, and its results indicate that contemporaneous foreign capital inflow has no impact on savings. However, if we use F_{t-1} as a proxy for

expected foreign capital inflow in year t, foreign savings are a substitute for domestic savings. This result is conditioned to the hypothesis that $a_1 = (1 + a_2)$. After testing this hypothesis (linear combination of regression coefficients), we could not reject the possibility that foreign savings are a substitute for domestic savings.

TABLE A12.1 The Trade-off between Domestic and Foreign Savings in Brazil

$$S = a_0 + a_1 Y + a_2 F + u$$

Independent variables		Regression coefficients (OLS) (Standard error)
Constant	50,663.8 (48,956.0)	−100,374 (53,497.4)
Y_t	0.1922 (0.0118)	
F_t	−0.1667 (0.2002)	0.2116 (0.0141)
F_{t-1}		(−0.2360)
R^2	0.956	0.960
$F(R,n)$	383.3	405.0
DW	0.843	1.218
n	38	37
SSR (in 10^6)	822,800	732,937

NOTE: Y_t = National income in year t. F_t = Foreign capital inflow defined as the negative value of current account balance in year t.
SOURCE: Basic data are from national accounts as revised by the Fundação Instituto Brasileiro de Geografia e Estatistica.

TABLE A12.2 Total Receipts Net to Brazil, 1960–84 (millions of 1980 U.S. dollars)

	Largest bilateral donors					Multilateral donors					
	France	Germany	Japan	U.K.	U.S.	IBRD	IFC	IDA	IDB	EDF	Total
1960		4.39	-7.49		135.89	21.25	13.94		-53.90		114.08
1961		52.29	-8.08	5.75	917.81	59.59			-82.67		944.69
1962	12.12	14.11	-7.21	17.91	535.35	26.60	-0.67		-45.22		552.99
1963	59.25	64.04	52.05		472.60	1.37	-2.40	-52.05	41.16		636.02
1964	21.48	39.13	-7.65	7.89	711.41	-21.81	-2.68	-12.08	45.34		781.03
1965	52.67	157.83	94.53	6.53	450.97	-45.3[illegible]	-6.00		5.07		716.27
1966	-6.43	-14.16	41.85	2.77	743.70	-51.77	6.75		81.86		804.58
1967	-20.38	-12.99	-19.44	-8.06	429.59	-21.02	25.16		174.04		546.91
1968	-28.30	181.29	49.68	62.09	1,146.50						1,411.26
1969	-44.51	311.95	95.21	94.24	667.71	101.10	9.15		260.88		1,495.73
1970	-6.90	234.08	153.99	314.25	1,129.31	170.63	10.92		229.86		2,236.14
1971	77.38	380.93	441.31	372.72	1,070.84	243.43	27.25		179.43		2,793.29
1972	310.50	316.85	640.05	320.37	1,837.50	342.57	36.50		252.87	0.20	4,057.42
1973	894.61	43.84	2,484.42	216.47	1,799.57	349.83	35.34		180.65		6,004.73
1974	1,000.64	261.95	847.19	76.76	2,323.89	397.38	86.55		260.39		5,254.75
1975	83.71	505.86	479.00	205.84	2,050.96	352.77	78.02		187.61	0.52	3,944.30
1976	353.85	1,099.23	486.83	1,001.93	2,127.16	195.29	45.99		147.72	0.02	5,458.03
1977	205.40	853.10	950.40	128.30	712.86	279.86	12.71		131.06	0.01	3,273.71
1978	462.37	660.61	1,472.40	94.45	2,788.82	234.11	-11.55		112.55	0.25	5,814.00
1979	423.14	426.81	1,156.56	22.64	1,453.95	246.82	-16.78		168.10	0.19	3,881.43
1980	885.65	1,360.67	71.37	231.33	318.00	242.22	70.70		130.20		3,310.14
1981	1,517.85	527.78	539.38	265.06	3,725.37	248.45	96.52		139.60		7,060.01
1982	1,937.75	511.28	616.61	280.88	3,534.81	408.67	117.56		214.03		7,651.58
1983	672.65	689.42	230.87	93.86	2,993.79	963.74	80.12		153.72	0.69	5,878.87
1984	924.48	739.70	1,096.31	67.65	2,339.83	989.32	12.12		228.21	0.41	6,898.03
Total	9,788.98	9,439.99	11,950.14	3,881.63	36,918.19	5,735.07	725.24	-64.14	3,142.56	2.29	81,519.95

NOTE: Blank indicates zero.
SOURCE: World Bank, based on OECD data files.

TABLE A12.3 Official Development Assistance to Brazil, 1960–84 (millions of 1980 U.S. dollars)

	Largest bilateral donors					Multilateral donors			
	France	Germany	Japan	U.K.	U.S.	IDA	IDB	EDF	Total
1960		1.26	-2.15		39.00		-15.47		22.64
1961		15.27	-2.36	1.68	268.00		-24.14		258.45
1962	3.60	4.19	-2.14	5.32	159.00		-13.43		156.54
1963	17.30	18.70	15.20		138.00	-15.20	12.02		186.02
1964	6.40	11.66	-2.28	2.35	212.00	-3.60	13.51		240.04
1965	15.80	47.35	28.36	1.96	135.29		1.52		230.28
1966	-2.00	7.53	13.01	0.86	289.38		25.46		334.24
1967	-6.40	12.59	-6.10	-2.53	187.23		54.65		239.44
1968	-8.80	17.46	-7.06	-2.77	223.51		0.00		222.34
1969	-10.00	19.30	-9.08	-1.15	138.00		52.76		189.83
1970	-2.60	27.34	-11.86	-1.11	120.00		51.28		183.05
1971	-4.90	26.24	-12.00	-0.76	104.00		37.48		150.06
1972	5.76	33.92	-10.72	0.21	54.00		52.77	0.08	136.02
1973		14.63	-5.66	1.23	42.00		48.11		100.31
1974	18.61	19.73	1.92	4.33	69.00		37.67		151.26
1975	12.79	24.17	23.06	7.44	43.00		33.60	0.33	144.39
1976	-1.50	18.55	18.55	4.09	30.00		19.42	0.01	89.12
1977	-0.90	26.66	28.28	2.12	-5.00		11.24	0.01	62.41
1978	17.75	36.25	34.53	0.47	-22.00		23.50	0.20	90.70
1979	5.10	39.58	25.47	1.16	-27.00		18.81	0.17	63.29
1980	9.15	47.76	20.50	1.22	-33.00		2.20		47.83
1981	111.90	80.09	31.36	0.31	-31.00		7.60		200.26
1982	74.27	43.89	50.47	16.60	-36.00		29.85		179.08
1983	18.66	41.32	27.13	8.10	-13.00		-6.20	0.67	76.68
1984	30.23	35.07	35.60	8.16	11.00		6.72	0.39	127.17
Total	310.22	670.51	282.03	59.29	2,095.41	-18.80	480.93	1.86	3,881.45

NOTE: Blank indicates zero.
SOURCE: World Bank, based on OECD data files.

TABLE A12.4 USAID Loans to Brazil, 1971–75 (millions of U.S. dollars)

Loans	Until 1971	1972	1973[a]	1974	1975[a]
Program loans					
Imports of goods	621.4		2.4		
Project loans	289.0	21.3	0.1	66.2	25.8
Agriculture	30.5	0.1		28.1	4.9
Education		0.4			8.3
Energy	163.8	16.7		13.5	6.3
Feasibility studies	6.5	0.9			
Industry and intermediate credit	19.5		0.1	6.4	2.2
Natural resources	2.0	0.8		2.0	0.3
Public administration		0.3		0.9	0.2
Public health and sanitation	15.4	0.8		19.3	9.1
Transportation	51.3	1.3		3.8	1.5
Sector loans	18.8	9.2			1.3[b]
Total	929.2	30.5	2.5		34.1

NOTE: Blank indicates zero.
a. Until September.
b. Science and technology.
SOURCE: *Relatório do Banco Central* (Report of the Central Bank).

TABLE A12.5 IBRD Loans to Brazil, 1971–84 (millions of U.S. dollars)

Sector	Until 1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Agriculture	11	15	14	25	24	17	12	6	19	28	51	70	252	209
Education	0.4	0.1	0.8	1	1	2	3	6	7	6	6	9	9	17
Industry	26	25	44	85	71	21	18	49	92	127	93	66	126	57
Electricity	424	72	46	49	96	64	85	92	73	74	83	86	165	203
Transportation	65	49	81	82	48	42	155	93	62	55	67	138	203	256
Water and sewerage		0.3	3	4	9	27	19	12	18	22	39	168	131	163
Rural development							3	8	15	16	17	32	48	61
Development bank							5	8	15	3			87	98
Nutrition and health								1	1	4	10	6	1	3
Urban development										8	21	48	36	40
Export development													146	193
Total	527	162	189	247	250	173	300	275	302	343	387	623	1,204	1,300

NOTE: Blank indicates zero. Amounts greater than $1 million have been rounded off.
SOURCE: *Relatório do Banco Central* (Report of the Central Bank).

TABLE A12.6 IDB Loans to Brazil, 1971–84 (millions of U.S. dollars)

Sector	Until 1971	1972	1973[a]	1974[b]	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Energy	187[c]	91[c]	51[c]	74[c]	78[c]	88	80[c]	125[c]	135[c]	100	83	93	89	74
Transportation and communication											21	51	56	53
Industry and mining	133		16	53	49	31	37	46	60	66	55	54	28	111
Agriculture and fishing	70	17	22	26	9	13	17	22	9	13	31	100	85	58
Sanitation	117	9	9	10	9	3	6	1						13
Export financing	32	11	5	11	7	6	23	23	23	19	18	20	3	6
Urban development	23[d]												3	
Education, science, and technology	24	10	8	9	5	6	6	29	29	36	30	11	4	10
Global pre-investment[e]					5.4	4	3	4	4					11
Total	587	134	118	184	162	151	172	250	260	234	238	329	268	336

NOTE: Blank indicates zero.
a. Until November.
b. Calculated as the difference between loans disbursed until 1974 and the sum of loans disbursed until 1972 plus loans disbursed in 1973 (until November).
c. Energy and transportation.
d. Housing.
e. Probably refers to feasibility studies.
SOURCE: *Relatório do Banco Central* (Report of the Central Bank).

PART III AID-RELATED ISSUES

CHAPTER 13 JOHN W. MELLOR AND WILLIAM A. MASTERS

The Changing Roles of Multilateral and Bilateral Foreign Assistance

In the four decades since Harry Truman's Point Four program was announced,[1] there have been five major trends in foreign assistance: (1) steady, moderately rapid growth in all forms of foreign aid, accompanied by large but highly unstable private flows to and from developing countries and considerable instability in aggregate flows to individual developing countries; (2) increasingly large flows through multilateral agencies, including private portfolio investment in development banks; (3) an increasing number of donors and aid channels, with a change from one dominant donor (the United States) to many donors, and a switch from a dominant bilateral channel (the U.S. Agency for International Development, or USAID) to a dominant multilateral one (the World Bank); (4) large changes in aid allocations among countries, including reversals in the direction of some flows; and (5) explosive growth in explicit knowledge, documentation, and experience in development processes, accompanied by continued and perhaps increasing dissatisfaction with the pace of development and the efficiency of foreign assistance.

As the number of foreign assistance agencies and donors has increased, strong comparative advantages among them have been revealed.[2] The

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differences between aid channels have given each one relative advantages in mobilizing resources from particular constituencies, in directing aid to particular countries, and in carrying out particular aid activities. All agencies have, to some degree, specialized to capture the benefits from these relative advantages.

Unfortunately, much of the potential benefit from larger aid flows and greater diversity among donors has been lost, principally because of weak leadership in the aid community, which has encouraged few shared objectives and little common understanding of development processes. Consequently, aid agencies have been periodically overrun by fads in development thinking. These fads make aid flows more unstable in terms of both country allocations and functional activities, and they keep diverse agencies from exploiting their various comparative advantages. At the same time, fads distract recipient countries from making the best use of their resources, and the less the national capacity of a recipient country to formulate its own long-run development strategy, the worse the impact of this problem.

Fashionable ideas are typically true in their original context, but their success in a particular place and time propels them too far, too fast, grossly oversimplifying the complex processes of development. For example, the growth successes of the 1960s did call for efforts at direct poverty alleviation, and poor growth in the late 1970s did require more emphasis on open markets and greater economic efficiency, but both of these responses were only partial solutions. Similarly, deterioration of the global environment today cries out for policy actions in all countries, but this too may be taken too far.[3] In each case, excessive and simplistic concentration on a popular idea brings confusion, duplication of effort, and wholesale reversals in institutions and ways of thinking. These problems are often attributed to a lack of coordination, and formal cooperation arrangements are suggested as a solution. But formal links are no substitute for genuine consensus. The critical task is providing the leadership to build a consensus through defining the common goals of the aid community and delineating effective strategies to deal with the diverse problems of extreme poverty, market structure, environmental deterioration, and many others. Such leadership was provided by the United States in the 1950s and by the U.S. and the World Bank in the 1960s, albeit with a heavy hand. The case studies in this volume clearly show the role that this leadership played; in India, for example, the Bell mission in 1964 generated an overall aid strategy, a sectoral strategy, and policy guidelines that provided the basis for dialogue and forward movement of policy that was helpful to consensus even while bringing out contentious issues.

Since the 1960s, the increased dispersion of bilateral aid and the rise of multilateral agencies have created a vacuum of leadership. It is doubtful if any organization but the World Bank, which is important to all countries, has the strength and legitimacy to sustain a major leadership role. However, neither the World Bank nor any other donor has prepared itself to play that role. To do so would require a deep understanding of the processes of

development; capacity to develop that knowledge into a coherent strategic vision; ability to help tune this strategy to specific, widely varying circumstances; and an ability to build a consensus not only among donors, but between donors and developing countries. Underlying such leadership must be a sense of humility gained from the knowledge of how dynamic, varied, complex, and uncertain are the processes of development.

Some suggestions for a consensus-building strategy are given in the final section of this chapter. With a broad consensus, the dispersion and diversity of donors could be turned into an asset, in the same way that resource diversity is an asset in the play of comparative advantage in trade. The diversity among agencies will become clear in the next section of this chapter, a brief review of the history of bilateral and multilateral resource flows. Then we will explore the theory and practice of comparative advantage in aid, survey the effects of faddism, and outline a strategy for aid around which a consensus could be built.

Resource Flows through Bilateral and Multilateral Institutions

Aid versus nonconcessional flows. To situate aid in the context of the market for capital flows between developed and developing countries, Figures

FIGURE 13.1 Aggregate Flows from DAC Countries to LDCs and Multilateral Agencies, 1960–85

a. Nominal flows

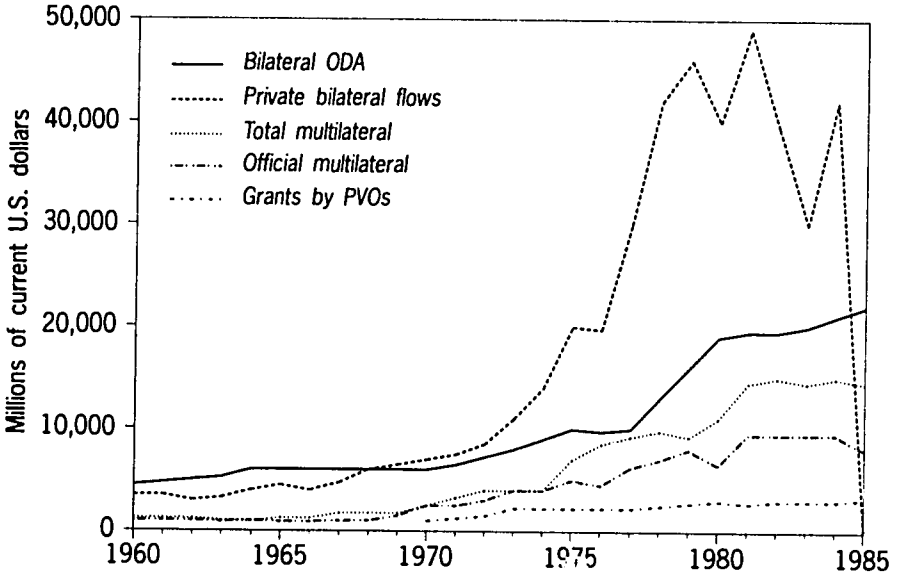

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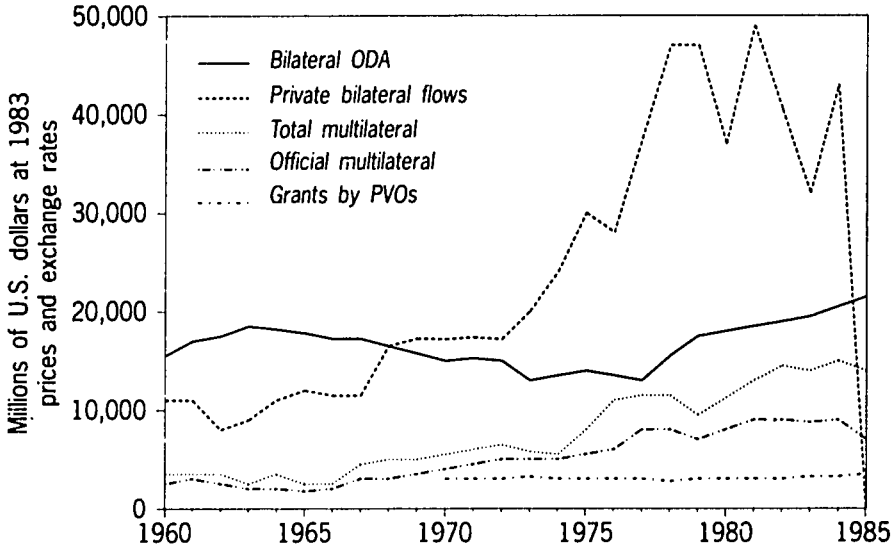
FIGURE 13.1 (continued)

b. Real flows



NOTE: Private bilateral flows include bilateral portfolio investment, direct foreign investment, and private export credits. They do not include private portfolio investment in multilateral development banks. Total multilateral includes official contributions to all multilateral agencies, plus private portfolio investment in multilateral development banks. Grants by PVOs includes only privately raised funds. Official contributions to PVOs are included as bilateral ODA. Data are from 1970 onward only.

SOURCES for Figures 13.1–13.4: *Development Cooperation 1969*, p. 38 (for 1960–61); *Development Cooperation 1973*, p. 42 (for 1962–69); *Development Cooperation 1974*, pp. 232–33 (for 1970–73) and pp. 254–55 (for U.S. data, 1963–69); *Development Cooperation 1977*, pp. 187–88 (for 1974–76); *Development Cooperation 1980*, pp. 199–200 (for 1977); *Development Cooperation 1982*, p. 219 (for 1978–81); *Development Cooperation 1986*, pp. 283–84 (for 1982–85). GNP deflators are from *Development Cooperation 1985*, p. 336 (for 1960–84); and *Development Cooperation 1986*, p. 287 (for 1985).

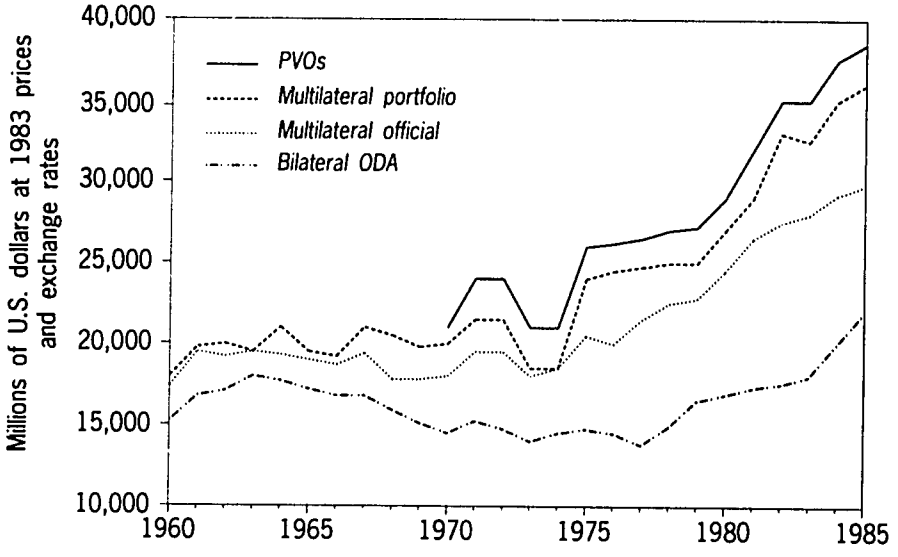
13.1a and 13.1b chart aggregate flows from all members of the Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC)[4] to all developing countries, in both nominal and real terms. Although private flows[5] far surpassed aid during the decade between 1975 and 1985, they have now fallen back to their level of the 1960s, and in general have been characterized by extreme instability.

The balance between bilateral and multilateral flows. When modern aid agencies were established, they were almost exclusively bilateral. Figure 13.2a shows, in real terms, how the balance between the various channels for aid from DAC countries to developing countries has shifted since then. Figure 13.2b shows these aid flows as percentages of total resources net (TRN), which includes private flows.

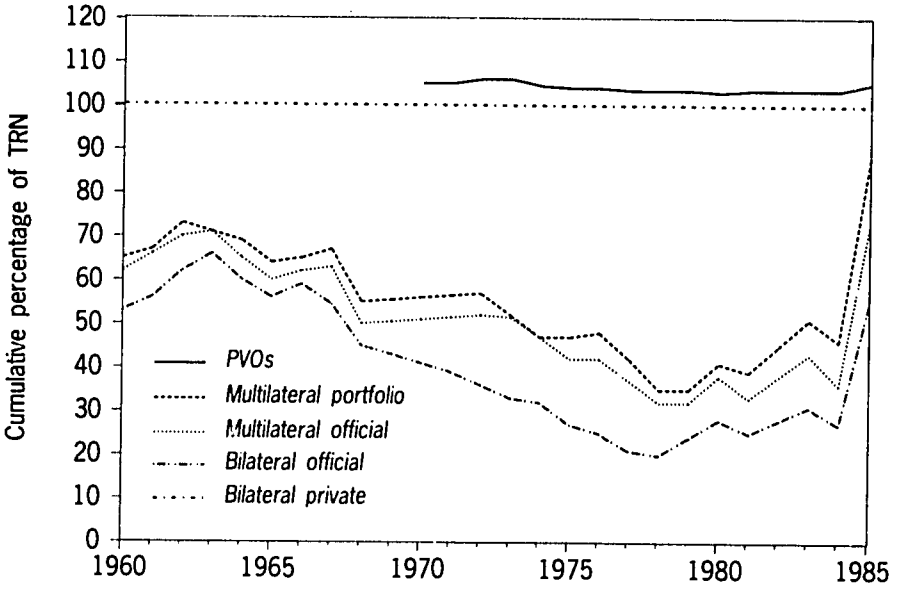
For the decade beginning in 1963, all nominal growth in official aid was channeled through multilateral agencies; in constant dollars and as a proportion of all flows, bilateral programs fell off dramatically. But since the

FIGURE 13.2 Composition of Aid and Total Resource Flows from DAC Countries to LDCs and Multilateral Agencies, 1960–85

a. Composition of aid flows



b. Composition of total resource flows



SOURCE: See Figure 13.1

mid-1970s, bilateral programs have expanded again, without appreciably cutting into official contributions to multilaterals or into the private fund-raising activities of private voluntary organizations (PVOs). Some of this expansion consisted of security-related assistance from the United States, but most of it was development aid from other donors.

In the late 1960s and again after 1974, another major source of additional funds has been private portfolio investment in multilateral banks. By 1985, these flows had grown to over $6 billion per year, accounting for almost half of multilateral funding, and 7.5 percent of total resource flows to developing countries and multilaterals. It was largely additional to what developing countries could borrow individually and was obtained on much better terms. And most important today, private investment in multilaterals is more stable than other private lending. In 1985 multilateral portfolio investment continued to grow (in nominal terms), while other private flows dried up and net DAC portfolio investment in developing countries was a negative $4.7 billion.

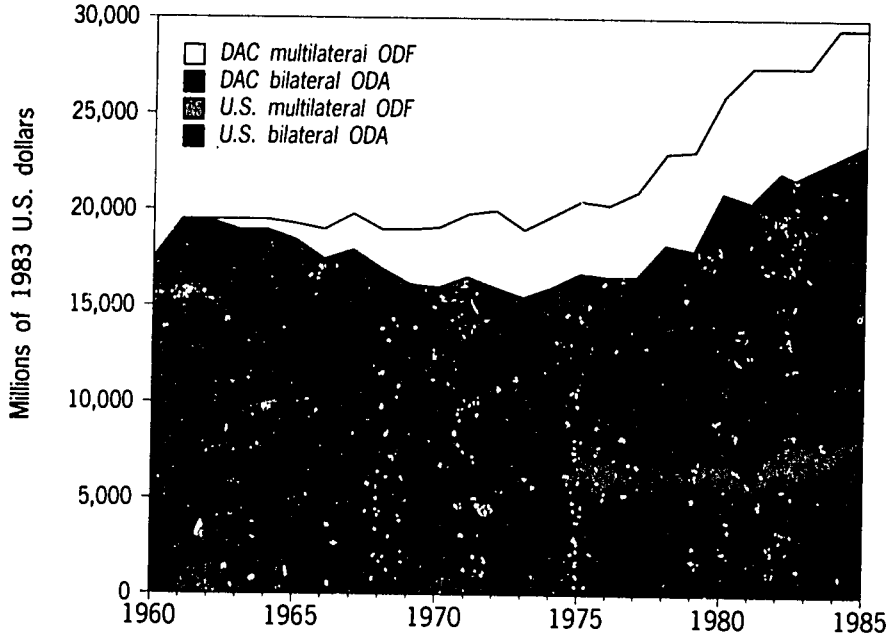
The changing importance of the United States. The share of aid funds contributed by the United States has declined almost continuously since the mid-1960s, from about one-half to about one-third of official development finance (ODF).[6] This is shown in Figures 13.3a and 13.3b in constant dollar terms and as percentages of official DAC bilateral aid, contributions to multilaterals, and combined total ODF. Most non-U.S. flows come from five other major donors (Canada, France, Germany, Japan, and the United Kingdom), but there are also a large number of small individual donors, including non-OECD countries.

It is notable that the United States, relative to other donors, generally provides a smaller proportion of total DAC official development assistance (ODA) through multilaterals than through bilaterals. This was briefly reversed in the late 1970s, when there had been a long increase in the U.S. share of multilateral funding, but that increase was completely erased in the 1980s. U.S. contributions to multilaterals as a share of U.S. ODA have increased from below the DAC average (7.6 percent in 1960–61 and 11.4 percent in 1970–71) to above it (34 percent in 1980–81) and then declined far below it again (19 percent in 1984–85).

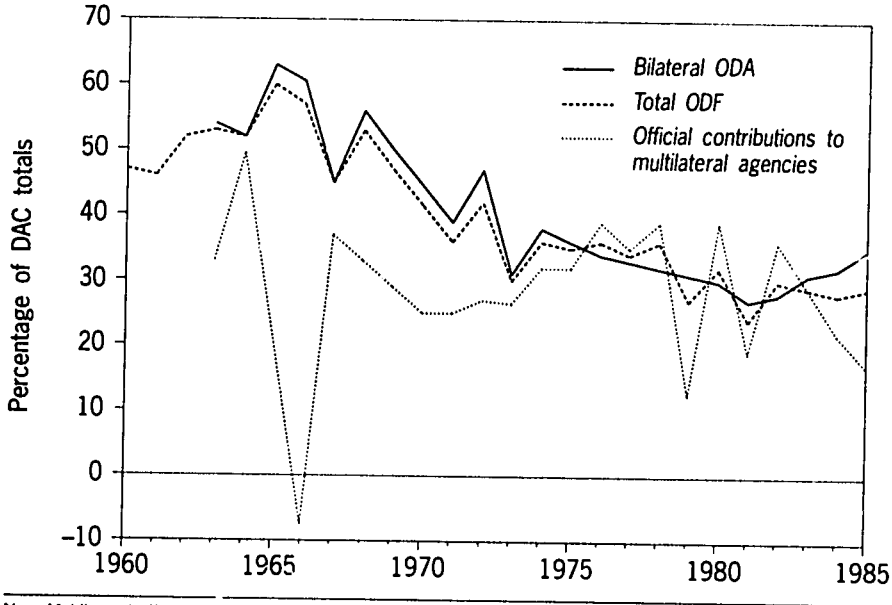
The U.S. role in private flows has also changed considerably over the 1970–85 period, as shown in Figures 13.4a, 13.4b, and 13.4c. While private voluntary flows from the United States have been fairly constant, other countries' PVOs have recently expanded (Figure 13.4a). Consequently, the U.S. share of PVO grants has fallen, from over 60 percent in the early 1970s to just over 50 percent in 1985. The U.S. share of private investment in multilaterals (Figure 13.4b) and in developing countries (Figure 13.4c) remains smaller than this, and is quite unstable.

FIGURE 13.3 U.S. Contributions to ODF and ODA, 1960–85

a. Cumulative official contributions to bilateral and multilateral agencies from the United States and from other DAC countries



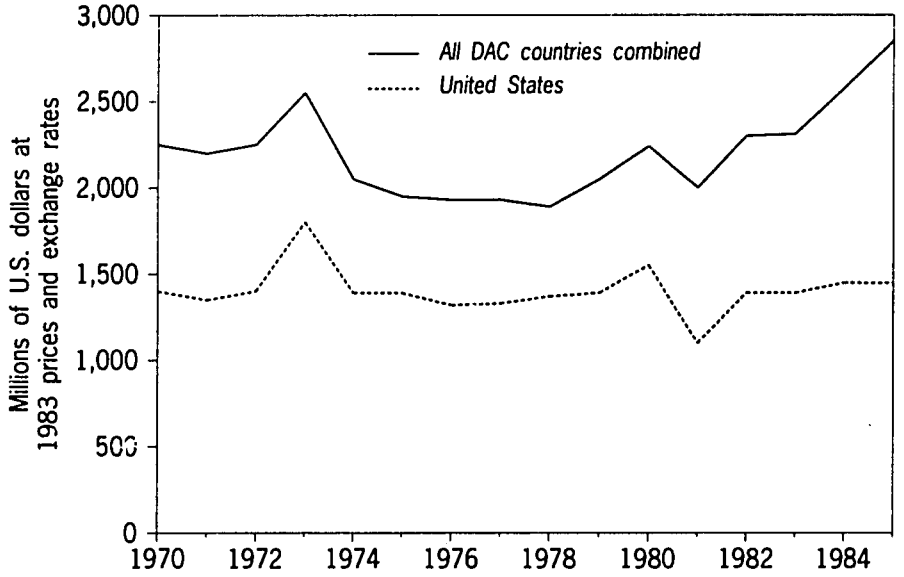
b. Official U.S. contributions to bilateral and multilateral agencies and to total official development finance



NOTE: Multilateral official development finance (ODF) includes all official development-oriented funds, both concessional and nonconcessional.
SOURCE: See Figure 13.1.

FIGURE 13.4 Private Flows from DAC Countries and the United States, 1970–85

a. Grants by private voluntary agencies



b. Private portfolio investment in multilateral agencies

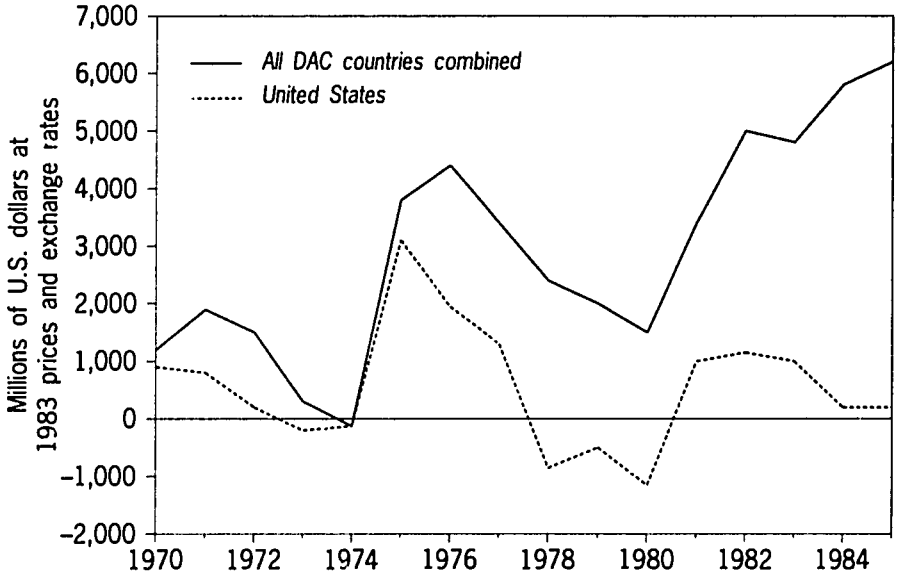


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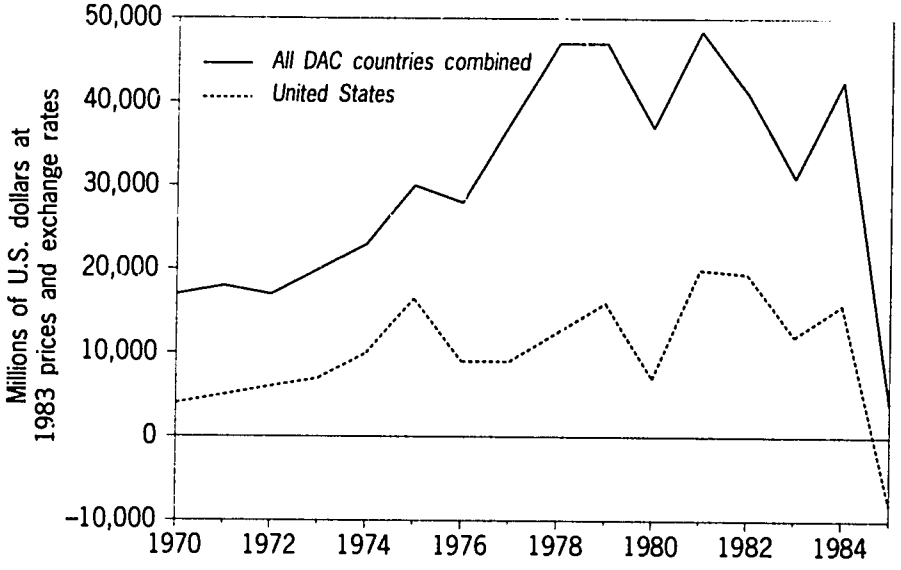
FIGURE 13.4 (continued)

c. Private flows not including investment in multilateral agencies



SOURCE: See Figure 13.1.

The proliferation of multilaterals. The problems of aid coordination engendered by the growth in aid flows and in the number of donors are compounded by the rising number of multilateral agencies. In 1960, only seven major multilateral aid channels were operating;[7] by 1975 there were eight more.[8] The ages and relative sizes of the largest agencies are listed in Table 13.1.

The changing geographic concentration of aid flows. The relative decline of the U.S. share in aid flows has become more marked in recent years because of the increased concentration of U.S. aid on a few major recipients. In 1960–61 the top two recipients of U.S. ODA were India and Brazil; together they received 19.3 percent of all U.S. bilateral aid. In 1970–71 the top two were India and Vietnam; they received 27.5 percent. By 1980–81 the top two were Israel and Egypt, who received 34.6 percent; by 1983–84, their share had increased to 37 percent. This increasing concentration was largely due to the growing use of U.S. foreign aid to pursue narrowly defined military and national security interests, combined with shifts in the definition of those interests.

Other donors also concentrate their bilateral assistance, but to a lesser degree than does the United States. Table 13.2 illustrates the geographic concentrations of most major donors and agencies. Clearly, each bilateral donor allocates aid differently, and in the aggregate, bilateral aid is highly

TABLE 13.1 Age and Net Disbursements of Major Multilateral Agencies, 1964–85 (selected two-year averages)

	Year established/year of first commitment	Millions of current U.S. dollars					Percentage of multilateral total				
		1964–65	1970–71	1975–76	1980–81	1984–85	1964–65	1970–71	1975–76	1980–81	1984–85
World Bank total		474	872	3,154	5,615	8,029	56.4	43.5	48.7	42.7	49.8
IBRD	1947/48	279	585	1,776	3,482	5,372	33.2	29.2	27.4	26.5	33.3
IDA	1960/61	184	225	1,198	1,731	2,546	21.9	11.2	18.5	13.2	15.8
IFC	1956/57	11	62	180	403	111	1.3	3.1	2.8	3.1	0.7
United Nations total		221	529	1,354	2,668	2,908	26.3	26.4	20.9	20.3	18.0
WFP	1962		125	350	541	729		6.2	5.4	4.1	4.5
UNDP	1965		219	378	725	616		10.9	5.8	5.5	3.8
UNHCR	1949		8	81	451	408		0.4	1.2	3.4	2.5
UNRWA	1946		45	99	164	191		2.2	1.5	1.2	1.2
UNICEF	1949		47	114	231	262		2.3	1.8	1.8	1.6
UNFPA	1967				140	123				1.1	0.8
Other UN			85	332	418	579		4.2	5.1	3.2	3.6
Regionals total			359	914	1,670	3,007		17.9	14.1	12.7	18.6
AfDB/AfDF	1964/67 (AfDF 1972)		4	51	177	333		0.2	0.8	1.3	2.1
ADB/ADF	1966/68 (ADF 1974)		32	317	507	805		1.6	4.9	3.9	5.0
IDB	1959/61	44	323	546	987	1,869	5.2	16.1	8.4	7.5	11.6
Special constituency agencies											
EDF/EIB	1957	104	242	653	1,500	1,406	12.4	12.1	10.1	11.4	8.7
Arab/OPEC agencies	various			384	532	377			5.9	4.0	2.3
IFAD	1977/78				65	220				0.5	1.4
Others			1	23	1,091	179		0.0	0.4	8.3	1.1
Total multilateral		841	2,003	6,482	13,140	16,126	100.0	100.0	100.0	100.0	100.0

NOTE: Blanks indicate unavailable data.
SOURCE: Flows calculated from OECD, *Development Cooperation 1986*, p. 239; *Development Cooperation 1977*, p. 197; and *Development Cooperation 1974*, p. 261. Dates for the establishment of and the first commitment from each agency are from *Development Cooperation 1980*, p. 138.

dispersed. However, some of the recipients favored by large donors are relatively small and rich, and they almost certainly receive aid flows far in excess of their absorptive capacity or their relative need. These flows are often targeted by critics as wasteful and inequitable. In contrast, while multilaterals also concentrate their aid on certain countries, their focus is on larger, poorer countries (see Table 13.4 for per capita figures).

To examine changes in geographic concentration over time, it is most convenient to use concentration ratios.[9] In Table 13.3 we show the percentage of the nine major donors' geographically allocated bilateral ODA going to the top one, two, and four bilateral recipients. It is particularly important that all donors, except France and the United States, have been tending toward

TABLE 13.2 Geographic Concentration of ODA, 1980–81 Average

Percentage of geographically allocated bilateral ODA, with total bilateral ODA in parentheses

Australia (US$0.5 billion)		Netherlands (US$1.1 billion)	
Papua New Guinea	57.6	India	13.9
Indonesia	9.4	Surinam	9.7
Bangladesh	4.0	Indonesia	7.5
Philippines	2.6	Neth. Antilles	7.4
Pakistan	2.4	Tanzania	7.3
Canada (US$0.5 billion)		Sweden (US$0.5 billion)	
Bangladesh	11.2	Vietnam	15.6
India	9.4	Tanzania	14.8
Pakistan	8.3	India	11.1
Sri Lanka	6.1	Mozambique	6.5
Tanzania	4.6	Zambia	5.7
France (US$3.4 billion)		United Kingdom (US$1.3 billion)	
Reunion (DOM)	16.6	India	20.6
Martinique (DOM)	14.9	Bangladesh	8.4
New Caledonia (TOM)	5.4	Tanzania	4.9
Fr. Polynesia (TOM)	4.7	Sri Lanka	4.9
Morocco	4.2	Kenya	4.7
Germany (US$2.9 billion)		United States (US$4.1 billion)	
Turkey	12.5	Egypt	21.4
Bangladesh	10.1	Israel	19.4
India	6.0	India	5.6
Sudan	4.8	Turkey	4.8
Indonesia	4.7	Bangladesh	3.6
Japan (US$1.8 billion)		Total DAC (US$18.2 billion)	
Indonesia	17.0	Egypt	6.7
Korea, Rep.	10.5	India	6.3
Thailand	8.9	Bangladesh	5.4
Bangladesh	7.5	Indonesia	5.4
Philippines	7.1	Israel	4.8

Percentage of total geographically allocated ODA, with total ODA in parentheses

IDA (US$1.8 billion)		Total multilateral (US$7 billion)[a]	
India	39.2	India	18.6
Bangladesh	8.9	Pakistan	5.5
Pakistan	4.7	Bangladesh	5.0
Egypt	3.6	China	3.4
Tanzania	3.2	Egypt	2.8
WFP (US$0.5 billion)		OPEC (US$5.4 billion)	
Pakistan	8.9	Syria	23.8
Kampuchea	7.3	Jordan	17.4
India	6.5	Morocco	6.8
Somalia	5.5	Lebanon	5.3
Egypt	5.4	Yemen	5.2

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TABLE 13.2 (continued)

UNDP (US$0.6 billion)		CMEA (US$2.6 billion)	
India	4.1	Vietnam	34.8
Bangladesh	3.5	Cuba	22.8
Sudan	3.0	Afghanistan	10.5
Ethiopia	2.9	Kampuchea	5.3
Indonesia	2.4	Lao PDR	3.5
All sources combined (US$33.1 billion)			
India	7.8		
Egypt	4.4		
Syria	4.4		
Bangladesh	4.3		
Vietnam	3.4		

a. ODA contributions to multilateral agencies from DAC member countries.
SOURCE: Calculated from *Development Cooperation 1983*, pp. 208–213.

less geographic concentration over time. This trend seems to be related to program size: smaller programs tend to be more concentrated, and to become less so as they grow. As exceptions to this rule, France has maintained a roughly constant degree of concentration on a few overseas territories, while the United States has actually increased concentration in its shift to security-based lending. A notable feature of geographic concentration is that it

TABLE 13.3 Concentration Ratios for Major DAC Donors, 1960–81 (selected two-year averages)

	Percentage of geographically allocated bilateral ODA									Percentage of total ODA to multilateral agencies		
	Top recipient			Top 2 recipients			Top 4 recipients					
	60–61	70–71	80–81	60–61	70–71	80–81	60–61	70–71	80–81	60–61	70–71	80–81
Australia		75.8	57.6		85.1	67.0		89.8	73.6		10.9	22.2
Canada	54.0	42.0	11.2	83.5	58.0	20.6		64.6	35.0	24.9	22.6	45.7
France	94.2	13.3	16.6		25.2	31.5		42.7	41.6	7.3	10.2	16.3
Germany	34.1	14.6	12.5	64.2	24.6	22.6	91.7	38.4	33.4	22.6	22.0	27.5
Japan	26.6	26.9	17.0	48.2	50.2	27.5	83.1	71.4	43.9	18.5	14.9	32.3
Netherlands	74.9	33.3	13.9	96.4	51.2	23.6		77.9	38.5	36.3	25.3	25.6
Sweden	38.9	18.6	15.6	66.0	36.2	30.4		66.8	48.0	83.8	52.6	35.1
United Kingdom	17.3	27.8	20.6	33.8	33.2	29.0	51.7	42.9	38.8	15.2	17.9	34.6
United States	11.6	18.0	21.4	20.6	31.6	40.8	34.8	48.1	51.2	7.6	11.4	34.0
Simple average of 9 largest DAC donors	44.0	30.0	20.7	59.0	43.6	32.6	63.4	58.5	44.9	27.0	20.9	30.4
All DAC countries combined	15.0	14.8	6.7	24.7	24.4	8.9	36.9	36.7	16.3	11.0	12.5	31.3

NOTE: Blanks indicate unavailable data.
SOURCE: Calculated from *Development Cooperation 1985*, pp. 123, 306–314; *Development Cooperation 1983*, pp. 208–213.

increases the vulnerability of aid recipients to sudden changes in the objectives and perceptions of their principal donors. This is particularly evident among recipients of U.S. aid, which is large, concentrated, and unstable. Virtually all of the country studies in this volume call attention to the seriousness of this problem.

The changing poverty emphases of aid flows. In the early 1970s, both bilateral and multilateral donors dramatically increased the share of funds going to the least developed countries (LLDCs).[10] This occurred during a period of rapidly growing total aid, resulting in very rapid growth of LLDC receipts, as shown in Figures 13.5a, 13.5b, and 13.5c.

DAC bilateral aid flows shifted *away* from the LLDCs in the late 1970s, however, and then shifted back toward them a few years later. Funding of LLDCs has been heavily influenced by the 1970s' emphasis on helping the poorest of the poor (reinforced by famines in Asia and Africa) and by the 1980s' emphasis on structural adjustment in distorted economies (reinforced by famines in the Sahel). Unfortunately, these bursts of funding were probably far in excess of the LLDCs' real absorptive capacity.

Multilateral aid to LLDCs, however, has been growing in a somewhat more stable fashion. This is particularly important for those countries with high ratios of aid to gross national product (GNP), for whom the predictability of aid is essential to its productive investment.

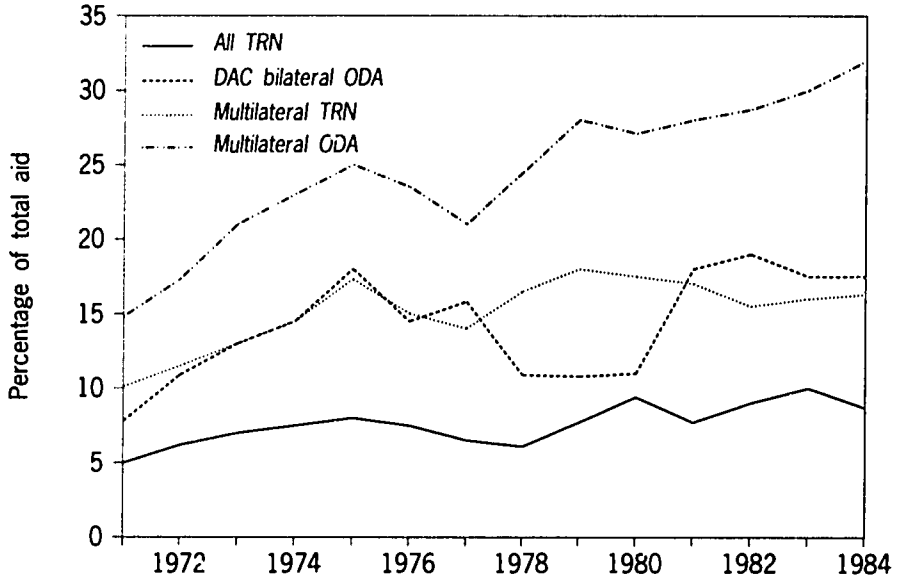
These data clearly show the special importance of the multilateral agencies in providing aid to the poorest countries. Very poor countries may be of little strategic or political importance to bilateral donors, but they have great economic needs and potential for development.

The changing regional emphases of aid flows. Table 13.4 shows bilateral and multilateral aid allocations by region and selected country. It is notable that bilateral allocations have changed considerably over time, recently shifting toward the Middle East, North Africa, and sub-Saharan Africa at the expense of Asia. In contrast, multilaterals have maintained a more consistent pattern, with aid generally targeted to the very poor countries of South Asia and Africa. These trends are closely related to those discussed in the section above.

Differences in the geographic allocations of bilaterals and multilaterals are particularly evident in their per capita levels of ODA. The dramatic extremes and apparent misallocations allowed by bilaterals are rarely seen among multilaterals. In 1983–84, bilaterals gave over five times their world average ODA per capita to countries in the Middle East, and over three times the average to North Africa, largely reflecting U.S. support for Israel and Egypt. This left relatively little bilateral aid for poorer, more populous countries, particularly in South Asia, where over half of the world's poorest people live, and where bilaterals actually gave less per capita than multilaterals.

FIGURE 13.5 Flows to Least Developed Countries (LLDCs), 1971–84

a. Percentage of total aid allocated to LLDCs



b. Real aid flows to LLDCs

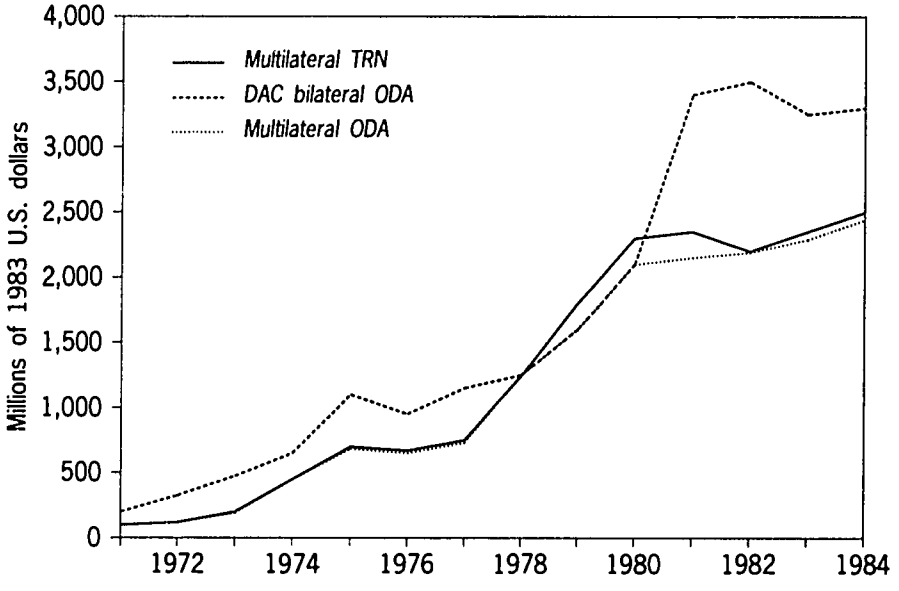


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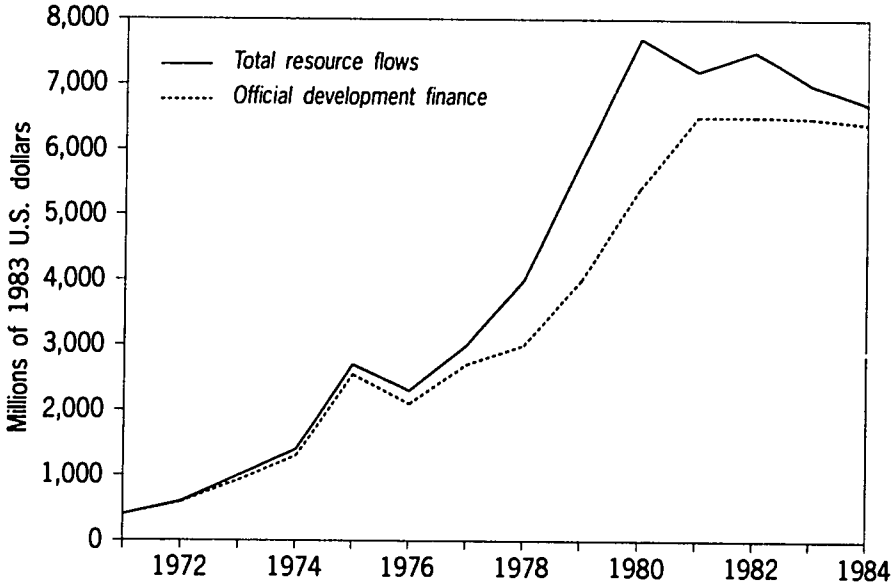
FIGURE 13.5 (continued)

c. Real official development finance and total resource flows to LLDCs



NOTE: Deflated by DAC GNP deflators.
SOURCE: Calculated from *Geographical Distribution of Financial Flows to Developing Countries*, 1978 (for 1971–77), 1981 (for 1977–80), and 1986 (for 1981–84) and *Development Cooperation 1985*.

Comparative Advantage in Theory

To explain the facts and trends outlined above, it is appropriate to turn to the economics and political science literature on foreign aid. In this section we briefly summarize a few themes from this literature and then use those insights to compare the abilities of donors and agencies to raise and spend money.

The quantity of aid. Support for aid typically follows patterns of international trade and investment. These links generate donor country constituencies for aid (people pursuing humanitarian, religious, commercial, financial, industrial, military, political, and ideological interests) and help create the skills and institutions necessary for its provision.[11] The various constituencies for aid receive substantial real benefits from aid programs, but there are often significant spillovers between constituencies. For example, in the United States, food aid serves both humanitarian and agricultural interests. Support for aid is therefore typically in the form of coalitions of more or less diffuse interest groups. Some groups do provide foreign aid independently of their governments and have done so for centuries. These represent only a

TABLE 13.4 Regional Distribution of Aid Flows, 1970–84 (selected two-year averages)

	Percentage of flows to all developing countries						Value of aid flows (current U.S. dollars)					
	Bilateral ODA			Multilateral ODA			Bilateral ODA per capita			Multilateral ODA per capita		
	1970–71	1980–81	1983–84	1970–71	1980–81	1983–84	1970–71	1980–81	1983–84	1970–71	1980–81	1983–84
Sub-Saharan Africa	17.6	21.0	23.6	36.3	35.4	36.5	3.93	14.80	13.08	1.23	7.69	6.93
Americas	13.9	8.5	11.8	11.1	11.5	11.1	2.98	6.09	6.75	0.36	2.54	2.20
Middle East	2.2	18.4	16.1	7.5	5.3	3.4	2.03	50.69	34.19	1.05	4.55	2.53
Israel	1.1	3.3	5.9	0.0	0.0	0.0	22.30	214.56	311.71	0.03	0.06	0.00
North Africa	5.3	9.5	8.9	7.0	4.1	4.1	4.95	26.89	19.95	0.99	3.61	3.16
Egypt	0.4	4.5	6.3	2.4	2.6	2.7	0.65	26.92	30.10	0.65	4.75	4.50
South Asia	21.9	10.8	9.6	19.2	29.3	30.1	1.77	2.92	2.08	0.24	2.46	2.25
India	13.2	2.9	2.5	11.9	16.4	14.0	1.45	1.08	0.75	0.20	1.87	1.43
Bangladesh	0.2	3.2	3.1	0.7	4.7	5.9	0.13	9.25	7.00	0.09	4.17	4.59
Pakistan	6.1	2.1	1.2	4.7	4.8	5.5	6.01	6.62	2.80	0.70	4.62	4.60
Far East Asia	25.2	8.0	10.1	7.6	10.7	7.2	1.56	1.48	1.53	0.07	0.61	0.37
China	0.0	0.0	2.4	0.0	3.0	2.5	0.00	0.00	0.52	0.00	0.24	0.19
Indonesia	8.2	3.3	2.7	3.1	1.6	1.5	4.05	5.72	3.80	0.23	0.86	0.74
Total to all LDCs (millions of current U.S. dollars)	6,064	25,456	22,212	921	7,858	7,672	2.20	7.69	6.19	0.33	2.37	2.14

SOURCE: Calculated from *Geographic Distribution of Financial Flows to Developing Countries 1981/84* (for 1980–81 and 1983–84). For 1970–71, aid data are from *Development Cooperation 1973*, pp. 202–205; and population data are from *United Nations Demographic Yearbook 1980*.

fraction of aid flows, however, because it is generally more efficient to fund aid out of national tax receipts, like other national collective goods.

Of course, different interest groups benefit differently from each activity, and the degree to which various constituencies and coalitions should be tapped for any given aid enterprise is often the subject of intense debate. Feasible coalitions may or may not correspond to national boundaries, and organizations at the subnational and multinational level may have to be formed. Indeed, one of the earliest arguments for multilateral activity, and one of the most important, is that much foreign assistance has global public good qualities. It provides a shared infrastructure for international trade and finance, and helps maintain peace and political stability.[12]

After World War II, the United States dominated the world economy; it was the only country able to fund aid efforts and was arguably their most significant beneficiary. Initially, its greatest concern was the economic recovery of Europe. The United States took the lead in extending assistance in reconstruction, bilaterally through the Marshall Plan and multilateraliy through the Bretton Woods institutions.[13]

Soon non-European countries came into greater prominence as potential recipients of economic assistance, and the United States developed the Point

Four program to extend assistance throughout the world. As the postwar economy grew, however, a concern with "burden-sharing" arose (Pincus 1965). Growth in other industrialized countries, increasing their stake in a politically stable and economically growing world, implied that they too were benefiting (or would benefit) from the effects of U.S. aid, and the United States sought to lead other donors into matching-funds arrangements, both formal and informal. In such arrangements, each donor pledges to fund some fixed fraction of a program's cost, usually through a multilateral agency. This helps overcome the public goods problem. In theory, such arrangements can even induce full Pareto efficiency when each donor's share of funding is equal to its share of the benefits.[14]

Throughout the 1960s and 1970s, the United States took the lead in establishing and strengthening multilaterals. In the initial stages, the United States dominated a number of these organizations, but as other countries grew economically, they took increasingly large shares of each funding cycle.

The recognition of public goods qualities in aid activities is not, however, always an argument for global multilateral activity. It is only an argument for matching donors with those agencies capable of providing the services they need, and vice versa. Many services belong at the national level, because they serve national interests. But other services might belong at the regional or subregional level. The variety of types of agencies that are needed is manifest in the variety of agencies that have arisen, as discussed below.

The quality of aid. A longstanding feature of most bilateral programs is that much of their aid is tied to procurement in the donor country. A newer but similar arrangement is to offer aid as subsidized credit for the purchase of donor country exports. Either form of tying substantially reduces the real value of aid to recipients (Bhagwati 1967) and may significantly distort their economies over the long run. In donor countries, aid tying helps preserve high-cost, noncompetitive industries and creates a policy-induced market failure similar to the effects of protectionism in trade.

Attempts to untie existing aid programs have made some progress, despite the political strength of the beneficiaries of aid tying.[15] One way to address this problem is to support multilateral agencies, whose aid is difficult to tie. Furthermore, the size and global contacts of multilaterals allow them to establish effective systems for international competitive bidding and recruitment.

The other side of this coin is that tied aid and export credits allow producers to subsidize their exports for economic and political reasons. This can be beneficial to aid recipients; subsidized goods represent real resources to be used in the development effort. If the donor provides such goods consistently, and the recipient buys no more than it really wants, this can be an effective form of assistance. (The chapter by T. N. Srinivasan in this volume provides valuable insight into this issue.)

Many aid activities offer important economies of scale. Some economies will be administrative or managerial in nature, but these are rapidly exhausted even among the smallest foreign aid agencies. Other economies will arise through overcoming market failures (Krueger 1981). Still others will be acquired through learning-by-doing and will depend on the depth and breadth of an agency's experience in a particular activity. Some of this knowledge can be shared with other agencies, resulting in familiar patterns of institutional leadership.

USAID, a bilateral agency, has been such a leader since its inception. Because of its size and broad responsibilities, it has had to develop systems for project and program design, appraisal, monitoring, and evaluation that can be widely applied and that take into account many aspects of development processes. In particular, a long and large concentration on agriculture has given USAID a leadership role in that area. While numerous valid criticisms of USAID's operations can and have been made—many from within USAID—it is unlikely that the development field would have progressed as rapidly as it has if the work of USAID had been diffused through a dozen different national agencies working in different languages and organizational styles.

USAID's learning process, however, has been limited by its close ties to the localized, short-term interests of the U.S. government. By the 1970s, the expansion of the World Bank Group had brought a broader and longer-term perspective and a somewhat more geopolitically disinterested player onto the development scene. Its comparative research is widely credited with a number of important advances in development thinking, and the intellectual impact of World Bank missions in developing countries has been noted in a number of the country studies in this volume. Research in the Bank and its application to the lending process are both driven and facilitated by the magnitude and extent of the Bank's responsibilities.

All economies of scale, of course, are eventually exhausted. Most activities do not need to be global, and some aid activities may be so distinct that they warrant functionally specialized agencies. This is clearly shown by the relative success of the geographically focused regional development banks and of the functionally specialized Consultative Group on International Agricultural Research (CGIAR).[16] In these cases, it has been effective to match an agency of appropriate size with a coalition of constituencies willing to fund its work.

Relatively small bilateral agencies and PVOs may well reach efficient sizes in some activities. This is most likely to happen if the activity is important in their home economy, because bilaterals have direct access to the individuals and institutions that support them, giving bilaterals in general a special advantage in helping to transfer and adapt national skills for institution-building efforts elsewhere. USAID, for example, offers good technical assistance to national agricultural research institutions largely because it can facilitate the transfer of skills accumulated in the U.S. land-grant college

system.[17] Similarly, British and French assistance in export crop marketing or Scandinavian aid in forestry are successful because they match the institutional resource endowments of their countries with the needs of others. (For an in-depth analysis of these and other sources of comparative advantage, see the recent research of the World Bank's project Managing Agricultural Development in Africa [MADIA], comparing eight major agencies working in six countries.[18])

The adaptation and transfer of skills and institutions is further facilitated by strong cultural, linguistic, and economic ties between countries. These ties generate the necessary skills for effective communication across national boundaries and also ensure the long-term contact needed for successful institution building (Lele and Goldsmith 1989). The fact that many such ties originate in exploitative colonial enterprises should not now prevent their application to more equitable activities.

Some multilaterals have substantial "indigenous" institutional skills of their own, and they may also have strong links with developing countries. The World Bank is an important example, having frequently used its unique position to help build macro and sectoral analytical capacities in member governments. The Bank, however, is an exception; in general, bilaterals have the advantage in institution-building technical assistance.

Multilaterals may have fewer indigenous skills and weaker links with specific countries, but they benefit from internationally competitive recruitment. In particular, multilaterals can recruit the nationals of third-party developing countries. Bilaterals almost never do this, although they frequently employ nationals of recipient countries. This gives multilaterals a relative advantage in enclave-type technical assistance (such as the agricultural research centers supported by the CGIAR) and technical assistance related to turn-key projects (such as the construction of ports, roads, and so forth), which are increasingly important as the older generation of technicians trained during colonial administrations moves into retirement. Global recruitment also provides a positive externality when those more widely experienced personnel move on to other jobs.[19]

The geopolitically partisan quality of bilateral agencies helps them to tap a major constituency for aid. But it also limits their effectiveness, because it affects the nature of their aid, its allocation among recipients, and its stability. These limitations were an important cause of the rise of multilaterals in the 1960s.

The relatively large number and the partisan nature of bilaterals particularly affect their ability to influence the economic policy of recipients.[20] Several agencies, each with a small stake in an individual recipient country, usually have little incentive to engage in policy dialogue, aid coordination, and conditional aid, but even if they wish to do so their divergent styles and interests make such work very difficult. And when a single donor dominates the scene, its attempts to influence recipient policies will be suspect because of its independent geopolitical agenda and lack of local

political accountability. Examples of these problems will be found in all the country studies of this volume.

The potential for multilateral agencies to help solve this problem was well put in the 1969 Pearson report:

> If international organizations take the initiative in assessing country performance and in coordinating aid strategy at the country level, many bilateral aid givers could find it easier to ensure that their aid forms part of an integrated whole. In short, if bilateral donors wish to ensure that bilateral aid is effective, they should try to strengthen the multilateral framework (Pearson 1969: 214).

Coordination is particularly important for policy-based aid (which in practice subsumes program aid and structural adjustment aid), because policies must be stable (but flexible) and national in scope, whereas projects can be locally oriented and relatively short-lived. Multilaterals have, indeed, taken the lead in these policy-based activities. National aid coordination efforts are led by the World Bank's consultative groups and the UN Development Program's Roundtables, while policy-based aid has been led by the World Bank's structural adjustment loans. This work has not been free of ideological content and political conflict, if only because multilaterals are inevitably governed by their donors' point of view and may even be disproportionately influenced by their few largest donors. The agencies' administrative structures, however, demand that donors make compromises among themselves and with recipient-country members, thus diluting and smoothing out fluctuations in each member's short-term interests.

The structure of multilaterals also has a significant impact on their allocations across recipients. (For relatively recent empirical work on this issue, see Maizels and Nissanke 1984; Mosley 1982; McKinlay and Mugham 1984.) While it is difficult to test meaningful hypotheses in this area, it does seem clear that multilaterals have been able, to a greater extent than bilaterals, to allocate their aid following the long-term resource needs of recipients rather than the short-term interests of donors.

Multilateral aid also seems to be more stable than bilateral aid. While formal studies of this issue are rare, clear patterns do emerge from most data series. Johnston et al. (1987: 13) noted about USAID in sub-Saharan Africa: "One of the most striking characteristics of this assistance has been its instability." Aid from most multilaterals has been more stable, contributing significantly to its effectiveness (Cassen 1986).

Finally, while PVOs are not formally within the scope of this chapter, they do have considerable significance as channels for certain aid activities, and often provide additional resources as well.[21]

First, because they are private, PVOs have clear advantages in mobilizing human resources inspired by humanitarian and religious interests, in both donor and recipient countries. They can appeal to constituencies that

are alienated by or simply do not correspond to the formal structures of government, and organize those constituencies on their own terms.

Second, because they are small, they tend to have low administrative overheads. Consequently, they are often relatively flexible and willing to take risks, although they generally have poor institutional memories and may also have poor interagency communication and coordination. Nevertheless, as long as PVOs can use the research, information dissemination, and aid coordination activities of larger agencies, their contribution to overall productivity can remain very high.

Third, because they are voluntary (as opposed to being funded through compulsory taxation by governments as is "official" aid), PVOs are often highly motivated to educate the public in both donor and recipient countries.[22] The education of voters, legislators, and government officials can have important spillover effects on the funding of official agencies as well.

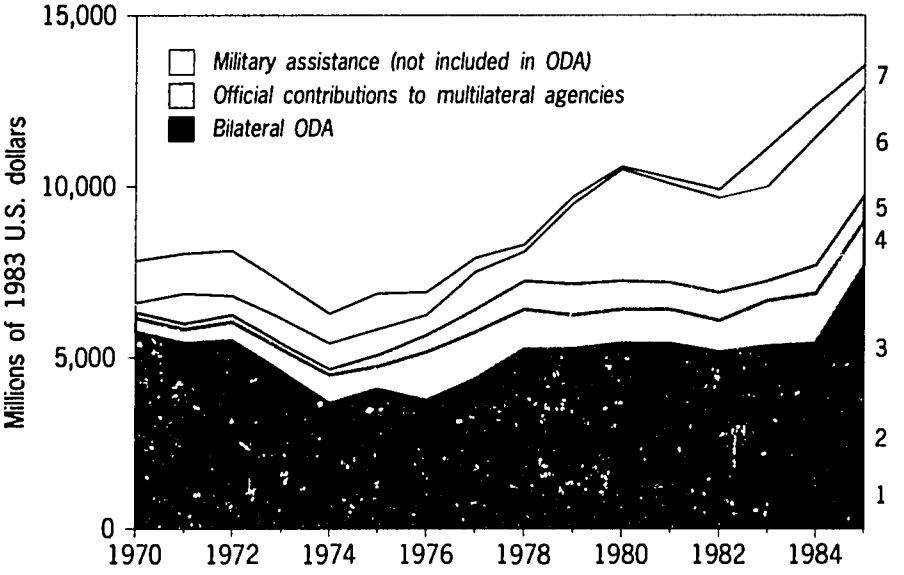
Having enumerated some of the theoretical comparative advantages that donors and agencies could exploit to raise resource productivity, we will now survey the development field, asking to what degree selected donors and their aid channels have actually employed them.

Comparative Advantage in Practice

Bilateral agencies. As noted above, bilateral agencies adopt functional specialties much less often than multilaterals. Nevertheless, because of differences in donor countries' resource endowments and aid constituencies, there has been some expression of comparative advantage among them.[23] The United States provided 31.2 percent of DAC bilateral ODA in 1984–85,[24] almost entirely through USAID. This amount gives the United States substantial influence in setting the agenda for all bilateral aid. But the United States has an even larger share of DAC GNP, and its ODA as a proportion of GNP is the smallest of all DAC countries (0.24 percent, given a DAC average of 0.35 percent). This low level of aid can be explained in part by the fact that the United States suffers from a large-country effect (that is, diminishing returns of various sorts) in aid as in other activities, in part because it has relatively little international trade as a proportion of GNP, and in part because it has relatively few of the close colonial ties that help motivate and support aid flows.

In addition, the United States now provides one of the smallest proportions of its aid to multilaterals (19.2 percent, while the DAC average is 23.5 percent, or 28.5 percent including the European Economic Community). This is partly due to its relative strength in the provision of bilateral aid and is partly a reaction to the fact that between 1963 and 1977 the United States gradually reduced (in real terms) its bilateral programs in order to help accelerate the buildup of multilaterals, and, with the buildup seen as complete, reverted to a larger proportion of bilateral aid.

FIGURE 13.6 Composition of U.S. Foreign Aid by Program, 1970–85



1. USAID development programs
2. PL 480
3. ESF
4. Multilateral development banks
5. Other multilaterals
6. Foreign military sales credits
7. Military assistance programs

NOTE: Deflated by U.S. GDP deflator.
SOURCE: Budget of the United States, various years.

An exceptionally large amount of U.S. ODA is in the form of food aid through the PL 480 program, largely because domestic U.S. agricultural policy involves heavy surplus-creating subsidies. (The EEC is another major food aid donor, for the same reason.) It would be logical for the United States to build intellectual leadership in the area of food aid, but this does not seem to be taking place. In the agricultural and rural development sectors, in contrast, the United States has successfully built a leadership role commensurate with its resource flows and comparative advantage.

Finally, in recent years the United States has had an exceptionally large constituency for security-related aid. This directly affects the regional and functional distribution of aid and the scope for leadership with respect to other forms of aid, and may substitute for other forms of aid as well. The recent composition of U.S. aid is shown in Figure 13.6. Among USAID's particular advantages are large overall program size, long history, and geographic scope permitting comparative research and economies of scale in programming; large in-country missions aiding country-specific analysis and long-term relationships with governments;[25] access to subsidized U.S.

products, particularly agricultural goods; and use of U.S. institutions, including PVOs for public education and resource mobilization, and particularly research and training facilities for agriculture and other disciplines.

Japan (14.0 percent of DAC ODA in 1984–85, but rising rapidly) gives a higher proportion of its GNP in aid (0.31 percent in 1984–85) than does the United States. Japan gives a very high proportion of its aid to multilaterals (38.6 percent) and prefers to give locally (Japan leads funding of the Asian Development Bank, and its bilateral aid goes chiefly to other Asian countries). Much Japanese aid has recently gone for electrification and other public utilities (51.8 percent of sectorally allocable commitments in 1983–84, as opposed to a DAC average of 28.4 percent), and a higher proportion of its total outflows are private loans and direct investment. These preferences probably arise because of Japan's rapid and relatively recent economic expansion and the youth of its aid program. This situation is changing rapidly, however, as Japan becomes increasingly involved in a broad range of aid activities.

France (13.4 percent of 1984–85 DAC ODA, or 9.1 percent excluding aid to their Départements d'Outre Mer/Territoires d'Outre Mer [DOM/TOM]) and the United Kingdom (5.1 percent) both use their strong colonial links as channels for aid. The Commonwealth and the French DOM/TOM are key networks for strengthening a wide variety of public and private institutions. France and Britain also have particular skills in the development of export crops. Although the colonial history of agricultural export commodities has made this a politically delicate area, it is to be hoped that these skills can be exploited, especially for cotton, groundnuts, and several other crops that are in direct competition with U.S. producers and are often ineligible for U.S. assistance. The MADIA study (1987, and Lele and Hanak, forthcoming) argues this case strongly.

West German aid (9.8 percent of 1984–85 DAC ODA) is characterized by its emphasis on technical assistance (48.7 percent of bilateral ODA in 1984–85, given a DAC average of 23.5 percent). Like Japan, Germany's aid is focused on public utilities (44.7 percent of sectorally allocable commitments in 1983–84), probably because of its lack of colonial ties and the capital-intensive/capital goods orientation of its economy.

Aid from Canada (5.6 percent of 1984–85 DAC ODA), the Netherlands (4.1 percent), Italy (3.8 percent), Australia (2.6 percent), Belgium (1.5 percent), and Switzerland (1.0 percent) is relatively recent. Each of these donors exhibits different advantages in relation to its economic structure and political history. Political histories are especially important for aid from Sweden (2.7 percent of 1984–85 DAC ODA), Norway (1.9 percent), Denmark (1.5 percent), and Finland (0.7 percent), which have strong constituencies for poverty alleviation and political nonalignment. Scandinavian assistance has been given to regions and for purposes that have been politically infeasible for other donors, and has been an important complement to other programs. Scandinavian countries have also been leaders in establishing high levels of

ODA as a proportion of GNP, and in raising the proportion of ODA channeled through multilaterals. In addition, their technical assistance is strong in a number of important areas, such as forestry (especially Sweden) and livestock (Denmark). These skills must be adapted to the needs of developing countries, however, and the Scandinavian agencies sometimes suffer from their relatively small size.

Among non-OECD donors, OPEC and Arab agencies represent the largest bloc. They gave $3.53 billion in 1985, down from a peak of $9.64 billion in 1980. Of 1985 OPEC/Arab ODA, 10.4 percent went to non-OPEC/non-Arab multilaterals, and 36.9 percent went to countries outside of North Africa and the Middle East; 18.9 percent went to LLDCs, and 43.7 percent went to upper-middle-income countries (UMICs).

USSR net aid disbursements are estimated by the DAC to have been about $3 billion in 1985, 70 percent of which went to Vietnam ($1.05 billion), Mongolia ($0.56 billion), and Cuba ($0.51 billion).

Multilateral agencies. The World Bank Group combines the work of the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), and the International Finance Corporation (IFC), providing 49.8 percent of all flows from multilaterals in 1984 and 1985.[26] It achieves considerable economies of scale through:

1. gathering and disseminating information, and performing basic and applied research, for both particular countries and developing countries in general, in the areas of macro price and fiscal policies (relying on the IMF for monetary policy), sectoral price and investment policy, and micro behavior
2. using the above analyses to make all lending (including concessional IDA credits) conditional on satisfactory prospects for productive investment, thus ensuring its own continued creditworthiness and also providing leadership for other lenders
3. using its nongeopolitical status to lead country-level Consultative Groups for aid coordination
4. using its central treasury to make interest rate and currency swaps for maximum return on undisbursed funds and maximum efficiency in its lending operations[27]

The constituent parts of the World Bank have their own comparative advantages: the IBRD and IFC (33.3 percent and 0.7 percent of 1984–85 multilateral flows, respectively) maintain low-cost on-lending from private capital markets to developing country governments (IBRD) and private firms (IFC) through:

1. holding paid-in and callable subscriptions from member governments as collateral for their borrowings

2. making detailed analyses of projects and their political-economic context, to ensure the productivity of their loans
3. maintaining geographic and sectoral diversification in their loan portfolio, to share country and sector risks among member countries
4. cofinancing some projects with other development agencies and private investors, to share out those risks to other lenders[28]

IDA (15.8 percent of all multilateral flows in 1984–85) maintains a pool of ODA funds for on-lending to the poorest countries, which is sometimes used in conjunction with IBRD and other funds. This pool is sustained by using highly politicized replenishment rounds to ensure the participation of major donors, and by using the analytical capacity of the Bank Group to maintain high returns on extended credits.

The United Nations gave 18.1 percent of all multilateral flows in 1984–85. This sum was concentrated on technical assistance. The UN is also particularly important as a forum for international negotiation and conflict resolution, and as a provider of aid to countries and for purposes not supported by other major donors.

To sustain the services of UN system agencies, the UN collects regular, annual contributions from member governments on a matching-funds basis. The principal agencies funded in this way are the WFP (4.5 percent of 1984–85 flows), UNDP (3.8 percent), UNHCR (2.5 percent), UNICEF (1.6 percent), UNRWA (1.2 percent), and UNFPA (0.8 percent).

Regional development banks channeled 19.1 percent of multilateral funds in 1984–85 to build infrastructure for trade and promote regional integration (for detailed data and analysis see UNCTAD 1984). They operate and are funded on the same principle as the World Bank, but their regional focus allows additional resources to be raised from constituencies with purely local interests.

The Inter-American Development Bank (IDB) is the largest of the regional development banks, with 11.6 percent of all multilateral flows in 1984–85. Its funding is led by the United States. The Asian Development Bank and Fund (ADB/F) gave 5.0 percent, and the African Development Bank and Fund (AfDB/F), whose funding is led by the African states themselves and by European countries, gave 2.1 percent. There are also several subregional organizations, such as the Caribbean Development Bank (0.4 percent), but they operate on a much smaller scale. Each bank has one or more principal donors, raising resources that add significantly to those available for bilateral activities.

Special constituency agencies form another, less well-defined category of multilaterals. They lend everywhere, but on behalf of a limited constituency or group of countries; this is often called "collective bilateralism." These agencies represented 12.4 percent of multilateral activity in 1984–85, and included the European Development Fund (EDF) and the European Investment Bank (EIB) of the EEC (8.4 percent); Arab and OPEC agencies[29]

(2.3 percent); and the International Fund for Agricultural Development (IFAD, 1.4 percent), a joint OECD/OPEC venture. IFAD is an important example of the problems of funding public goods: despite widespread recognition of the importance and the innovativeness of its work, there has been great difficulty reaching agreement on matching-funds ratios between OECD and OPEC, as changing oil prices shift the relative incomes of these two groups (King 1985).

In addition to the resource-transfer agencies discussed above, some multilaterals disburse very little money directly to developing countries but may have a large impact on development. An important example is the CGIAR: its budget of about $200 million a year in 1984 and 1985 would correspond to about 1.2 percent of multilateral flows. Almost none of this was spent by developing countries, but the CGIAR's central role in coordinating international agricultural research is of great importance to them. The CGIAR-supported research centers collaborate with national research agencies, providing important technical assistance and research services to them on a predictable, ongoing basis.

Fads, Strategy, and the Exploitation of Comparative Advantage

As noted in the above discussion, there is a striking degree of scope for comparative advantage, not only between bilaterals and multilaterals in general, but also among bilaterals and among multilaterals. Yet, those comparative advantages are rarely the focus of debate, and they display themselves only modestly in donors' and agencies' explicit policies.

An important reason for this is the lack of a broad, generally agreed-upon strategy of development, which will yield common objectives and a common understanding of development processes and within which each donor can exercise its comparative advantages. Because the leadership necessary to generate consensus around such a strategy has been missing, development agencies have been buffeted by recurring fads.[30] Each fad is a development tactic, a theme. At best, it is a segment of a strategy. Each fad is the outcome of a particular debate that, in the vacuum left by the absence of a broader strategy, becomes a standard for what is acceptable everywhere.

While it may be easy to overstate the importance of fads, they do have a significant impact on most agencies. Under their influence, agencies tend to seek essentially the same instruments for development. They come to differentiate themselves by style and method, rather than by substantive specialization. There is duplication of effort, precipitating funding crises, calls for reform, and ultimately a new dominant theme.

Repeated waves of new themes have seriously affected the professionalism of foreign assistance agencies. Each thematic change turns agencies increasingly toward generalists and away from specialists, because specialists have a greater need for stable, long-term relationships with donors and

recipients. This showed most dramatically in the decline of agricultural technicians at USAID in the 1970s: despite the continuing dominance of agricultural projects in the foreign assistance program—for which there continued to be strong demand—specialists were not in vogue at that time and many skills were lost in the rush to fund more explicitly poverty-oriented programs. It can be argued that poverty-oriented projects require technical expertise at least as much as specific agricultural or other projects, but in the context of faddism this need was lost sight of in favor of the appearance of technical acceptability. Of course, this helps explain the generally poor record of such projects in achieving their objectives. Each move toward generalists further reinforces the degree to which the development-assistance community is vulnerable to a new fad, as the ability to specialize according to comparative advantage and the restraints to change arising from technical specialization are eroded. This tendency can be noted more recently at the World Bank.

From the recipients' point of view, fads tend to focus attention excessively on particular elements of the development process, distracting recipient governments from building the national capacity to address the full range of problems they face. For example, during the basic human needs fad of the 1970s, resources were diverted toward providing goods and services directly to the poor, through activities at the grass roots level. National-level institutions such as those for agricultural research were raided in order to provide the people and resources for these regionally fragmented poverty-alleviation programs, but as these programs became increasingly poorly serviced by the weaker national institutions, their effectiveness was undermined.

In many areas, grass roots poverty-alleviation activities were very much needed, but the idea was extended too far, into areas where it was no longer productive. (For a detailed discussion of this process in Africa, see Lele 1975.) By the time it was fully played out, the basic human needs fad had allowed national-level physical and institutional infrastructure and macroeconomic policy to deteriorate severely in many countries. A prime example is Tanzania, where almost all microeconomic efforts were ineffective because of an extremely weak macro environment (see the chapter by Collier in this volume; MADIA 1987; Lele and Hanak 1990).

A similar problem is seen in the wake of any fad.[31] Recently, for example, the theme of structural adjustment has focused attention on macroeconomic variables, ignoring public investments and the microeconomic problems of resource allocation. Macro policy is stressed by many analysts in the current U.S. administration, the International Monetary Fund (IMF), and the World Bank, but their ideas have spread rapidly throughout other multilateral and bilateral agencies. Again, the fad is a simplification of development processes, with obsessive concern for a few tactical objectives: immediate reductions in domestic and foreign trade controls and in fiscal deficits and certain types of subsidies, and immediate increases in aid to the private sector.

These are generally necessary reforms, but they are not sufficient. The analytic capacity of developing country governments must be enhanced if they are to sustain macroeconomic balance over the long run, provide public goods in particular markets, and build the institutions that increase factor productivity through technical change. These tasks are essential if the opportunities created by the removal of major distortions in the economy are to be seized.

In the short run, fads may help raise resources by focusing public attention on very specific foreign assistance needs. In the long run, however, they undermine each agency's comparative advantage, create embarrassing inefficiencies, and reduce both the quantity and the quality of aid.

If the various comparative advantages of bilateral and multilateral agencies are to be more fully exploited, there must be a shared strategy for aid that informs each agency's work. This strategy must incorporate the needs and desires of the entire aid community—recipients, donors, and practitioners. To be sustainable, the strategy must promote growth with broad participation by the poor, and must recognize that the natural province of public assistance is the efficient provision of public goods—the institutions, physical infrastructure, technology, and government policies on which the productivity of the private sector depends.

This is a tall order, but after four decades of experience with foreign aid, the broad outlines of a strategy capable of generating a broad consensus may now be clear. The core of a consensus strategy might be the promotion of technical change and capital accumulation in agriculture, aimed at providing increases in national income to drive demand-led growth throughout the economy.[32] Agriculture is initially at the core of this strategy because it is the dominant employer, it offers continuing opportunities for cost-reducing technological change, and it has strong demand linkages. As a result, investment and technical change in agriculture generally have strong potential for not only leading growth throughout the economy but also for fostering structural transformation of the economy, while also rapidly reducing poverty through lower food costs and expanding the demand for labor.

Generating such growth requires massive investment in infrastructure and institutions promoting technological change, open domestic markets in which small firms can operate, and an open trade regime in which labor-intensive production is profitable. The key element in the strategy is building domestic demand in rural areas. This relieves (but does not eliminate) the need for growth in exports, while focusing demand on relatively labor-intensive goods and services. Increased employment in turn raises food demand, and the whole strategy results in a more dispersed and sustainable pattern of growth.

The emphasis on domestic demand is particularly important in countries where income is highly concentrated in certain groups, such as Mexico or Brazil. In such countries aggregate demand for domestic output can often

grow more quickly in the large low-income bracket than in the smaller high-income group. Thus, a broader dispersion of income, driven, for example, by agricultural growth in northeastern Brazil or in the smallholder areas of central Mexico, can accelerate growth in national income as well as improve equity. Of course, in the bulk of Asia and Africa, the agricultural sector is so large and encompasses so much of the population in broadly dispersed activities that there is no choice other than to give technical change in agriculture a central place in the development strategy.

While this strategy depends most crucially on developing country governments themselves, there is obviously scope for a wide range of donor activities. In particular, foreign aid should focus on public goods, which are uniquely able to raise the productivity of resources in the small-scale and informal sectors of both agriculture and nonagriculture. It is those productivity increases, in particular, that are the sources of equity-enhancing growth.

Aid plays an especially important role in raising returns to capital, or equivalently, the aggregate absorptive capacity for capital. This helps to mobilize domestic and foreign savings for local investment, particularly if accompanied by improved financial institutions. Developing countries have proven themselves capable of generating savings rates well above 15 percent and of attracting large amounts of foreign capital as well. During the late 1970s and early 1980s, capital inflows to all developing countries were about 4 percent of their aggregate GNP. Given the high mobility of capital today, however, small differences in risk or productivity will result in large capital flows, and many countries have suffered greatly from capital flight and depressed savings rates.

A development strategy led by technical change in agriculture and growth in domestic demand is broadly consistent with the needs of all developing areas in Africa, Asia, and Latin America. Each country will have to find its own path, exploiting its own endowment of institutions and resources and its own pattern of preferences. But all countries will need substantial investment in productivity-enhancing public goods, including physical infrastructure and human, social, and institutional capital. Resource transfers from outside will be needed to pay for the additional balance of payments deficits that allow such investment and to fund those internal transfer payments that are needed to facilitate policy reforms and political evolution. Over the past thirty years, expanding concessional resource flows has been an urgent priority, primarily because other resources have been used at tragically low levels of productivity. In principle, faster growth and broader participation could be achieved with readily attainable rates of domestic savings and of private capital inflows, if factor productivity were high enough to mobilize these resources.

To generate sufficiently attractive levels of resource productivity, aid agencies will have to work efficiently to help governments provide public

goods, and they must pursue their own comparative advantages as vigorously as do private firms. The historical record suggests that these advantages exist, but have been eroded by successive waves of fads in development thinking. For each agency to exploit its natural advantages successfully, all agencies will have to be aware of what others can do and are doing, although explicit coordination will generally not be necessary.

The central comparative advantage of multilateral agencies is in supporting the macro environment needed for growth. This includes helping countries to open their trade regimes, minimize restrictions on their private sector (particularly on small- and medium-scale firms), and develop and maintain public goods such as physical and institutional infrastructure. Considerable financial resources will be required, as the short-run costs of switching policy regimes are substantial. The technical requirements are also large, both for managing policy-based aid and for participating in those enclave and turn-key technical assistance activities in which multilaterals find some advantage.

For most bilaterals, the key advantage is in developing appropriate institutional structures and human resources consistent with rapid economic growth. These range from the analytic skills needed to manage national price policies to subsectoral institutions such as a system of local agricultural research stations. There will inevitably be a need for close interaction between the bilateral and multilateral agencies. For example, bilateral efforts to build national agricultural research systems in agriculture should coordinate with the enclave research of the CGIAR. Similar cooperation could work in many other activities, such as between multilateral funders and bilateral technical assistance programs.

In addition to the bilateral-multilateral distinction, there could be greater recognition of the relative comparative advantages among bilaterals and among multilaterals (although this already takes place for multilaterals to some degree). Such recognition probably requires deliberate comparative research, like the recently completed MADIA project.

As we have seen, many determinants of agencies' comparative advantages cut across the bilateral-multilateral distinction. It may nevertheless be useful to summarize the broad advantages and disadvantages of these two agency types. In general, bilateral agencies have the following strengths:

1. They can apply the skills acquired in donor-country institutions to the aid process, adapting them for institution-building technical assistance in recipient countries.
2. They can use their international economic, political, linguistic, and cultural links to provide stable constituencies for aid to certain countries, and to generate the institutions and skills necessary for productive work in those areas.
3. They can respond to the needs of particular constituencies for aid and educate those constituencies as to current aid needs. When

threatened by competing national interests, bilateral aid agencies often respond by changing their aid agenda, but they can also use their influence to educate legislators and budget-makers as to the importance of their work.

In contrast, multilateral agencies have different strengths:

1. They can provide regional and global collective goods through matching-fund arrangements with member governments that help pay for benefits that spill over from one national aid constituency to another.
2. They can capture significant economies of scale in operations (particularly minimizing the cost of loan capital through bulk borrowing, risk sharing among member countries, and currency and exchange rate swaps) and in research (particularly insofar as the results of their work are disseminated internationally, providing important institutional leadership in the development community).
3. They can establish systems of international competitive bidding to purchase goods and services at the lowest possible cost and maximize the real value of aid flows.
4. They can recruit staff globally (especially from developing countries), thus expanding the worldwide pool of expertise in development processes.
5. They can undertake politically delicate tasks, such as policy-based lending, aid coordination, or refugee assistance, that bilaterals cannot do because of their geopolitically partisan nature.
6. They can complement each other better than bilaterals, because they often compete with one another for a common pool of aid funds and must specialize to justify their separate identities. In contrast, bilateral agencies all tend to do more or less the same things, once they have secured a share of their national budgets.

For aid practitioners to exploit their comparative advantages and better complement each other's work, complete agreement on tactics is not needed. What is necessary, and surely achievable, is a moderate consensus on broad strategy and a recognition of the aid community's natural diversity. As the comparative advantages of each agency are understood, those advantages can be exploited more fully. There will be more and better investment in public goods, thus increasing the productivity of all resources.

Complementarity between agencies, of course, does not have to be deliberate. Private sector firms often complement each other's work without explicit coordination. But for the invisible hand to function between governments, it is necessary to maintain an adequate base of shared knowledge and mutual understanding.

Conclusions

It is clear from the case studies in this volume that foreign assistance has contributed significantly to achieving sustainable, equitable growth in developing countries. As aid has grown in aggregate quantity, however, it may have become less efficient in meeting its objectives. This decline in efficiency has contributed to a widespread dissatisfaction with international institutions that threatens aid levels, even as polls show that a strong majority of the public supports efforts to reduce Third World poverty through economic aid (Contee 1987).

Any decline in the marginal efficiency of foreign assistance could easily be attributed simply to rapid growth and diminishing returns. However, the capacity to effectively absorb foreign aid has probably been increasing in most developing countries, as their investments in social and physical capital accumulate. Thus a declining marginal efficiency of foreign assistance is more properly attributed to the increasing fragmentation of the foreign assistance community.

The lack of leadership brings confusion and misunderstanding. As a result, passing development fads run rampant, undermining the effectiveness of all aid flows. The faddism and instability of foreign assistance is heavily associated with aid from the United States, perhaps because of the great size of U.S. flows, the strong American focus on global power politics, and the great volatility of U.S. foreign policy. Although some multilateral agencies and other bilateral donors have attempted to offset the major shifts in U.S. foreign assistance, the case studies in this volume suggest that still more efforts in that direction are needed.

Instability in foreign assistance has compounded other major external shocks, especially variations in the interest rate and in the price of oil and other primary commodities. Developing countries depend heavily on primary commodities, and the studies in this volume document the tremendous impact of shocks in these markets. For example, many of the policies targeted for reform in the 1980s were initially ways of coping with the price shocks of the 1970s. One of the objectives of development is to achieve a more diversified economy, which makes a country less vulnerable to these shocks. Diversification, however, is not achieved by artificially restricting trade in primary commodities, but by building comparative advantage in a wider range of goods and services through increased investment in human and other forms of capital. To meet these goals, development assistance policies must become more stable, with actual aid flows more responsive to the needs of recipients.

Although we emphasize that aid policies should become more stable, developing countries should probably recognize aid flows as inherently unstable, and see the income from aid as transitory rather than permanent. This recognition would place a particular emphasis on investment in fixed social and physical capital, rather than consumables. Although everyone

would prefer smooth flows, they do not always occur, and careful planning can help to overcome the problem of aid instability.

The lack of leadership in the development community with respect to long-term strategy is a serious problem. We have suggested that the World Bank, as the dominant multilateral agency, is uniquely positioned to lead the aid community to a sustained consensus on an effective development strategy. Such leadership would have to be exerted far more subtly than was U.S. leadership in the early postwar period. There would have to be a broad consensus-building effort, drawing upon the analytical efforts of the whole development community and including frequent meetings and seminars with broad attendance.

Unfortunately, rather than working in this direction, the World Bank has recently been taking less interest in strategic research, thus reducing its capacity to pursue the consensus-building process. If the World Bank abrogates this responsibility, it is not clear where the leadership will come from. The United States may still have some capacity to build such a consensus, by drawing upon its intellectual resources outside of USAID, but it would require a considerable reorientation within USAID, which has until now seen the World Bank as the logical home of such an effort.

An alternative to the type of leadership discussed here, of course, would be leadership by the recipients of aid. The larger, more developed Asian countries have already built a substantial internal capacity to order their priorities and force donors more or less into conformity with their own strategies. This has worked passably well in India and China. But in smaller countries, the idea of recipient sovereignty has often turned aid into just another source of patronage for politicians and bureaucrats.

A global consensus on development strategy could draw on major economies of scale, while still providing aid that reflects the individual needs of each country. Indeed, an important goal of the strategy we present is to help make each recipient country more autonomous, by building national analytical capacities as well as by improving the level and distribution of national income. Such autonomous capacity is both a means and a goal of international development efforts, but to build it. the world's foreign aid donors and agencies must first aim to improve their own work. As the case studies in this volume show, many donors and recipients have used aid very effectively in the past, and all can be learning to use it better in the future.

APPENDIX TO CHAPTER 13

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TABLE A13.1 Net Flows to Developing Countries and Multilateral Agencies, 1960–85 (millions of current U.S. dollars)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
From all DAC countries combined																
Official development assistance																
Bilateral ODA grants	3,716	4,031	4,020	3,940	3,806	3,714	3,701	3,578	3,344	3,251	3,323	3,634	4,370	4,481	5,336	6,268
Bilateral ODA loans	468	665	907	1,465	1,740	1,833	1,947	2,222	2,282	2,320	2,384	2,786	2,397	2,674	2,921	3,547
Bilateral ODA total	4,184	4,696	4,927	5,405	5,546	5,547	5,648	5,800	5,626	5,571	5,707	6,420	6,767	7,155	8,257	9,815
ODA to multilaterals	534	521	511	367	405	348	336	736	683	1,050	1,124	1,339	1,905	2,253	3,047	3,770
UN											367	434	637	653	831	1,197
IBRD											4	43	62	25	30	4
IDA											289	334	551	630	1,121	1,190
Other official flows																
Bilateral OOF	180	696	531	246	(28)	299	394	499	748	586	880	1,003	1,207	2,188	2,199	2,945
OOF to multilaterals	67	230	15	(3)	(7)	5	53	19	(10)	(15)	273	267	374	399	(16)	79
IBRD											272	259	372	(3)	(56)	(52)
Private flows																
Direct investment	1,767	1,830	1,495	1,603	1,572	2,468	2,179	2,105	3,151	2,919	3,529	3,707	4,443	6,655	7,084	10,494
Bilateral portfolio	633	614	147	327	837	655	480	800	948	1,201	726	760	2,079	2,961	3,816	5,239
Multilateral portfolio	204	90	239	(33)	461	247	175	469	767	419	474	771	667	258	-67	2,553
Private export credits	546	573	572	660	859	751	1,124	1,007	1,596	2,047	2,142	2,831	1,429	1,199	2,481	4,142
Grants by PVOs											858	913	1,036	1,362	1,217	1,342

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TABLE A13.1 (continued)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
From the United States																
Official development assistance																
Bilateral ODA grants											1,381	1,549	1,588	1,438	1,742	1,705
Bilateral ODA loans											1,276	1,344	1,136	899	815	1,236
Bilateral ODA total				3,438	3,379	3,954	3,851	2,989	3,589	3,046	2,657	2,893	2,724	2,337	2,557	2,941
ODA to multilaterals				142	223	69	-32	307	248	330	393	431	625	631	882	1,066
UN											150	179	293	218	297	347
IBRD											0	0	1	12	0	0
IDA											58	71	73	152	344	357
Other official flows																
Bilateral OOF											168	180	196	477	823	920
OOF to multilaterals											0	0	0	0	0	0
IBRD											0	0	0	0	0	0
Private flows																
Direct investment											1,742	2,010	1,976	2,887	3,788	7,241
Bilateral portfolio											198	263	948	969	1,103	2,406
Multilateral portfolio											372	322	102	(135)	(59)	1,862
Private export credits											83	190	334	(275)	441	291
Grants by PVOs											598	599	669	905	735	804
DAC GNP deflator[a]	27.08	27.98	28.80	29.74	30.66	31.69	32.82	33.57	34.65	36.23	38.20	41.19	45.89	53.09	58.16	67.26
U.S. GNP deflator	33.04	33.53	33.91	34.39	34.87	35.55	36.51	37.67	39.02	41.04	43.26	45.76	47.69	49.61	53.95	59.06

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TABLE A13.1 (continued)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
From all DAC countries combined										
Official development assistance										
Bilateral ODA grants	6,530	7,203	9,403	11,703	14,124	13,184	13,423	14,224	15,498	17,840
Bilateral ODA loans	2,966	2,878	3,721	4,628	3,985	5,098	5,022	4,403	4,192	4,076
Bilateral ODA total	9,496	10,081	13,124	16,331	18,109	18,282	18,445	18,627	19,690	21,916
ODA to multilaterals	4,161	5,642	6,869	6,488	9,156	9,353	9,332	8,963	9,049	7,512
UN	1,153	1,303	1,584	1,699	2,170	2,229	2,268	2,243	2,302	2,337
IBRD	27	197	261	89	141	103	926	231	416	158
IDA	1,359	2,157	3,155	1,996	3,101	2,434	2,772	3,147	3,011	1,948
Other official flows										
Bilateral OOF	3,186	3,189	5,232	3,138	5,378	6,470	7,440	4,775	6,039	3,443
OOF to multilaterals	119	127	157	(244)	(107)	137	(26)	106	157	(88)
IBRD	18	100	100	(286)	(111)	137	(42)	143	92	(61)
Private flows										
Direct investment	7,593	9,499	10,906	12,745	9,769	14,639	10,385	7,792	11,269	7,690
Bilateral portfolio	6,073	10,737	21,037	23,450	17,702	24,712	23,665	17,634	26,284	(4,723)
Multilateral portfolio	3,097	2,642	2,228	2,083	1,469	3,836	5,178	4,736	5,530	6,204
Private export credits	5,424	8,337	9,400	9,408	11,490	10,593	7,328	5,249	4,239	1,506
Grants by PVOs	1,358	1,489	1,675	1,997	2,386	2,018	2,317	2,318	2,587	2,865

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TABLE A13.1 (continued)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
From the United States										
Official development assistance										
Bilateral ODA grants	1,684	1,738	2,060	2,452	2,975	3,164	3,791	4,540	5,644	7,310
Bilateral ODA loans	1,154	1,159	1,414	1,624	1,391	1,153	1,070	1,023	813	872
Bilateral ODA total	2,838	2,897	3,474	4,076	4,366	4,317	4,861	5,563	6,457	8,182
ODA to multilaterals	1,496	1,785	2,190	608	2,772	1,466	3,341	2,518	2,254	1,221
UN	327	319	370	373	647	706	671	660	744	758
IBRD	0	119	91	27	39	44	287	80	110	30
IDA	758	855	1,259	0	1,072	520	1,400	1,190	900	0
Other official flows										
Bilateral OOF	822	752	1,288	1,087	1,112	916	1,578	56	1,023	178
OOF to multilaterals	0	0	0	0	0	0	0	0	0	0
IBRD	0	0	0	0	0	0	0	0	0	0
Private flows										
Direct investment	3,119	4,866	5,619	7,986	3,367	6,475	5,451	2,340	4,419	930
Bilateral portfolio	2,161	(264)	3,445	4,146	1,125	10,296	12,133	8,532	11,537	(10,640)
Multilateral portfolio	1,296	892	(568)	(290)	(1,092)	954	1,210	1,067	448	314
Private export credits	(177)	665	(209)	166	901	933	305	1,641	983	118
Grants by PVOs	789	840	931	1,029	1,301	1,018	1,280	1,320	1,464	1,513
DAC GNP deflator[a]	69.34	75.57	88.21	97.58	106.61	102.78	100.43	100.00	97.83	98.94
U.S. GNP deflator	62.04	65.70	70.62	76.40	83.33	90.94	96.34	100.00	103.80	107.23

NOTE: Blanks indicate unavailable data. Parentheses indicate reverse flows, from developing countries and multilateral agencies to DAC countries. Data in this table were used to create Figures 13.1–13.4.

a. 1983 = 100. The DAC GNP deflator includes exchange rate changes, using 1983 shares of total DAC ODA as weights.

SOURCE: *Development Cooperation 1969*, p. 38 (for 1960–61); *Development Cooperation 1973*, p. 42 (for 1962–69); *Development Cooperation 1974*, pp. 232–33 (for 1970–73) and pp. 254–55 (for U.S data, 1963–69); *Development Cooperation 1977*, pp. 187–88 (for 1974–76); *Development Cooperation 1980*, pp. 199–200 (for 1977); *Development Cooperation 1982*, p. 219 (for 1978–81); *Development Cooperation 1986*, pp. 283–84 (for 1982–85). GNP deflators are from *Development Cooperation 1985*, p. 336 (for 1960–84) and *Development Cooperation 1986*, p. 287 (for 1985).

TABLE A13.2 Flows to Least Developed Countries, 1971–84 (millions of U.S. dollars at current prices and exchange rates, unless otherwise noted)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Resource flows to the least developed countries (LLDCs)														
Multilateral TRN	232	289	448	671	1,093	973	1,085	1,496	1,853	2,170	2,329	2,131	2,321	2,535
Multilateral ODA	189	232	409	653	975	925	1,042	1,445	1,692	2,030	2,186	2,133	2,232	2,489
DAC bilateral ODA	489	726	957	1,182	1,740	1,341	1,533	1,445	1,692	2,030	3,218	3,448	3,168	3,364
OPEC bilateral ODA	0	0	24	322	583	638	773	524	596	822	759	1,001	926	508
All TRN	774	1,137	1,689	2,387	3,850	3,304	3,853	4,553	5,787	7,173	6,952	7,379	6,836	6,780
DAC ODF	721	1,015	1,405	1,852	2,833	2,314	2,618	2,941	3,546	4,200	5,547	5,579	5,489	5,899
Resource flows to all developing countries (LDCs, including unallocated funds)														
Multilateral TRN	2,224	2,390	3,265	4,653	6,418	6,599	7,898	9,084	10,355	12,570	13,641	14,151	14,801	15,902
Multilateral ODA	1,301	1,376	1,958	2,818	3,837	3,871	4,959	5,999	6,195	7,721	7,925	7,525	7,575	7,769
DAC bilateral ODA	6,312	6,611	7,087	8,242	9,801	9,505	10,081	13,123	15,918	17,640	18,195	18,433	18,605	19,665
OPEC bilateral ODA	0	0	1,208	3,015	4,946	4,533	3,940	3,247	4,933	6,106	7,510	4,525	4,289	3,714
All TRN	16,393	17,846	22,955	32,444	45,483	44,762	54,586	73,412	80,285	81,511	100,176	86,616	72,867	85,903
DAC ODF	8,535	9,000	10,352	12,895	16,220	16,103	17,978	22,208	26,273	30,210	31,836	32,583	33,406	35,648
Percentage of flows allocated to LLDCs														
Multilateral TRN	10.43	12.10	13.72	14.42	17.04	14.74	13.74	16.47	17.90	17.27	17.08	15.06	15.68	15.86
Multilateral ODA	14.51	16.83	20.86	23.18	25.40	23.89	21.01	24.09	27.31	26.29	27.58	28.34	29.46	32.04
DAC bilateral ODA	7.75	10.98	13.50	14.34	17.75	14.11	15.21	11.01	10.63	11.51	17.68	18.71	17.03	17.11
OPEC bilateral ODA	0.00	0.00	1.97	10.67	11.79	14.07	19.62	16.13	12.09	13.46	10.10	22.11	21.58	13.69
All TRN	4.72	6.37	7.36	7.36	8.46	7.38	7.06	6.20	7.21	8.80	6.94	8.52	9.38	7.89
DAC ODF	8.45	11.28	13.57	14.37	17.47	14.37	14.56	13.24	13.50	13.90	17.42	17.12	16.43	16.55

continued on following page

TABLE A13.2 (continued)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Indicators of absorptive capacity in LLDCs and in all LDCs combined														
LLDC GNP (current US$)	17,728	18,869	24,361	29,988	36,127	32,834	42,766	51,060	53,840	59,850	63,200	61,980	61,840	
LLDC population (millions)	220.79	224.51	229.80	235.32	242.25	247.30	253.30	272.57	279.05	285.68	292.73	300.11	308.35	314.67
DAC ODF/GNP to LLDCs (%)	4.1	5.4	5.0	6.2	7.8	7.0	6.1	5.8	6.6	7.0	8.8	9.0	8.9	
Real p.c. DAC ODF to LLDCs (current US$)	1.35	2.07	3.25	4.58	7.87	6.49	7.81	9.52	12.40	15.67	19.48	18.67	17.80	18.34
LDC GNP (current US$)	499,489	569,941	712,218	943,819	1,058,695	1,181,658	1,307,561	1,726,310	2,069,070	2,415,170	2,559,220	2,484,970	2,339,210	
LDC population (millions)	1,890.58	1,933.82	1,980.03	2,077.79	2,076.18	2,130.56	2,170.90	3,185.25	3,249.50	3,312.29	3,377.99	3,449.95	3,522.10	3,585.82
DAC ODF/GNP to LDCs (%)	1.7	1.6	1.5	1.4	1.5	1.4	1.3	1.3	1.3	1.3	1.2	1.3	1.4	
Real p.c. DAC ODF to LDCs (current US$)	1.86	2.14	2.78	3.61	5.25	5.24	6.26	6.15	7.89	9.72	9.69	9.49	9.48	9.73

NOTE: Blanks indicate unavailable data. Data in this table were used to create Figure 13.5.
SOURCE: Calculated from OECD *Geographical Distribution of Financial Flows to Developing Countries*, 1971/77 (1978), 1977/80 (1981), 1981/84 (1986), and OECD *Development Cooperation 1985*. Real flows calculated using DAC GNP deflator as shown in Appendix, p. 42.

TABLE A13.3 Composition of U.S. Foreign Aid by Program, 1970–86 (millions of current U.S. dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Bilateral ODA																	
USAID	1,040	1,087	926	837	863	940	1,001	976	1,007	1,361	1,610	1,544	1,524	1,657	1,779	1,929	1,990
PL480/Food for Peace	937	918	993	754	639	936	693	850	808	976	1,073	1,254	929	992	1,085	1,715	1,095
Economic Support Fund (ESF)	485	460	717	645	382	426	601	1,062	1,908	1,755	1,904	2,053	2,299	2,676	2,874	4,889	4,684
Official contributions to multilaterals																	
Multilateral development banks	224	201	276	324	446	569	902	875	858	683	784	955	1,063	1,242	1,391	1,427	1,607
International organizations (voluntary contributions)	113	129	196	186	168	115	143	250	230	263	284	336	238	219	308	336	231
International organizations (conduct of foreign affairs)	n.a.	n.a.	n.a.	n.a.	n.a.	223	291	368	382	495	492	441	544	482	580	540	499
Military assistance																	
Foreign military sales credits	93	425	216	353	406	247	280	570	570	1,933	2,576	2,442	2,789	2,858	3,878	3,253	4,763
Military assistance	548	510	563	485	460	556	367	209	169	140	219	228	176	1,011	928	848	753
Total international affairs outlays	3,570	3,095	3,726	2,957	5,821	5,862	5,067	4,831	5,922	6,091	10,733	11,130	9,982	8,995	15,876	16,176	14,152
Total federal budget (US$ billion)	168	177	194	200	217	272	302	328	369	403	477	543	594	662	686	770	806
U.S. GNP (US$ billion)	990	1,056	1,153	1,281	1,417	1,523	1,698	1,933	2,172	2,448	2,671	2,986	3,139	3,322	3,687	3,937	4,163

NOTE: n.a. = not available. Data are actual expenditures for U.S. fiscal years. Data in this table were used to create Figure 13.6.
SOURCE: Executive Office of the President, Office of Management and the Budget, Budget of the United States Government (various years), and Historical Tables—Budget of the United States Government 1988. The data in Figure 13.6 are deflated by the U.S. GNP deflator as shown in the Appendix, p. 42.

CHAPTER 14

T. N. SRINIVASAN

Food Aid: A Cause or Symptom of Development Failure or an Instrument for Success?

Food aid is, by definition, commodity-tied aid that makes goods such as food grains, edible oils and fats, and dairy products available to recipients at concessional terms. Food aid, except as emergency relief during famines or other abnormal circumstances, takes two forms: project aid, where food aid is tied to the implementation of projects mutually agreed upon by the donor and recipient, and untied program aid. If a project is defined broadly enough to include policy reforms or changes, then the two forms overlap. In this case, the so-called policy-conditional food aid would be covered under project aid. I will discuss emergency food aid for relief during famines and natural disasters only briefly, for my primary concern here is longer-term food aid.

Food aid has evolved from being a means for disposing of food surpluses in donor countries in the 1950s to serving as a policy tool for promoting economic development in the recipient countries in the 1980s. The volume of food aid has fluctuated, reaching a low, ironically, during the food crisis of 1973–74. The recovery since then has not restored the volume to the levels of the 1960s (Table 14.1). In the mid-1960s, the United States was essentially the only food aid donor. By the mid-1980s, the European Economic Community (EEC) had emerged as a significant donor. In large part, this reflects the

I thank Jagdish Bhagwati, Uma Lele, John Mellor, and Ijaz Nabi for comments on an earlier draft.

TABLE 14.1 Cereal Aid by Principal Donors in Selected Years, 1965–85 (millions of tons)

Donor	1965–66	1967–68	1972–73	1974–75	1984–85
Australia	0.00	0.19	0.26	0.33	0.48
Canada	0.00	0.80	0.81	0.61	0.94
European Economic Community	0.00	0.00	0.99	1.41	2.47
United States	17.32	13.50	6.95	4.72	7.54
Total (including others)	17.73	16.22	9.96	8.40	12.52

SOURCE: Food and Agriculture Organization (1985).

growth of food surpluses in the EEC, stemming from its policy of agricultural price support and protection. The growth of the EEC's role also reflects the reduction in U.S. food stocks. Thus, surplus disposal as an objective has not completely disappeared from the food aid scene. Moreover, even though liberalization of agricultural trade is on the agenda of the Uruguay round of GATT negotiations initiated in 1986, and the costs of domestic agricultural subsidy programs in the United States and the EEC are spiraling upward, it is unlikely that either the programs or the surpluses will disappear any time soon.

Food aid can further the economic growth of developing countries in several ways. First and foremost, it adds resources that can be used for current consumption or accumulation. Second, it provides balance-of-payments support, just as any other form of foreign aid. Third, as food aid, it augments the domestic availability of food (though not necessarily on a one-to-one basis). Fourth, to the extent that it is targeted at the poor, it can alleviate poverty, which is a major goal of economic development. By improving the health and nutritional status of the poor, food aid augments their human capital and future income-earning capability. Fifth, food aid is sometimes tied to development-oriented projects that would not have been undertaken otherwise. And sixth, to the extent it can be credibly tied to the implementation of growth-promoting policies and reform—if not the abandonment of policies detrimental to growth—it can obviously promote development. This last role can be important in the structural adjustment process. Adjustment to unanticipated shocks, as well as reform of entrenched policies, involves political and economic costs. External aid can in some situations increase the credibility of reforms by alleviating these costs. The operative word in all the above is, of course, "can" and not "will." The use of food aid to further development depends on three factors: the flexibility with which it is used; the other objectives of donors and whether they conflict with the objective of economic development; and the domestic, economic, political, and institutional environment in recipient countries.

The first section of this paper is devoted to illustrating positive and normative aspects of food aid using some simple analytical models where appropriate. The next section addresses the impact of global agricultural trade liberalization. Since surplus disposal has been an objective of food

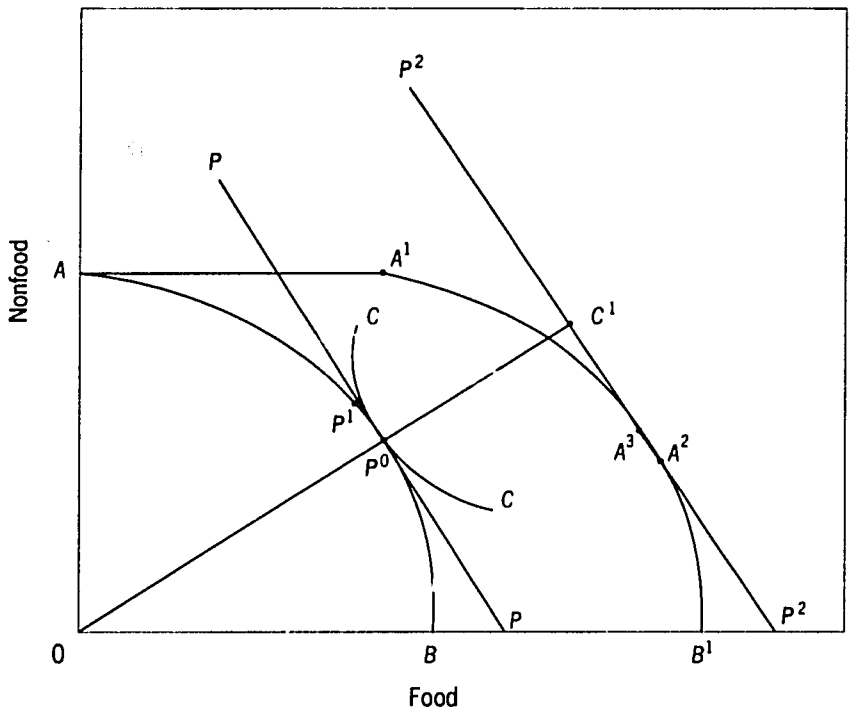
aid, and the emergence of agricultural surpluses in the developed (and even in some developing) countries is a consequence of protection, it is worth analyzing the costs and benefits to developing countries of a liberal trade regime in agriculture. It is also worthwhile to see to what extent additional food availability in the global market, as contrasted with targeted aid, will improve nutritional status in developing countries through reduced world prices of food. This section will draw on the simulations from the Basic Linked System (BLS) of models of the Food and Agriculture Project of the International Institute for Applied Systems Analysis (IIASA). Next, we use the India model of the BLS to analyze the impact on the poor of expansions in the system of public distribution of food grains and of the so-called food-for-work program. In this program rural labor from poor households is employed in slack agricultural seasons to build public works (such as roads, irrigation systems, and schools) and is paid in kind, at least in part, with food grains. These simulations are of interest since alleviation of poverty and improvement of nutritional status are important objectives of food aid. Moreover, food-for-work programs are prime examples of projects to which food aid is tied. The next section briefly reviews salient features of the food aid experience, and the final section concludes with some observations on past experience with food aid and on policy implications for the future.

Positive and Normative Aspects of Food Aid

The standard workhorse of international trade theory, the two-commodity general equilibrium model, can be used to illustrate some of the analytical issues involved in food aid, as demonstrated by Bhagwati (1986). We reproduce and extend his analysis below. Consider a country producing and consuming two aggregate commodities, food and nonfood. The production possibility frontier (PPF) of this country is AB in Figure 14.1. The preferences of its citizens are represented by a set of Samuelson social indifference curves (SIC). Assume, to begin with, that the country is in autarkic equilibrium with its production and consumption at P^0, where the SIC represented by CC touches the PPF. The equilibrium domestic relative price of food in terms of nonfood is the common slope of the PPF and SIC at P^0. Suppose the country's government is offered food aid, gratis, in the amount A^1. The effect on domestic prices, production, and welfare will depend on how the recipient government responds to aid and any conditions that the donor may impose.

Incentive effects. Suppose the government sells the food aid in the open market and returns the sale proceeds to consumers as lump-sum income transfers. The resulting equilibrium can be derived by shifting the PPF to the right by the distance A^1 so that the domestic availability curve with aid is AB^1.

FIGURE 14.1 Two-Commodity Model for Food and Nonfood



SOURCE: T. N. Srinivasan.

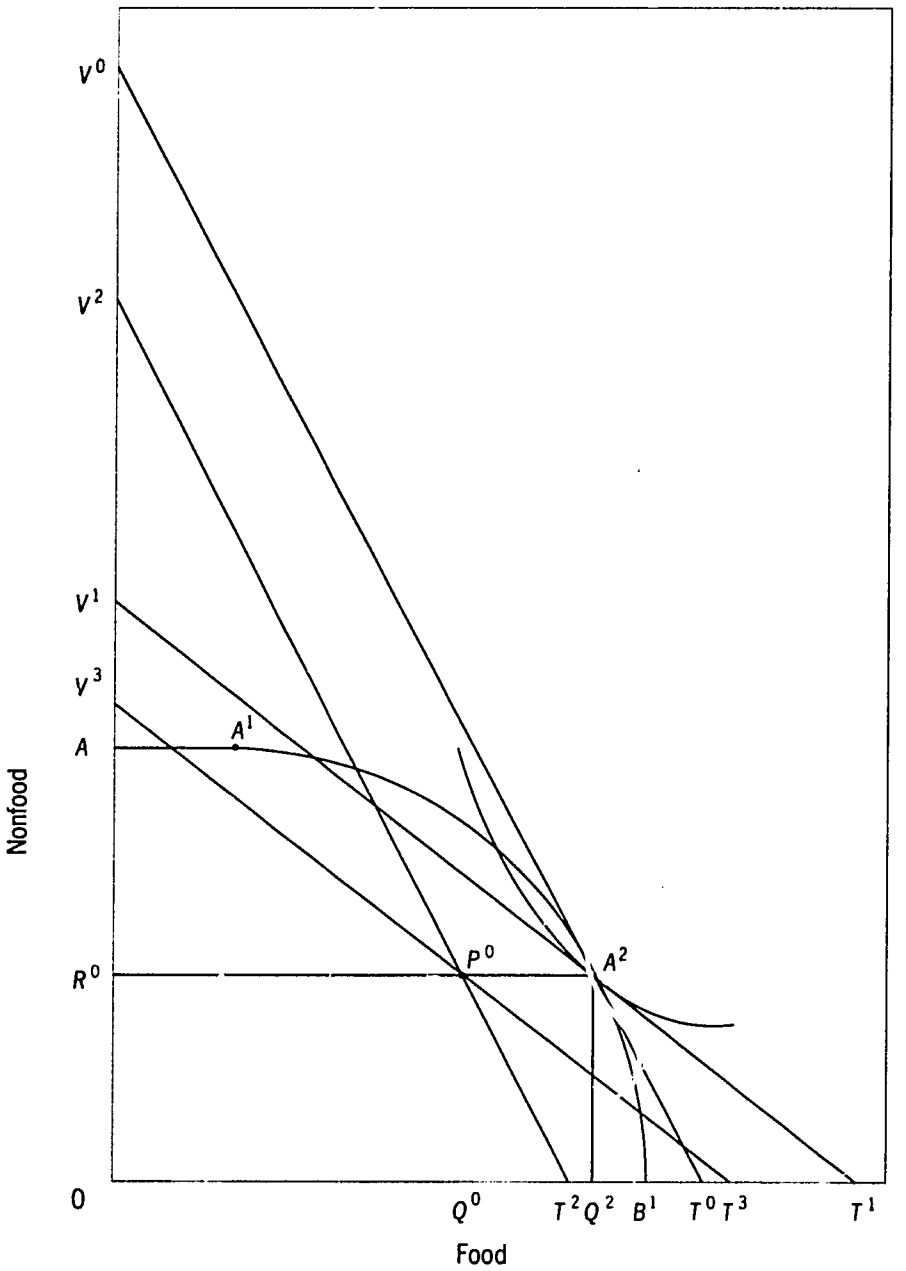
If the domestic price remains unchanged as the slope of PP (hereafter referred to imply as price PP), output will be at P^0 so that domestic availability is at A^2, where the slope of the tangent P^2P^2 to the availability curve AB^1 equals the price PP. If we assume for simplicity that social preferences are homothetic, demand at price PP and disposable income OP^2 in terms of food (including the value of food received as lump-sum transfers) will be C^1. Thus, there will be an excess supply of food (and demand for nonfood), forcing relative food prices down. Equilibrium is obtained at the point A^3 to the left of A^2 on the availability curve at which an SIC (not shown) touches it. The corresponding production point is P^1 on the PPF to the left of P^0. In comparing P^1 with P^0, it is apparent that the equilibrium domestic relative price of food (that is, the slope of PPF at P^1) has fallen and so has the food output.

This model illustrates the oft-cited production disincentive effect of food aid. Is this undesirable and inevitable? The answer is clearly no. Before we illustrate other possibilities, let us note that even though the domestic price of food and its output have fallen, consumer welfare at A^3 is clearly *higher* than at P^0. With the use of lump-sum transfers to counter any adverse income distributional effects among citizens, and given that aid is a transfer that augments the commodity availability set of the economy, it can only improve social welfare. That is, those who gain from aid (consumers as a whole and nonfood producers) can fully compensate the losers (food producers) and still gain. Thus the fall in the relative price of food and its output have not led to any undesirable consequences in this illustration.

Suppose the government wishes to maintain producer incentives while absorbing food aid by not allowing the domestic relative price to fall from PP. To be able to do this, consumers must be in equilibrium at A^2. They will be, if the relative price of food facing them is the slope of the SIC passing through A^2. Clearly this price will be lower than PP. The reason is that price PP is the same as the slope of P^2P^2. A^2 and C^1 both lie on P^2P^2. Since an SIC touches P^2P^2 at C^1, the slope of an SIC passing through A^2 which is to the right of C^1 (that is, involving more consumption of food than at C^1) has to be smaller. This implies that a food subsidy for consumers (or equivalently a tax on nonfood) will be necessary to ensure consumption at A^2. With this distortionary wedge between consumer and producer prices, it is not surprising that consumer welfare at A^2 (where an SIC intersects AB^1) is lower than at A^3 (where an SIC *touches* AB^1), but of course higher than at P^0. If the government intervenes with a consumption tax on nonfood, the problem of financing does not arise; the tax revenue as well as the proceeds from food aid are returned to consumers as lump-sum transfers. This can be seen in Figure 14.2. Producers and consumers are in equilibrium at P^0 and A^2, respectively. V^1T^1 represents baskets of food and nonfood consumption that have the same value as the basket A^2 at consumer prices. V^0T^0 also represents baskets equivalent in value to A^2, but at producer prices. Analogously, V^2T^2 and V^3T^3 represent baskets of food and nonfood production that are equivalent in value to the basket P^0 at consumer and producer prices, respectively. The value of consumption in terms of untaxed food (at A^2) at consumer prices = OT^1 = the value of production at producer prices OT^2 (= factor income) + the value of food aid T^2T^0 + taxes on nonfood consumption T^0T^1. Tax revenue equals T^0T^1 because the value (in terms of food) of nonfood consumption (A^2Q^2) at tax inclusive *consumer* prices is Q^2T^1, while its value at producer prices is Q^2T^0, the difference being the tax revenue.

Suppose taxing nonfood consumption is infeasible. Then food consumption has to be subsidized—thus, part of the value of food aid (at domestic prices) is used up in financing the subsidy and the rest is transferred to consumers in a lump sum. Thus, OV^1, the value of consumption (in terms of nonfood) at domestic consumer prices equals the value of production at producer prices OV^2 plus the value of food aid V^2V^0 minus food consumption

FIGURE 14.2 Two-Commodity Model for Food and Nonfood with Tax on Nonfood or Subsidy for Food



SOURCE: T. N. Srinivasan.

subsidy V^1V^0. Food subsidy equals V^1V^0 since the value (in terms of nonfood) of food consumption at subsidized prices equals R^0V^1, while its value at producer prices is R^0V^0.

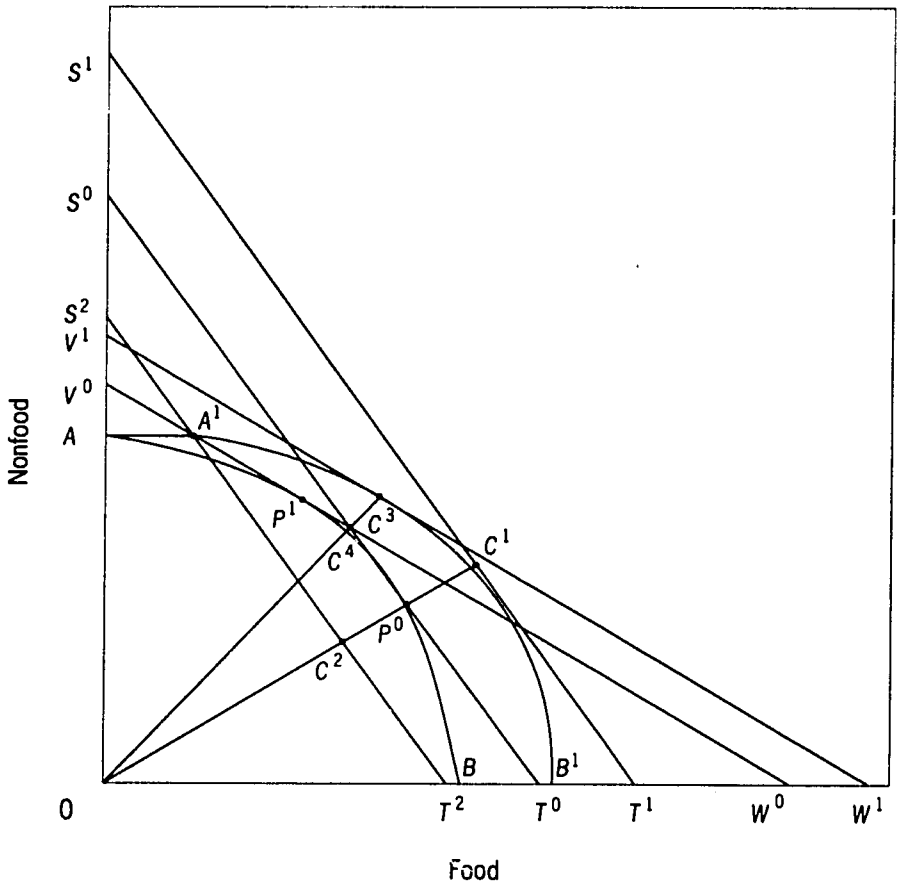
It is also obvious that producer incentives could have been maintained through a production tax on nonfood or a production subsidy on food relative to the consumer price at A^2. Again, when a subsidy instrument is used, only that part of the value of food aid net of the subsidy is transferred to consumers in lump sum. For completeness, take the second case. Here the value of consumption in terms of nonfood OV^1 equals the value of production at producer prices OV^2 minus production subsidy V^2V^3 plus the value of food aid V^3V^1.

The essential points of these illustrations are simply these: food aid, being an unrequited transfer, adds to domestic resources and at the same time adds to domestic food availability. Under laissez-faire, with prices unchanged, the relative price of food must fall to absorb the increase in food since the additional resources will not all be spent on food. However, consumer welfare will unambiguously rise. An intervention is needed if the price fall is to be prevented or mitigated. If this intervention takes the form of a food consumption subsidy or an equivalent production subsidy, part of the additional resources will be used up in financing the subsidy. This distortion-creating intervention will reduce the welfare gain from food aid compared to laissez-faire, but the gain is still positive. Thus the fall in food prices with aid is neither undesirable, if it occurs as in the laissez-faire situation, nor inevitable, since it can be prevented through government intervention, albeit at some welfare cost.

Mitigating price inflation. It is sometimes suggested that food aid, far from creating a production disincentive because of a fall in the relative price of food, will in fact help mitigate price inflation that would have come about in its absence. Implicit in this argument is the assumption that food aid alleviates an incipient excess demand at the initial prices. Presumably the excess demand arises because the government expands development expenditure without at the same time raising the needed resources through taxes. It is not always clear whether the argument refers to general price inflation or to the possible rise in the relative price of food (that is, food price inflation). We will illustrate both versions, although illustrating nominal price inflation using a real model and diagram is a bit clumsy: in what follows, nominal flows (commodity flows valued at inflation-inclusive prices) and real flows (commodity flows valued at constant prices) are both measured on the same axis and the underlying monetary system and behavior are left implicit.

Consider first the case in which the government wishes to acquire goods worth T^0T^1 (see Figure 14.3) in terms of food at the initial prices (represented by the slopes of the parallel straight lines S^0T^0, S^2T^2, and S^1T^1), say, for public investment. Given our homotheticity assumption, if it levies a lump-sum tax equal to T^0T^2 in terms of food, private consumption will move to C^2 with no

FIGURE 14.3 Two-Commodity Model for Food and Nonfood with Excess Demand for Food



SOURCE: T. N. Srinivasan.

change in prices and the government will acquire the resources. Suppose such taxation is unfeasible but the government nevertheless attempts to acquire these resources by adding to aggregate spending in the amount T^0T^1 (where T^0T^2 equals T^0T^1) so that aggregate spending in nominal terms is OT^1. Assume that the composition of government demand in terms of food and nonfood is the same as private demand. Aggregate demand at nominal expenditure OT^1 and at initial prices will then move to C^1, while output stays put at P^0, thus creating excess demand for both goods. With nominal income of consumers and nominal expenditure of government both unchanged at OT^0 and T^0T^1, respectively, a nominal price inflation (in the ratio T^0T^1/OT^1) will push real aggregate expenditure back to OT^0 and equilibrium is restored. However, the government acquires only a proportion, OT^0/OT^1, of the resources it wished to acquire through the "inflation tax."

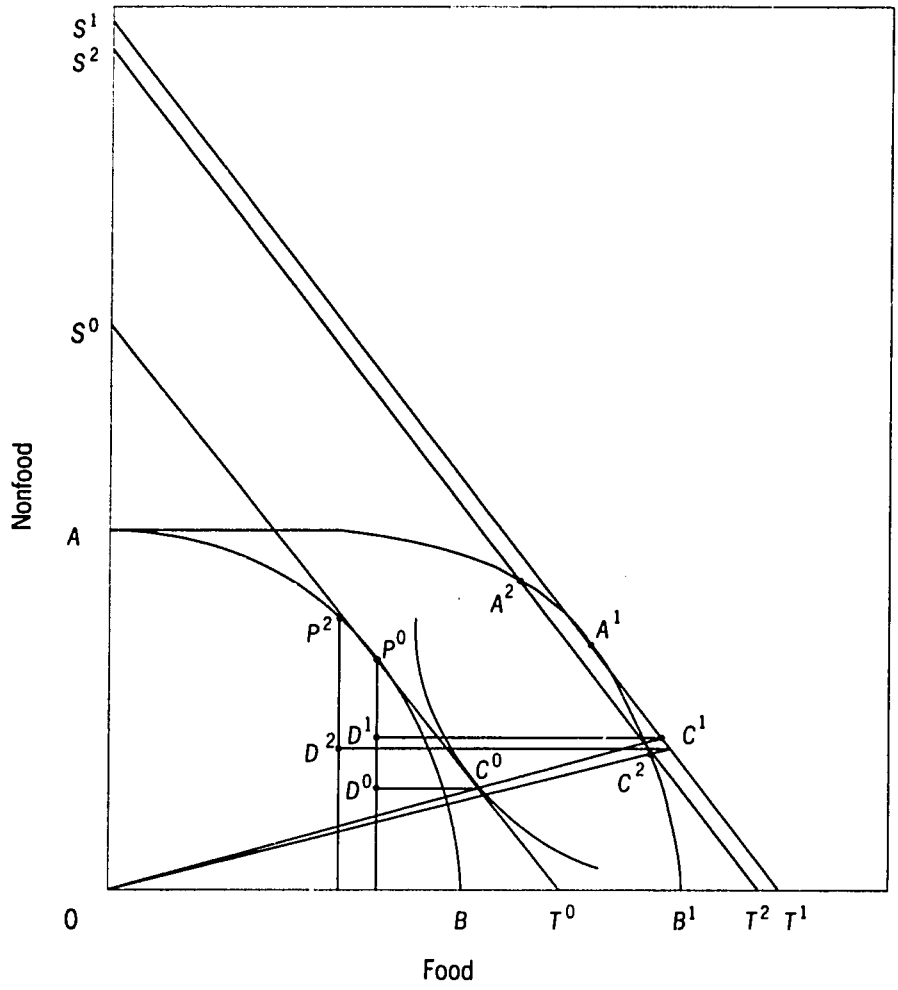
Before turning to aid tied to food, let us dispose of a simpler case of untied aid. If nonfood aid is also available—if the government received both commodities in amounts equal to the difference between C^1 and P^0—then clearly there will be no price inflation; OT^1 will in fact be real expenditure. The government acquires the resources it needs entirely through aid.

Food aid, being tied to food, will not enable the government to acquire the nonfood it needs for its investment without intervening in the domestic market. Assume, for simplicity, that the commodity composition of government investment is flexible so that the set of investment "isoquants" is the same as the set of consumer indifference curves and the government maximizes the "quantity" of investment given its expenditure and the relative price of food. Then, with food aid in the amount AA^1 (also equivalent to W^0W^1) becoming available, by allowing the relative price of nonfood to rise (the increased relative prices being represented by the slopes of the parallel lines V^0W^0 and V^1W^1), equilibrium is established with aggregate use at C^3 and production at P^1 (Figure 14.3). Private consumption will be at C^4 since consumer income in terms of food is OW^0 and consumers face the relative price of food represented by V^0W^0. Because consumers and the government have the same homothetic preferences, C^4 is also on the ray OC^3, and the difference between C^3 and C^4 represents the government investment bundle. Of course, if the relative price of nonfood for producers (or consumers) is to be kept unchanged, then, as earlier, an appropriate indirect tax or subsidy will be needed as an additional instrument and part of the aid may be used up in financing a subsidy.

It is evident from the above illustrations that in situations in which a government resorts to inflationary financing of its expenditures, food aid can be helpful in mitigating inflation. The reasons are twofold: first, aid, whether in the form of food or not, contributes resources to the government that reduce to that extent its recourse to inflationary finance. Second, aid in the form of food has an additional effect of lowering food prices.

Usual marketing requirements or additionality. Let us now turn to the more realistic world in which the economy receiving food aid is open to international trade. To keep matters simple, let us avoid the incentive issues discussed above by assuming the economy is a price taker in world markets and is rationally following a free trade policy. In the pre-aid equilibrium (Figure 14.4) production is at P^0 and consumption is at C^0 (with the slope of S^0T^0 representing the relative price of food in world markets). Food imports equal C^0D^0. Suppose now food aid in the amount T^0T^1 becomes available. With prices unchanged (because of free trade), production remains at P^0, availability moves to A^1 (where the straight line S^1T^1 parallel to S^0T^0 touches the curve AB^1), and consumption moves to C^1 (under homotheticity). Food imports rise to C^1D^1 (commercial imports plus food aid). However C^1D^1 is less than the sum of the pre-aid commercial imports C^0D^0 and food aid T^0T^1. Thus, part of food aid has been used to replace commercial imports.

FIGURE 14.4 Two-Commodity Model for Food and Nonfood with Usual Marketing Requirements Imposed



SOURCE: T. N. Srinivasan.

Food aid donors would not wish to see their commercial sales reduced as a consequence of food aid. For this reason they impose what are called "usual marketing requirements" (UMR) as a condition for providing food aid. These can take various forms, but for simplicity let us assume that the donors require the recipient country to continue to import at least as much from commercial channels after receiving food aid as it did prior to food aid. This means, given the aid, *total* imports (aid plus commercial) must be at least C^0D^0 plus T^0T^1. According to the theory of noneconomic objectives (Bhagwati and Srinivasan 1969), the optimum policy to absorb food imports exceeding the level that would be obtained under laissez-faire is an import

subsidy. This means that the domestic price of food will fall below world prices, thereby discouraging domestic production and encouraging domestic consumption of food sufficiently to increase imports of food to the required extent. In Figure 14.4 an import subsidy on food lowers the relative price to a value equal to the slope of the tangent (not shown) to the curve AB at P^2. The production point moves to P^2 from P^0, thus lowering the output of food and raising the output of nonfood. Prior to trade but after aid, availability moves to A^2. After trade consumption moves to C^2 on the world price line (S^2T^2) through A^2 at which the slope of SIC is the same as the subsidy inclusive domestic price (that is, the same as the slope of the PPF at P^2). Total food imports C^2D^2 now equal pre-aid commercial imports C^0D^0 plus food aid. Such a policy minimizes the welfare loss (relative to laissez-faire) associated with meeting UMRs.

This raises a possible conflict between the two objectives of the donors, namely between the desire to see incentives for food production in the recipient country not being adversely affected and the desire to see that export markets for food for donors are not adversely affected by aid. UMRs serve the latter objective at the expense of the former if the optimal response of the recipient country is an import subsidy that reduces the domestic price of food there. Of course, if the donors insist that both objectives be met, they will force the recipient country to use a food consumption subsidy rather than the first-best import subsidy (that is, an import subsidy that minimizes the welfare cost of UMR), thereby imposing on it a further welfare loss relative to laissez-faire.

Targeting food aid to the poor. One of the objectives of food aid on the part of donors is the improvement of the income and nutritional status of the poor in recipient countries through some form of targeted food aid. To explore this set of issues, let us utilize a partial equilibrium analysis instead of the general equilibrium analysis of the earlier sections. At the same time, let us be more general by considering the global food market. We will put all donors of food aid into one group and all recipients into another, with the former exporting food to the latter. Let us distinguish two distinct groups of consumers within the recipient region: the poor, who have fairly price-elastic demand, and the rich, who have fairly inelastic demand. Again for simplicity, assume that there is no domestic production of food in the recipient region. For the sake of variety, let us illustrate with numerically specified export supply and demand functions rather than with diagrams.

The export supply function of the donor region is $0.9 + p$, where p is the price per unit. The demand functions of the rich and poor respectively are $10 - .01p, 0 < p < 100$ and $2 - .1p, 0 < p < 20$. In free trade with no aid the market clears at a price of 10, with the donor region exporting 10.9 units of which 9.9 units are consumed by the rich and 1 unit by the poor in the recipient region. Suppose now the farm lobby in the donor region succeeds in raising the domestic price of food (by a "modest" 5.5 percent) to 10.55. Export

surplus goes up to 11.45. Where this is to be "dumped" in the recipient country market, the price would fall by 50 percent to 5, with the consumption of the rich going up to 9.95 and the poor to 1.50. Thus, export revenue would fall from 109 to 57.25. The cost to the donor country treasury of acquiring and dumping the surplus arising from the domestic price increase would be $(10.55 - 5) \times 11.45 = 63.5475$. Policymakers in donor countries begin thinking that there must be better ways of disposing of the surplus created by their domestic price policy than to dump it in world markets. One such idea is food aid tied to its being used for the "poor" in the recipient country.

The donor offers to give 1.55 units of the surplus food to the recipient country to be sold to the poor, the resulting revenues being kept by the recipient country government. The rest of the surplus—9.9 units—is sold to the rich. Assuming that the markets in which the poor and rich buy their food are segmented, the transaction costs are prohibitive for the poor reselling their share at a higher price to the rich. In this case, the sale in the rich market will yield a price of 10. Thus the price paid by the rich and their consumption equal those in the free trade equilibrium. The consumption of the poor rises by 55 percent to 1.55, and the price they pay also falls by 55 percent to 4.5 as compared to the free trade equilibrium. The donors realize a revenue of $10 \times 9.9 = 99$ on the sales to the rich, thereby reducing the cost of their domestic price support program to 21.7975 from 63.5475, a reduction of more than 65 percent. The recipient country government realizes a revenue of 6.975 from the sale of food aid to the poor. Thus, compared to the hypothetical equilibrium with dumping, in the aid equilibrium in the recipient region the poor are better off, the rich are marginally worse off (their food consumption falls by .05 units, or 5 percent), and the government is better off (it receives revenues). The donor government, given that it has to raise domestic prices, is better off in the aid equilibrium compared to dumping, since it saves over 65 percent on the cost of price support.

This example demonstrates that by inducing the recipient country to isolate the market with more elastic demand (that is, the poor market), with the carrot of food aid and the right to keep the revenue from sales to the poor, the donor government achieves price discrimination. Indeed, it can do even better by giving the poor 2 units of food free of charge and selling the remaining 9.45 units to the rich at a whopping price of 55 (a jump of 550 percent over the price in free trade) thus realizing a revenue of 519.75 and a profit of 420.9975! Clearly, the rich in the recipient country will strenuously resist such gouging. However, achieving price discrimination through food aid with the consent and cooperation of the recipient country government is the next best thing to gouging. Price discrimination and food aid tied to the poor have not then been a tool for monopolistic exploitation, but simply a means of saving on the costs of surplus disposal.

Project tying, commodity composition of aid, and use of counterpart funds. Food aid is necessarily tied to a commodity or set of commodities given as

aid, but it may also sometimes be tied to particular projects, such as food-for-work projects (more on this below) in which all or part of the wages of workers employed in such projects are paid in kind with food received under food aid. There is no evidence to suggest that the availability of food aid led to the choice and implementation of projects that should not have been chosen. In any case, if projects proposed for implementation are evaluated using social cost-benefit analysis, in which food aid is valued at its social opportunity cost, the availability of food aid per se will not necessarily cause a project that would not otherwise have been socially worthwhile to pass the social cost-benefit test. The social cost of food obtained through aid has to be sufficiently below its commercial import cost in order to pass the test.

Food aid, originating as it did with the accumulated surpluses in donor countries, is more often than not offered in commodities that happen to be in surplus—mainly wheat, rice, corn, yellow maize, and dairy products. As most of these commodities are internationally traded, the fact that aid comes in a particular commodity composition need not create any special problem for the recipient if oppressive UMRs are not imposed as part of aid and if the volume of aid is not too large relative to commercial imports. Substituted for commercial imports or exports, aid can be absorbed without any domestic production effect. Even if the recipient country does not trade, as long as there are substitution possibilities in either the domestic production or consumption basket, aid can be absorbed by suitably altering the domestic production and consumption baskets through appropriate price changes. Of course, problems can arise if conditions imposed on the recipient preclude trading all or part of the aid given in one commodity for others needed and if there are absolutely no substitution possibilities in production and consumption. An example of such aid is yellow maize offered to Kenyans who preferred white maize. Since the same donor often provides aid to many countries with differing preferences and production possibilities, by permitting the recipients to exchange commodities received in aid for others which they prefer, donors may enhance the utility of aid to each recipient without affecting donor interests. Indeed, if such a swap can be planned ahead, some transportation and other transaction costs can be saved as well.

A potentially more serious problem arising from food aid is the long-run change in consumption preferences in the recipient country toward the commodities supplied as aid. Although a shift toward imported "superior" cereals (wheat and rice) supplied by aid and away from domestically produced "inferior" coarse grains has been observed in West Africa (Delgado and Miller 1985), Mellor and Ezekiel (1987) point out that this shift may simply reflect a higher Engel elasticity for wheat and rice, in addition to the effects of lowered wheat and rice prices resulting from aid. In other words, the shift in commodity composition of consumption reflects changing budget constraints (prices and incomes) rather than a change in the preferences (that is, set of indifference maps).

The real problem, perhaps, is not the shift in consumption patterns or preferences but the fact that the continuance of food aid in the indefinite future is uncertain, and even if it continues, its volume will certainly fluctuate. Thus, food aid can be reduced or withdrawn in an unanticipated fashion. If the process of resource reallocation from production of aid-supplied commodities to other commodities cannot be flexibly reversed without excessive cost, then foreign exchange must be spent to import commodities when they are no longer supplied or are supplied in smaller volumes under aid. In other words, *unanticipated* withdrawal of food aid constitutes an adverse shock to which the economy will have to adjust. And as with adjustment to any adverse (or favorable) shock, the greater the flexibility with which resources can be reallocated the lower will be the social cost (or the greater will be the social benefit) of adjustment. There is substantial evidence (Balassa 1985) that economies that have maintained a neutral foreign trade regime between earning foreign exchange through *export promotion* and saving foreign exchange through *import substitution* beyond that that would have been dictated by dynamic comparative advantage considerations have not only achieved efficient and rapid economic growth but have weathered more successfully the adverse oil and interest rate shocks since 1973. Besides the foreign trade regime, domestic distortions of various kinds can impose high and avoidable social costs of adjustment. These distortions include those that adversely affect the incentives of producers in agriculture and their capability to respond to the changing economic environment, particularly to the availability of new technologies.

Most of the above analysis was based on the assumption that food aid was an unrequited transfer. In reality this is not quite so. Until 1972 or so, revenues generated in the recipient country's currency (the so-called counterpart funds) by the sale of food aid received under U.S. Public Law 480 Title I were put in special accounts, the disbursal from which was governed by agreements between the United States and recipient country governments. In effect, the value of food aid was a U.S. asset, albeit in local currency and over which the recipient had some say. Part of it was used for U.S. embassy expenses and part as a grant for investment in agreed-upon projects. To the extent that such expenses would have been incurred and such projects would have been aided even if counterpart funds were not available, use of local currency assets for such purposes meant that foreign exchange that would otherwise have accrued to the recipient did not. Thus, the foreign exchange saved by the recipient to the extent food aid replaced commercial food imports was "lost" later in the sense that a potential foreign exchange inflow was forgone.

In cases where the project would not have been aided but for the availability of U.S. assets in local currency, nor undertaken by the recipient in the absence of aid, the project creates domestic demand that would otherwise have been absent, thereby adding to inflationary pressures present in many developing countries. Even when this is not the case, some

have argued that it is inflationary since the use of accumulated counterpart funds is not associated with any fresh inflow of food or other commodities from abroad. In India there was an extensive debate on the inflationary potential of the use of PL 480 funds (Rath and Patvardhan 1967; Shenoy 1974). The debate also focused on whether the deposit of such funds in special accounts added to the growth of the money supply, thereby creating another potential source of inflation (Sundaram 1970 and the references he cites). The debate was inconclusive, for the realization of this inflationary potential, if any, depended on the assumptions one made about the actions (accommodating or sterilizing) of the Indian government and monetary authorities.

Food aid dependency, neglect of agriculture, and long-term development. The permanent shift in consumption preferences toward commodities supplied as aid is only one example of alleged long-term deleterious consequences of food aid. Another result is that a recipient with a poorly performing agricultural sector may become complacent—and may even discriminate in favor of other sectors—in the confident expectation that food aid will be forthcoming to solve any emerging food problems. This attitude, it is claimed, can be changed only by withdrawing food aid or by making it costly, politically if not economically. For example, it has been suggested that the availability of cheap food under PL 480 enabled Indian policymakers to neglect agriculture and pursue an import-substitution strategy emphasizing heavy industry, while simultaneously keeping the vocal urban population happy through public distribution of subsidized food and other essential commodities. According to this version of history, it was President Johnson's pressure on India that convinced Indian policymakers of the dangers of food aid dependency and of the high political cost of the neglect of agriculture. To change India's stance toward the Vietnam War, Johnson "blackmailed" the government by requiring monthly approval of PL 480 shipments while famine threatened drought-plagued India. In response, Indian policymakers dramatically increased the incentives in agriculture, facilitating the Green Revolution and India's transformation into a food exporter in the late 1980s. However, as I showed elsewhere (Srinivasan 1986), the available data do not support the contention that Indian economic planners greatly favored investment in the agricultural sector after the mid-1960s. Nor is there evidence of any significant change in the rate of growth of food-grain output or real agricultural output between the two periods. What did happen is a change in the components of growth, with a relatively larger proportion in the later period due to improvements in yield per hectare of crop area and a smaller proportion due to expansion of area. Of course, as is to be expected, the performance of different crops was not the same, with the growth in output of wheat (and to a lesser extent, rice) substantially faster in the later period because of the adoption of Green Revolution technology. This also suggests that if indeed the planners shifted resources toward agriculture in later years,

it may have been a rational response to the rightward shift in the marginal-productivity-of-investment schedule for agriculture because of Green Revolution technology, which became available only in the mid-1960s.

The aid dependency argument is a multifaceted one. At the aggregate level, in an extreme form, it suggests that all foreign aid is substituted on a one-to-one basis for domestic savings in financing investment, so that aggregate investment and hence the growth rate of aggregate output is unchanged. Thus, aid is simply consumed. Even in this form the implied behavior of the recipient is neither irrational nor suggestive of dependency. If aid (by which I mean the unrequited transfer element in the external resource inflow) is confidently expected to be permanent, it is like an added permanent income flow. Theory would suggest that it be largely consumed. At the sectoral level, available food aid will either reduce producer prices, and hence incentives to produce food and to invest in the capacity to produce food, or it will simply increase consumption of food (not necessarily on a one-to-one basis) with no impact on prices or incentives. As we saw above in the section on incentive effects of food aid, both of these are essentially rational responses to a *permanent* availability of food aid.

There is one dependency argument that may make some sense. In this case, the recipient country embarks on a development strategy that would be rational if aid were permanent. In fact, aid is not permanent, and at some stage in the development process the country is faced with an unanticipated reduction or cessation of aid. As argued above, this is equivalent to an adverse shock on an economy that has geared its intertemporal resource allocation to aid availability (in other words, has become dependent on aid); the economy thus faces an adjustment cost whose size will vary with the flexibility and efficiency of resource allocation. But unless the recipient's expectations about the permanence of aid were irrational and not based on available information, it is inaccurate to call the adverse consequence of unanticipated aid curtailment the effect of aid dependency. On the other hand, if, despite available information to the contrary, a recipient chooses to act as if aid were permanent, it is this irrationality, rather than aid dependency, that is responsible for the inevitable cost of adjustment when aid ceases.

Famines and food aid. Famine, according to the 1955 edition of the *Oxford Universal Dictionary*, means an instance of extreme and general scarcity of food, and in its figurative use, hunger and hence starvation. Yet not having enough food to feed everybody (that is, general scarcity) does not mean *everyone* will starve. Equally, having enough food to feed everyone (that is, absence of scarcity) does not mean that *none* will starve. Unless an individual has access to available food, he is likely to starve regardless of food availability in the aggregate. This rather elementary and obvious point has been elaborately and elegantly made by Sen (1981). As he documented, the Bengal famine of 1943 and the Bangladesh and the Ethiopian famines of 1974 were not associated with any rapid decline in food availability. The Chinese

famine of 1959–61, in which more than 20 million people are estimated to have died, had much less to do with a shortfall in food availability than with the political and economic system. Merely augmenting food availability through emergency food aid whenever famine threatens may not be adequate to prevent starvation, let alone reduce the chances of future occurrence of famines. However, an overwhelming proportion of the world's poor depend on agriculture for their employment and income. Thus, a serious crop failure erodes their incomes. Moreover, given the imperfections in credit and asset markets, they cannot borrow or sell their meager assets to finance consumption except at high cost. In such circumstances, food (whether from foreign aid or from other regions of the country) can be used for relief and food-for-work programs to employ those who can work, thus avoiding mass starvation. Equally, if food-for-work programs financed by food aid are used even in normal years to employ rural labor to build irrigation works and infrastructure in slack seasons, the probability and intensity of crop failure can be reduced in the long run. (Mellor and Gavian 1987 provide an incisive analysis of these issues.)

The role of food aid in the adjustment process. The possibility of using food aid in support of the adjustment process in developing countries has attracted attention, particularly in international bureaucracies involved in food aid (World Food Programme 1987). Since "adjustment" generally means "painful adjustment," anything that eases the pain will be welcomed by the adjusters. Analytically, there is nothing about food aid to suggest that it will ease the pain more than any other aid.

The adjustment process here refers to reforming the policy framework, incentive structures, and resource allocation mechanisms to enable the economy to perform efficiently and equitably in a changed external economic environment. Where this can be achieved without sacrificing growth, it is of course desirable. However, if the need for adjustment arises from past policies that would not have been sustainable even without a change in external environment, adjustment will necessarily involve sacrifices and even a pause in growth. In such circumstances, policy reform will not be credible and will not remain in place for long, because the short-run resource reallocation and hardship will be too severe to permit political survival of the reforming regime. The availability of additional resources to ease the pain of adjustment could bring credibility to reforms. It must be emphasized that this is a *political* and not necessarily *economic* argument. The threat to political survival usually arises not because the burden of adjustment is too onerous, but because those who bear the burden of adjustment are politically powerful or because the burden is inequitably distributed. The need for adjustment raises another troublesome issue. If the country's own development strategy, rather than changes in the external environment, led to the crisis, giving additional aid for adjustment in such a situation may encourage other developing countries to follow politically rewarding but economically unsustainable strategies.

Similar considerations apply to food aid tied to policy reform or to particular projects, even if these were not part of an adjustment program. If an economy is following an appropriate development strategy, and the social cost of a project exceeds social benefits when food is imported commercially, a donor may encourage implementation of the project by providing food aid at a sufficiently low social cost to the recipient. If aid, however, is given to reduce the *political cost* to the regime of the recipient country so as to induce it to implement a project the *donor regime* prefers (possibly for reaping political benefits at home), the argument shifts to the political arena. To "bribe" the regime in the recipient country to change bad policies (introduce "policy reform") will give the wrong signal to others.

Trade versus Aid in Combating Hunger: Agricultural Trade Liberalization or Larger Aid Flows?

There is perhaps no country in the world in which the government does not intervene in the determination of agricultural output, foreign trade, and prices. Obviously, interventions that affect a country's imports or exports, such as quotas, tariffs, voluntary export restrictions, or import expansions affect not only that country but the international market as well. The quantitative significance of the effect naturally depends on how large a trader the country happens to be in world markets. Less obviously, domestic interventions, such as acreage restrictions, set-aside programs, credit subsidies, and price supports, affect the international markets as well. Government interventions are so varied and so complex that disentangling their individual effects is an almost impossible task. However, their combined effect in terms of the difference between domestic and border prices—c.i.f. (cost, insurance, freight) import prices or f.o.b. (free on board) export prices—can be viewed as a measure of protection. By this measure, average agricultural protection varied from −19 percent in Indonesia to a whopping 175 percent in Japan during 1975–76. Only Australia, New Zealand, and Thailand had negative protection in addition to Indonesia (Parikh et al. 1986).

Changes in the protection regime by one or more countries in the global market will affect all countries and call for adjustments by each. Analyzing changes in protection levels requires a fairly sophisticated set of general equilibrium models, one for each country or region, linked together by global market clearing. A team of researchers at the International Institute for Applied Systems Analysis created a system of empirically estimated models, distinguishing eighteen countries, two regions (EEC and the Eastern Bloc), and fifteen simpler models for groups of the remaining countries of the world (Parikh et al. 1986; Parikh and Tims 1986). The models distinguished ten commodities: wheat, rice, coarse grains, bovine and ovine meat, other animal products, dairy products, protein feeds, other food agriculture, nonfood agriculture, and nonagriculture. The model was designed to solve for domestic

and international equilibrium prices sequentially. The simulation period was 1980 to 2000. A reference simulation of unchanged policies was compared with simulations of policy scenarios ranging from unilateral trade liberalization by countries of the Organization for Economic Cooperation and Development (OECD) and the developing countries to multilateral liberalization by all market economies. Several other scenarios were simulated. In one, grain supplies in the world market were increased through (1) an extra 50 million tons of wheat on the world market each year and (2) 50 percent reduction in the consumption of meat in OECD countries. In another, higher prices for producers in developing countries were assured by reducing OECD output by 25 percent. In contrast with these scenarios that affect the poor mainly through price changes, two foreign aid scenarios were also simulated. In scenario A1, developed countries provide additional program aid at the level of 0.5 percent of gross domestic product (GDP), over and above the present level of about 0.35 percent. Additional aid is distributed to developing countries in inverse proportion to their per capita incomes. In scenario A2, project-tied aid is given to be saved and invested. The results of market price-mediated and aid-mediated scenarios are shown in Tables 14.2 and 14.3 in terms of the number of persons hungry, that is, with nutritionally inadequate food energy intakes.

These results show that market price-mediated effects on hunger in developing countries are modest (Table 14.2). For example, even though the volume of additional food needed to raise the food intake of the entire population of developing countries to nutritional adequacy is about 50 million tons of wheat in 2000, simply adding 50 million tons of wheat to the market supply will reduce the number of hungry by only 2 percent. This is because the global market systems adjust to the extra 50 million tons of wheat through price reductions and shifting resources away from wheat. Because of the resulting reduction in food output, the net addition to food consumption is far less than the 50 million tons thrown on the market, and the consumption of the poor increases even less.

TABLE 14.2 Global Food Market and Hunger, 1990 and 2000

Scenario	1990	2000
Reference (millions of persons hungry)	470	400
	% change in number of hungry from reference scenario	
50 million tons more wheat in the market	−3	−2
50% less meat consumption in OECD	−7	−1
Better producer prices in developing countries	+11	+9
Agricultural trade liberalization		
By all market economies	+1	+1
By developing countries	−5	−5
By OECD countries	+3	+4

SOURCE: Parikh and Tirns (1986: Box 3).

TABLE 14.3 Aid and Hunger

Country group	Number of hungry in 2000 in reference scenario (millions of people)	% change over reference scenario	
		A1 (Program aid)	A2 (Project aid)
All developing countries	400	-32	-32
Middle-income countries	30	0	+4
Low-middle-income countries	60	-13	-8
Low-income countries	310	-40	-40
India	155	-54	-56

SOURCE: Parikh and Tims (1986: Box 4).

Given the protection levels in developing countries, consumers, particularly the poor, are better off when they liberalize and significantly worse off when their domestic producer prices are increased. Agricultural protection in OECD countries and the consequent surpluses actually help the poor in developing countries by reducing world market prices below what they would have been without surpluses.

In contrast to the above, the results in Table 14.3 show substantial reductions in hunger, particularly in low-income countries, when the volume of aid is increased. By the year 2000 program aid and project aid will have the same impact. Detailed results (not reported here) of the two aid scenarios show that investment-tied aid reduces hunger only slightly at first, but then catches up to program aid by 2000. More important, the reduction in hunger with project-tied aid persists even if aid is discontinued after fifteen years.

Subsidized Food Distribution, Food-for-Work Programs, and Hunger in India

The India model (Narayana et al. 1987, 1988) of the Basic Linked System of IIASA models distinguishes five different socioeconomic groups within the rural and urban areas of India, with each group defined by its monthly household real consumption expenditure per head. A household in each group has a claim on the output of the economy, depending on its factor endowments, any income transfers from the government, and the direct taxes it pays. It saves part of its income and spends the rest on consumption of the ten commodities distinguished in the model, given their prices, according to a linear expenditure system separately estimated for each group. The model is thus better equipped to analyze income distribution issues than representative consumer models.

In the simulations with the model reported here, India is viewed as a small open economy facing parametrically given international prices, the time path of which was taken from the reference scenario of the Basic Linked System as a whole. In the reference scenario a basket of rice, wheat, and

TABLE 14.4 Effects of Alternative Public Distribution Policies in Year 2000

	REF		D0		D1		D2	
Expenditure group	P	E	P	E	P	E	P	E
Rural								
1	147.6	132.8	149.1	136.3	90.6	153.4	97.0	153.5
2	114.0	261.4	113.8	270.6	135.5	261.4	138.9	261.7
3	136.0	399.1	135.2	413.5	154.4	401.5	153.7	401.9
4	154.9	616.2	154.8	634.3	165.8	613.4	169.7	615.5
5	166.0	1227.3	165.7	1233.8	172.4	1169.2	159.2	1168.1
Urban								
1	1.5	171.8	2.4	169.2	0.6	171.3	0.9	170.3
2	10.6	272.9	12.2	271.6	8.3	271.2	11.7	269.6
3	41.2	394.8	42.5	390.6	39.4	392.7	47.7	393.1
4	109.0	604.9	108.0	596.7	110.4	596.0	116.4	600.3
5	167.3	1223.6	164.6	1199.1	171.1	1158.0	152.9	1164.0
Macro indicator: real GDP (1980 = 100)	270		270		272		244	
Average per capita energy intake (kcals per day)	2,569		2,581		2,610		2,539	
Gini-e	0.3445		0.3418		0.3100		0.3149	

NOTE: P = population in millions. Total rural population is 718 million and urban population is 330 in all scenarios. E = equivalent expenditure per capita (1970 rupees).
SOURCE: An unpublished longer version of Narayana et al. (1987).

coarse grains (in fixed proportions) weighing approximately 135 kilograms is distributed to all urban residents during each year at a subsidized price (approximately 20 percent subsidy). The food grains needed are purchased from the farmers at a price below the equilibrium open market price. Three alternative distribution policy scenarios are compared with the reference scenario: (1) in D0, both subsidized public distribution and food purchase at below market prices from farmers are abolished; (2) in D1, 100 kilos of wheat are distributed free of charge to all residents of India (rural and urban), with the cost of procuring the needed grains financed by additional income taxes; and (3) in D2, the cost of free distribution of food is accommodated by a reduction in aggregate investment while keeping the tax rate fixed at the reference level. Table 14.4 shows the population in each expenditure group and its average equivalent expenditure (that is, the expenditure needed at 1970 prices to achieve the same welfare as in 2000). Thus, equivalent expenditures are comparable across scenarios.

As expected, the abolition of subsidized food distribution in urban areas (and the associated implicit tax on food producers in rural areas) in D0 as compared to the reference scenario improves rural income distribution slightly and worsens urban distribution. The macro indicators differ only slightly.

The extension of public distribution of food grains to rural areas, making it completely free and financing it through an increase in income taxes (levied mainly on the urban rich), in D1 improves rural income distribution significantly. The number of people in the poorest class falls by 57 million compared to REF; the number of people in the middle three income groups rises; and the number in the richest group falls. Income distribution in urban areas also improves, though not as dramatically. With investment unchanged, aggregate growth (that is, GDP) is essentially unchanged, while the average energy intake rises and the Gini coefficient of equivalent expenditure falls.

When the free distribution of food is financed by a reduction in investment rather than through an increase in taxes as in D2, aggregate growth is naturally affected—GDP falls by about 10 percent and the improvements in income distribution in rural areas are slightly attenuated compared to D1. Comparing D1 and D2 implies that if the free distribution of food could be financed through aid rather than tax increases, the improvements in D1 as compared to REF would be even more dramatic.

Rural works programs (RWP) in India are meant to provide gainful employment to rural workers by creating productive assets, particularly during slack seasons. The fact that participation in these programs is voluntary and the work force is comprised largely of the poor allows better targeting of the poor for other poverty alleviation programs. However, the execution of these programs has been criticized on the grounds that the works are often poorly designed and hence unproductive and that the benefits accrue largely to nontarget groups because of corruption. In specifying rural works scenarios in the model, the efficiency of design and targeting can be varied.

Specifically, the two lowest expenditure classes constitute the target groups. Each person in the poorer of the two classes receives an average of 125 kilos of wheat per year as wages for participation in RWP. The payment to each person in the next class is adjusted (depending on the scenario specific populations in the two classes) to maintain an *average* payment of 100 kilos per person for the two classes together. Other inputs besides labor are needed for constructing rural works, and the cost of these inputs is assumed to be 50 percent of the wage bill. Half of the works created are assumed to be used for agricultural production and the other half for nonagricultural production.

If the RWP is well designed and executed, the value of the entire expenditure is translated into assets of equal value. At the other extreme, a poorly designed and executed program spends the resources but creates no productive assets. Thus, efficiency is defined as the ratio of the value of assets created to the value of resources spent, and this ratio e takes two values: 1 and 0. Targeting failure is captured by a parameter t taking the values 1 and 0.5. Thus, a proportion t of the wage bill is assumed to reach

TABLE 14.5 Effects of Alternative Rural Works Programs

Variable	Scenario[a]				
	R-1-1	*R*-1-0	*R*-0.5-1	*R*-0.5-0	*R*-1-1-*T*
Average real GDP growth rate (1980–2000)	95.1	85.6	96.1	87.0	104.3
Average equivalent expenditure per capita in 2000					
India	99.8	94.6	100.0	95.3	102.2
Poorest rural class	167.0	167.0	133.0	133.0	167.0
Two poorest rural classes	139.0	139.0	119.0	119.0	139.0
Average per capita energy intake in 2000 (kcals per day)					
India	104.7	102.6	103.0	101.0	105.7
Poorest rural class	170.0	170.0	140.0	133.0	170.0
Two poorest rural classes	140.0	140.0	120.0	119.0	140.0

a. Each variable is expressed as an index with its reference run value set at 100.
SOURCE: Narayana et al. (1988).

the two poorest rural expenditure groups (the target groups) and the remaining $(1 - t)$ accrues to all the other rural classes in proportion to their population. Scenarios are designated by *R*-*t*-*e*. Thus, *R*-1-1 means a well-designed and well-targeted rural works program. The two alternative values for t and e together yield four rural works scenarios, all of which are financed by reducing other investment (compared to the reference scenario) rather than by increasing taxes. However, in scenario *R*-1-1-*T* the cost of rural works is financed by additional taxation, while investment is unchanged from the reference scenario. In Table 14.5 the value of the relevant variable in the policy scenario is shown as a percentage of its value in the reference scenario.

It is clear from Table 14.5 that rural works programs have a substantial impact on the poor. A well-executed and targeted program raises the equivalent expenditure and energy intake of the poorest class by about 70 percent and the next poorest by about 40 percent relative to the reference scenario with no rural works. With their cost coming out of investment, aggregate growth is somewhat lower. As is to be expected, a poorly executed and well-targeted program still yields the same benefits for the poor, because they are the beneficiaries of the *expenditure* on the program. But spending resources to create unproductive assets naturally has an adverse effect on aggregate growth (compare *R*-1-1 with *R*-1-0 or *R*-0.5-1 with *R*-0.5-0). Targeting failure reduces the benefits to the poor by nearly half (compare *R*-1-1 with *R*-0.5-1 or *R*-1-0 with *R*-0.5-0). If a well-executed and targeted program can be financed through additional taxes rather than by reduction in investment, the poor will benefit as much and the economy will grow. If such a program is financed by aid rather than by additional taxes, benefits as well as growth would be even further augmented.

Food Aid: Some Relevant Experience

Food aid in the form of cereals has declined substantially from its peak in the mid-1960s. In 1984–85, food aid from the United States had fallen by nearly 10 million tons from a peak of over 17 million tons in 1965–66 (see Table 14.1). The decrease was compensated only partially by the emergence of other donors, mainly the EEC. U.S. aid fell primarily because of changes in the domestic price support program. The program, as it operated until the mid-1960s, contributed to the accumulation of stocks. In 1960–61 stocks reached a peak of over 1.5 billion bushels of wheat. Food aid shipments, used partly to dispose of stock, grew from fewer than 150 million bushels in the early 1950s to a peak of 572 million bushels in 1965. The so-called loan rate, or basic support price, was gradually reduced from $2.00 per bushel in 1962 to $1.25 in 1965. Taken together with other supports, the overall reduction of bushel price was from $2.00 in 1962 to $1.69 in 1965. Stocks began declining, and with the extraordinary food aid shipment to India in the two drought years of 1965–66 and 1966–67, they fell to a low of 513 million bushels, or 36 percent of all uses, in 1966–67. Stocks then rose only to fall again to an even lower value of 340 million bushels in 1974, the year of large sales of wheat to the Soviet Union. In 1982–83 they recovered and surpassed their 1960–61 peak in absolute terms. However, the 1982–83 stock was only 63 percent of all uses compared to 118 percent in 1960–61. This was due both to a rise in domestic consumption relative to production and to the growing importance of nonfood aid exports, particularly to the USSR and Eastern Europe, in the 1970s. Aid shipments did not recover completely; after falling to a low of 58 million bushels in 1973, they reached 158 million bushels, the level they had been at in the 1950s, in 1984.

The terms of U.S. food aid also became more stringent. For example, payment in terms of local currency was phased out. In the peak aid year of 1965, nearly 70 percent of the 512 million bushels of wheat exported through aid programs was sold for foreign soft currency. By 1972 none of it was. Further, recipient countries had to bear an increasing share of transport and other costs as well. (Wheat stock and other data are from U.S. Department of Agriculture 1966, 1984, 1985, 1986.)

It was mentioned earlier that until the mid-1960s a large fraction of food aid went to India and Pakistan. In both countries a development strategy based on import-substituting industrialization was facilitated by cereal imports under food aid, which were used to supply a substantial part of the subsidized distribution of grains through ration shops in urban areas. Such rationing helped reduce food costs for workers in organized manufacturing industries and in the public sector. When India experienced two consecutive droughts of unusual severity in 1965–66 and 1966–67, famine was barely averted by the importation of over 10 million tons of cereals, largely under PL 480 food aid from United States. Lele and Agarwal suggest in this volume that the unacceptable political conditionality imposed with this aid (see

section on famines and food aid above) led Indian authorities to shift resources to agriculture so as to achieve self-sufficiency in food as quickly as possible and become less vulnerable to food blackmail. They also point out that earlier U.S. technical assistance (governmental as well as private, mainly from the Rockefeller and Ford Foundations) in setting up agricultural universities and strengthening research capability in plant breeding helped India to reap substantial gains from the Green Revolution technology that became available in the mid-1960s.

As pointed out earlier, this interpretation of the U.S.-India food aid relationship is not universally accepted. For example, India's ambassador to the United States at that time has denied that any political pressure was applied along with food aid.

Another major recipient of food aid in the 1950s and 1960s was Egypt. Handoussa claims in chapter 9 of this volume that during the period 1959–66 the availability of food aid under PL 480 enabled Egypt to save foreign exchange that would otherwise have been spent on commercial food imports. The saved foreign exchange was used to import capital goods needed for industrial investment and growth. Food imports, mainly of wheat, vegetable oils, and sugar, accounted for more than one-third of merchandise imports in 1975 and one-quarter in 1984. Rice exports and wheat output declined during the period 1975–85. Cereal imports increased from about 50 percent of domestic production in 1975 to 100 percent in 1984–85. Cereal consumption grew at an average of a phenomenal 15 percent per year during the same period. This course of events was largely due to the heavily subsidized food distribution policy backed by imported food. Politically, this policy was difficult to change, as demonstrated by the riots that ensued when a reduction in the subsidy was attempted.

In the 1970s and the 1980s sub-Saharan African countries were the major recipients of food aid. During the 1970–85 period the volume of food aid grew at an average annual rate of 4.1 percent in Cameroon, 43.1 percent in Kenya, 28.6 percent in Malawi, and 23.5 percent in Tanzania (World Bank 1988). Between 1985 and 1990 food aid requirements were expected to grow by about 25 percent in Kenya, 20 percent in Tanzania, 15 percent in Senegal, and 14 percent in Cameroon (Ezekiel 1986).

Food aid is also increasingly being used as a lever to promote structural adjustment and policy reform (World Food Programme 1987). In the late 1970s, for example, the United States provided food aid to Bangladesh more or less as a grant under Title III of PL 480, in a multi-year program to sustain Bangladesh's attempt to reduce food subsidies and move toward an open market food pricing system. Eleven food aid donors, including the World Food Programme (WFP), have agreed to provide food aid to Mali on the condition that the country restructures its cereal marketing system, reduces the deficits of the parastatal marketing boards, stabilizes cereal prices, and improves farm incomes. A more broad-ranging reform of the agricultural sector conditioned on food aid is being attempted in Senegal and Madagascar. In

Ghana, where disastrous policies had resulted in a substantial fall in real wages and productivity over several years, food aid, under the WFP and the World Bank, is being used to augment the real wages of workers engaged in key export sectors as well as in the improvement of roads, post facilities, and other infrastructure. In Grenada, local resources generated from sales of food aid have been earmarked for specific use in support of a structural adjustment and reform plan. In Morocco, however, food aid is used in a compensatory program for people placed at nutritional risk during a structural adjustment plan aimed at the elimination of food subsidies by 1990. The adjustment program was expected to reduce the real income of the very poor by 20 percent, placing them at nutritional risk. The expansion of supplementary and school food projects, using additional project food aid provided by the United States and WFP, should help avoid this risk. Since the results of most of these programs are not yet available, it is too soon to judge the effectiveness of food aid in easing structural adjustment costs.

Policy Implications and Conclusions

Food aid can play a useful role in furthering development and alleviating poverty in situations where the recipient country is following an appropriate development strategy and the aid is used either in support of distributive policies effectively targeted at the poor or in financing efficiently executed and effectively targeted investment projects. Of course, the use of any aid, whether food or foreign exchange, in support of policy reform and adjustment must be carefully planned so that it does not encourage the very thing it attempts to eliminate: inappropriate policies. The effectiveness of food aid can be substantially enhanced through proper design, appropriate choice of commodities, and flexibility for recipients to exchange with each other commodities supplied by aid and their own output (Mellor and Ezekiel 1987; Hopkins 1987).

During the 1950s and 1960s the United States and Canada were the major food aid donors and South Asian states of India, Pakistan, Sri Lanka, and, to a lesser extent, Korea and the Philippines received most of the aid. Since all of these countries made dramatic increases in food output, and some of them accumulated large food stocks in the 1980s (over 25 million tons in India in June 1987), it is tempting to conclude that food aid was a major factor in this turnaround. However, such a conclusion is too facile. Certainly, food aid at concessional terms, particularly in years when domestic output was way below normal because of drought, helped India avert what could have been major disasters. Whatever pressure aid donors may have applied, however, it was the availability of dwarf varieties of wheat and rice with high-yield response to heavy doses of chemical fertilizers in the mid-1960s that largely explained the growth of food output. Some of the domestic policy distortions, such as the zonal restrictions in the movement of food, had been

removed even earlier. Of course, the new technology brought in its wake new distortions, including fertilizer subsidies, irrigation subsidies, and price support at levels that led to accumulation of stocks. The distortionary effects of these producer incentives are difficult to judge since distortions favoring agriculture were in part corrections for distortions in other sectors that had in effect penalized agriculture. It may now be time to remove or reduce these distortions.

With sub-Saharan Africa (SSA) replacing South Asia as the major recipient of food aid in the 1970s and 1980s (the share of SSA in cereal aid has gone up steadily from under 5 percent in 1970–71 to nearly 50 percent in 1984–85), it may be thought that food aid leverage could also be used in SSA to turn the situation around. Extreme caution is warranted before any such conclusion is drawn. First, the domestic agricultural policy distortions in SSA appear to be far more serious and pervasive than they ever were in South Asia. In fact, South Asia never experienced a decline in the growth of food or agricultural output, let alone a negative trend. Although severe droughts in the Sahel and elsewhere in Africa are partly responsible for the declining trend in SSA output, the decrease is largely a reflection of policy failures. Most important, South Asia had a research infrastructure that could rapidly breed rice and wheat varieties suited to local conditions, once the dwarf genes became available. In addition, an extension service for spreading knowledge about new varieties was created, although some claim that it is still inadequate. These conditions do not exist in SSA to the same extent. There are also large differences in soil, climate, and factor endowments between SSA and South Asia. In short, domestic policy failure is the cause and current food aid levels are symptoms of the food crisis in SSA. It remains to be seen whether food aid conditioned on policy reform will prove to be a cure.

Finally, for reasons discussed earlier, linking food aid with structural adjustment is problematic. In any case, the adjustment problems in SSA and in Latin America, which is heavily indebted but considerably richer, are very different. Latin America has much greater agricultural resources, and it is unlikely that food aid will have much of a role to play in the structural adjustment process there.

CHAPTER 15 HOMI J. KHARAS AND HISANOBU SHISHIDO

The Transition from Aid to Private Capital Flows

Cross-country comparisons of international capital flows seem to indicate that as countries develop they progress through certain stages in the composition of their external financing. The first stage, for developing countries at very low income levels, is concessional financing from official donors to governments. The second stage occurs at slightly more advanced levels of development, with official nonconcessional flows becoming dominant. The third stage is characterized by lending from private creditors to the public sector, or to the private sector under the umbrella of public guarantees. In the final stage private agents become the dominant borrowers and lenders, and pure market-determined solutions arise.

During the 1970s there was considerable optimism that progress along this trajectory was well advanced and accelerating. Most middle-income developing countries, led by the large Latin American economies, were able to generate foreign exchange requirements from private international credit markets, and the role of official transfers to these countries diminished sharply. Even low-income countries, such as Sudan and Senegal, were able to attract substantial private loans. The objective of many financial development agencies, to wean countries from dependence on the limited resources of official aid without sacrificing growth, seemed within reach. In the aftermath of the 1982 debt crisis, however, it has become clear that the attempted

transition from official aid to reliance on private capital markets was premature. In almost every case, access to voluntary private financing has been curtailed. Official aid, from multilateral and bilateral sources, is once again the dominant element in the net transfer of resources to the developing world.

There are a few exceptions to this trend. South Korea stands out as an example of a developing country that is becoming more integrated into international capital markets. Not only has South Korea successfully utilized foreign credit markets through public and publicly guaranteed borrowing, but it is also turning increasingly to new sources of international capital, tapping securitized issues such as bonds, mutual funds, and other portfolio investments. Other developing countries, such as Malaysia, Cameroon, and Ivory Coast, have also been active in encouraging private domestic companies to seek external financing without government guarantee. In fact, links between private creditors in developed countries and private borrowers in developing countries are frequently proposed as the channel with the greatest potential for generating net capital flows to developing countries in the medium term. This strategy is advocated both for countries who are still creditworthy and for those facing debt crises. For creditworthy countries, suggested mechanisms include direct investment, leasing, investment trusts, and venture capital. For debt-crisis countries, the proposed mechanisms typically take the form of debt-equity swaps (as in Chile and the Philippines, for example). For both groups of countries, however, the principle of switching the external burden from the public sector to the private sector and from fixed obligations to ones that vary according to ability to pay is the same.

The problems that emerged in the 1980s in sustaining private capital flows to developing countries reawakened interest in the interaction between official and private funds. Since both fulfill similar macroeconomic functions in providing foreign exchange to a country, there is a presumption that some substitution between different sources of funds may occur. However, given the different characteristics of official and private capital, the substitutability may be highly imperfect. In fact, official and private flows may even complement each other in situations where the impact of aid on creditworthiness, savings behavior, and institutional development helps create opportunities for investment suitable for private foreign financing. These contrasting characteristics have generated substantial debate on the theoretical relationship between aid and private capital flows, but little empirical work has been undertaken on this subject.

This chapter analyzes the aggregate pattern of aid and private capital flows to a broad cross section of developing countries since 1970. It begins by examining the relationship between official aid and private capital and the notion of stages of development financing. The following sections concern the supply of development assistance from official and private sources and consider whether the progression to increased reliance on commercial funds at higher income levels is a process controlled by borrowers or by

lenders. Following this is a model estimating the demand for and supply of private capital based on observations of thirty developing countries. The data show that the transition to private capital has been halted by credit rationing on the part of the commercial banks, which intensified in the 1980s. The problem has been exacerbated by a decline in official aid as well. In light of this shortage of capital, the final section considers new sources of financing in the private capital markets and looks at how aid may help the transition from concessional to commercial flows. The arguments in this chapter are based on an econometric model of the determinants of private capital flows to developing countries, with a focus on the role of aid, and are illustrated with examples drawn from the companion case studies in this volume.

One finding of this analysis has been that in a large number of cases aid and commercial capital flows are complements. This implies that the pace of transition from aid to private capital, which accelerates when the funds are substitutes, is likely to vary and may even be reversed if conditions change, as is the case for the present debt-crisis countries. Nevertheless, it also appears that in these situations the policy conditionality associated with official aid seems designed to improve countries' capacity to attract private flows, particularly of new securitized instruments. Overall, the transition between sources of finance seems closely linked to explicit development strategies pursued by countries, particularly with respect to fiscal and exchange rate policy, financial liberalization, and incentives affecting firm-specific financial structures.

Substitutability between Official and Private Capital

Medium- and long-term financing for development is almost evenly divided between official and private sources (Table 15.1). Official financing, in turn, is divided into three important components: transfers, or grants-in-aid, which do not require any reimbursement; concessional loans, defined as those with a grant element of more than 25 percent;[1] and nonconcessional loans, which carry terms close to market rates. Private sector financing is dominated by medium- and long-term loans, primarily credit from commercial banks but also including supplier credits, loans from parent corporations to subsidiaries in developing countries, and bonds issued in foreign currencies. Since the onset of the debt crisis in 1982, private lending has also included arrears, interest rescheduling, and other involuntary lending arrangements. In addition to loans, private financing also includes direct and portfolio foreign investment.

Table 15.1 clearly indicates that the composition of financing changes toward market-oriented instruments as the level of development increases. Low-income countries rely almost exclusively on official finance at highly concessional terms. Traditionally, three-quarters of the flows to low-income countries have been transfers/grants and concessional loans. Recently,

TABLE 15.1 Financing Development, 1970–86 (percentage)

	Net official flows			Net private flows		
	Transfers	Concessional loans	Non-concessional loans	Medium- and long-term loans	Direct foreign investment	Total
Low-income countries						
1970–75	31.7	46.3	4.9	12.2	4.9	100.0
1976–80	32.3	42.5	8.1	13.8	4.6	100.0
1981–86	24.9	33.1	8.5	23.9	9.9	100.0
Lower-middle-income countries						
1970–75	25.0	22.4	7.9	28.9	15.8	100.0
1976–80	17.3	20.3	12.4	40.6	9.4	100.0
1981–86	18.4	14.7	19.2	34.6	13.2	100.0
Upper-middle-income countries						
1970–75	7.0	4.7	11.6	56.6	20.2	100.0
1976–80	5.9	1.5	10.0	68.3	14.4	100.0
1981–86	10.6	0.6	11.8	55.8	21.2	100.0
All developing countries						
1970–75	16.7	16.7	9.4	41.2	15.9	100.0
1976–80	13.3	13.1	10.3	51.8	11.4	100.0
1981–86	16.1	11.8	13.8	42.0	16.1	100.0

NOTE: Net flows equal gross disbursements less repayments of principal. Country groups are as defined in the World Bank's *World Development Report, 1986*. Totals may not sum because of rounding.
SOURCE: World Bank, *World Debt Tables, World Development Report*, various years.

however, there has been an apparent shift to more expensive funds as some of the larger poor countries, such as India, China, and Pakistan, have started to tap private credit markets in a major way and to receive "blend" financing from official donors.

Lower-middle-income countries such as Thailand, Ivory Coast, and Turkey have an almost even 50–50 split between official and private flows. They continue to receive a substantial portion of concessional funds, but they also attract private credits and a significant amount of direct foreign investment. Over time, the lower-middle-income countries have come to rely less on official transfers and concessional aid and more on official nonconcessional loans. In fact, nonconcessional donors have their greatest impact proportionally in lower-middle-income countries.

Official lending in all categories represents a smaller share of the financing obtained by upper-middle-income countries compared to the lower-middle-income group. Concessional loans have become almost negligible (0.6 percent) in the most recent period, while the share of official nonconcessional loans has remained static over time. There is an apparently anomalous rise in the level of transfers received by upper-middle-income countries during the 1980s, but this is entirely attributable to the presence of

Israel in this grouping. The large majority of funds for the upper-middle-income group, about three-quarters, has come from private capital markets, with loans and credits dominating direct foreign investment by a 5:2 margin. In the late 1970s, when the recycling of petrodollars to developing countries by commercial banks was at its height, the share of medium- and long-term loans and credits from private sources rose significantly to 68 percent. Much of this increase, however, was associated with an offsetting reduction in private foreign direct investment, whose share fell from 20 to 14 percentage points. With the onset of the debt crisis, the composition of private financing has reverted back to its pattern of the early 1970s. It is interesting to note that despite the well-publicized creditworthiness problems of countries such as Chile, Argentina, Brazil, and Mexico, private commercial lenders still provided over half of net financing to upper-middle-income countries through 1986, albeit through negotiated, concerted arrangements and reschedulings rather than through individual voluntary loans.

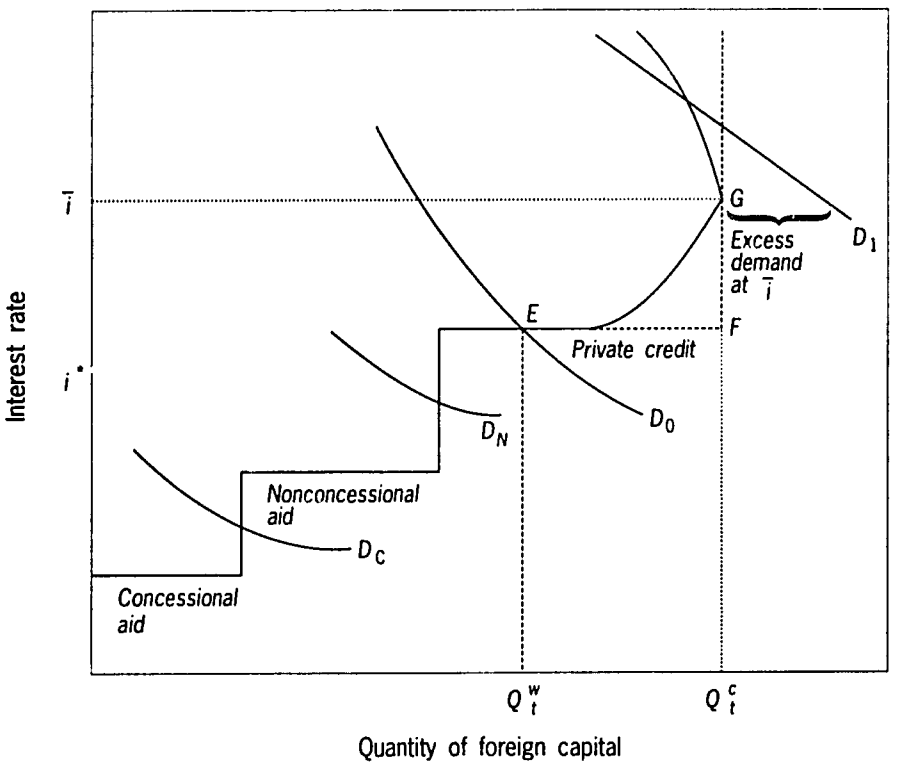
The data presented in Table 15.1 indicate two trends in the financing experience of developing countries. First, from a cross-section perspective, as income levels increase there is a trend toward a hardening of terms on loans and toward an increasing share of foreign equity investment over credit. The second trend shows the same pattern from a time-series perspective: rapid development in the 1970s was associated with a move toward reliance on private capital, and the setbacks to growth and development in the 1980s in middle-income countries have been linked to the reduced role of private financing. The cross-section and time-series evidence suggests that countries pass through "stages of financing," wherein income levels and development are tied to the composition of financing. This would suggest that the episode of heavy commercial lending in the late 1970s, when the composition of financing deviated considerably from the level appropriate to the development stage of middle-income countries in particular, should be seen as unsustainable. The following period in the 1980s can then be viewed as an adjustment back to a more sustainable financing structure.

The notion of "stages" should not, of course, be taken to mean that the process of transition from concessional to commercial capital flows must be smooth. As the experiences of highly indebted countries show, there may be reversals over time and the process may take much longer in some countries than in others. Explicit policy choices by borrowers are also important determining factors. For example, as the companion country studies show, Colombia and Thailand have deliberately taken a much more conservative debt management stance than other countries, and this undoubtedly affects their choice of borrowing instruments. Other countries, such as Hong Kong and Singapore, have also chosen a development strategy that largely eschews foreign borrowing from either official or private sources. Nevertheless, the notion of stages, with the connotation of imperfect substitutability between official and private funds, provides a useful background perspective on "normal" financial arrangements against which to evaluate specific

country experiences. It also offers a framework within which the many factors differentiating official and private capital flows can be linked with the overall development stage and strategy pursued by the country under analysis.

The supply of development assistance. At any point in time, a country appears to be faced with a supply curve for foreign financing that is step-shaped, illustrated schematically in Figure 15.1. The steps indicate a progression in the cost of funds as borrowers shift among different sources of supply. The cheapest funds are from concessional aid, but these are limited by the budgetary resources of donors and so must be rationed to individual countries. Next is the supply of nonconcessional official lending, which is also limited in supply. The most expensive source of funds is depicted as the private financial market. Two characteristics of this supply of funds schedule are noteworthy. First, the cheapness of official aid relative to commercial borrowing suggests that countries would only move to private sources once they have exhausted opportunities to borrow from official sources. Second,

FIGURE 15.1 Supply and Demand for Foreign Capital



SOURCE: Homi Kharas and Hisanobu Shishido.

TABLE 15.2 Terms of Developing Country Borrowing (New Commitments), 1973–85

	1973–80	1981–85	1983	1984	1985
Official creditors					
Interest (%)	5.0	7.0	7.3	7.0	6.5
Grace (years)	6.8	5.7	6.6	5.7	5.9
Maturity (years)	24.2	22.2	21.7	22.5	23.3
Grant element (%)	36.4	22.6	20.2	22.6	26.2
Private creditors					
Interest (%)	9.6	11.4	10.6	11.0	9.1
Grace (years)	3.5	4.1	3.3	4.4	5.3
Maturity (years)	9.4	9.5	8.2	9.5	10.7
Grant element (%)	0.9	-6.3	-2.5	-5.2	3.4

SOURCE: World Bank, *World Debt Tables*, various years.

the supply of private credit is also depicted as limited, or rationed, despite the fact that individual developing countries, including the major borrowers, are only minor players in international capital markets.

Because official international lenders tend to price their loans differently than private lenders do, a straightforward comparison of the average lending terms should be interpreted with care. Official lenders, for example, emphasize long-term relationships with borrowing countries and attempt to smooth fluctuations in their lending rates over time, whereas private lenders respond more quickly to immediate market conditions. Thus, over short periods of time, private loans may indeed appear more attractive. Nevertheless, over longer time horizons, the terms on official loans do appear more lenient.

The difference in average lending terms between official and private sources, shown in data collected through the World Bank's Debtor Reporting System, is considerable. Table 15.2 shows the average interest rate, grace period, maturity, and grant element for official and private loans. The grant element collapses the other terms into a single statistic. It is defined as the percentage difference between the face value of the debt and the stream of contractual interest and principal repayments discounted at 10 percent. It represents, therefore, a single measure of the cost of funds and indicates that official loans have been 20–40 percent cheaper than private loans over the last fifteen years.

The second key characteristic of the supply curve is the rationing of credit by private commercial lenders. Rather than supplying increased quantities of credit and using high interest rates to compensate for higher risk, private lenders tend to limit the total credit extended to a country. In fact, much analysis suggests that without credit rationing, private lending to developing countries would not occur at all, because in the event of repudiation no collateral could be collected.[2] The absence of collateral and of any legal framework or political structures with jurisdiction over cross-border lending to developing countries is often cited as a major reason for the failure

of private international capital markets to provide substantial net new fund for development between 1932 and 1965. Particularly after the defaults o developing country bonds in the 1930s, the risk of nonrepayment on eve small amounts of debt was high.

The advent of commercial bank credits as an important lending mecha nism changed these incentives. Like official lenders, commercial banks wer able to establish long-term relationships with borrowing countries. "Credit worthiness" became a valuable commodity in and of itself because it permit ted future access to loans and facilitated loans for a variety of activities. Th growth of increasingly sophisticated trade, industry, and finance structure in the more advanced developing countries required a broad range of ser vices that foreign commercial banks could provide. Rather than financin capital formation, Eurocredits were initially used for trade finance, fundin of local banking activities, and other areas with relatively safe returns. Fol lowing this, banks expanded their interactions with various groups within country and built a base on which long-term credit relations could grow. Th network of links, and the promise of future loans, ensured that government had a vested interest in maintaining payments. Examples of *ex post* publi guarantees of private debts in Chile, Korea, Thailand, and other countries ar testimony to the success of this diversification strategy by private banks. Thi reduced the risk of default or repudiation, at least up to a certain amount.

Causes of the shift to private financing. It is apparent that the shift to greate use of private financing can be explained by changes in both the demand and supply of foreign funds. On the demand side, if the demand curve for foreign funds shifts to the right as incomes rise, there will be a tendency for the share of private funds to increase, because official funds are limited. The processes governing the demand for funds revolve around the share and structure o savings and investment in gross domestic product (GDP). One example o increased demand came during the 1970s, when large public sector deficits financed from abroad became common in a number of developing countries.

A shift toward private financing may occur even in the absence o changes in demand as a consequence of shifts in the supply of funds. Consider a country with demand given by D_1 in Figure 15.1. The country would ideally like to borrow more than private lenders are willing to lend at an interest rate of $\bar{i}$. As explained above, rather than interest rates rising to clear the market, the country will be rationed at a level Q_1^f. This rationing level, however, is a complex function of lender information and country economic performance, among other factors. Over time, the rationing level may shift, altering the mix of private and official financing, as well as the volume. Similarly, for any given demand for funds, it may be official lenders who determine the mix of financing. If demand is given by D_0, then any reduction in official assistance will be translated into an increase in private lending. In such a case, official and private lending are essentially substitutes. If, however, private lending is rationed, then no increase in private lending will

follow from a decline in official assistance. In fact, depending on the criteria determining private credit rationing, it may even be the case that the willingness of private lenders to lend declines with a reduction in official loans; thus official and private funds would be complements. There is, therefore, a potential relationship between whether or not a country is credit rationed and the complementarity or substitutability of official and private lending.

Because of both the higher costs involved in private finance and the tenuous nature of the private sector's willingness to lend, creditworthiness takes on greater importance in determining whether the progression from official to private lending will be smooth or not. Two important criteria must be satisfied to ensure that a loss of creditworthiness does not disrupt the transition. First, because the shift of funding sources entails a loosening of the link between specific investment projects and foreign financing, care must be taken that efficient mechanisms for allocating resources are in place. The case study of Mexico in this volume, for example, shows growing inefficiency in investments associated with the surge in borrowing from private markets. This problem is attributed to ill-advised government investments and to a failure to maintain a stable macroeconomic environment in which appropriate price signals could guide private investment decisions.

A second, related criterion is that private capital must be self-supporting in terms of creditworthiness; borrowers must therefore promote exports and avoid fiscal laxity. In countries where official aid is critical to the maintenance of creditworthiness—as in Egypt, for example—it is likely that aid and private capital will be complements. The flow of commercial capital depends on a continued flow of aid, and withdrawal of such aid cannot be supplemented by an increase in private capital flow because of creditworthiness constraints. Progression toward reliance on private funding is interrupted.

One area where it is particularly difficult for commercial lenders to supplant official lenders is in the long-term financing of public deficits. Several case studies, including those of Brazil and Egypt, document how aid contributes to the development of institutional structures that promote government expenditure. In these cases, withdrawal of aid or a switch toward private sources can leave a pattern of fiscal indiscipline that can jeopardize creditworthiness. For example, Brazil became a heavy user of private foreign credit to finance greater state and local government spending. More official lending, with its tighter conditionality and restrictions on eligible programs for financing, may have buttressed the viability of the private flows.

The concern with creditworthiness, and with the willingness of a country to repay its debts, implies that certain development strategies are likely to be more favorable for a transition to commercial financing than others. An outward orientation, for example, by increasing links with foreign banks and by demonstrating a commitment to abide by the rules of international trade and finance, is more consistent with a reliance on private international capital than an inward-oriented strategy. Similarly, private sector–led growth also

helps by spreading risk and stability in the macroeconomic environment. Where the public sector leads growth through deficit spending, the risks are high of a surge in inflation, a loss of confidence on the part of external creditors, and the political exposure of interest payments to other budgetary priorities.

The Estimation of Private Capital Flows

The empirical analysis of capital flows to developing countries is complicated by the fact that both the demand and supply curves have shifted markedly in recent times. Compounding this difficulty is the practice of credit rationing, which implies that the interest rate will not always reflect a market-clearing equilibrium. When there is credit rationing, *ex ante* demand at the given interest rate will exceed available supply. For many of the high-debt countries in the 1980s, rationing is simple to observe. Even in other times, however, rationing is likely to have been pervasive, although it is not immediately evident from the data. Thus, any empirical estimation must distinguish between demand and supply effects, and must also allow for rationing. That is, two regimes must be estimated: one in which there is readily available access to the funds the country demands and another in which the country is subject to rationing.

Methods to estimate switching-regime models of the type described above have been developed by Goldfeld and Quandt (1972). The derivation of the estimating equation is given in the appendix to this chapter. Using maximum likelihood techniques, each data point is assigned to a rationed or a nonrationed regime. This structure permits an empirical assessment of the following specific questions: (1) how do concessional and nonconcessional official lending interact with private flows; (2) does the current slowdown in new private credit reflect (a) a natural stage of the debt cycle, (b) global economic conditions, or (c) an institutional retrenchment by global banks from development lending? First, the variables governing demand and supply are discussed and then the estimation results are presented.[3]

Demand factors. Foreign borrowing can be used to smooth investment and consumption over time, both against transitory disturbances and against systematic difference in expected growth rates, international interest rates, and the social discount rate. In general, if the rate of return is higher than the world interest rate, borrowing for investment will occur. If the expected growth of income is above the world interest rate, borrowing for consumption may take place. For developing countries where structural change in output is an integral part of the development process, external credits provide foreign exchange when it is relatively scarce and repayments are expected when development has eased the foreign exchange bottleneck.

Raising the ratio of investment to GDP has long been considered one of the main structural processes in development associated with rising incomes. As incomes rise, countries may find returns on bankable projects exceeding international market interest rates—thus, the development process "pulls in" increasingly costly capital. The transition to private capital, then, does not happen until countries have developed the social and physical infrastructures to support high-return investments in directly productive activities. One example of this at work in India is the development of commercial opportunities in irrigation and in the handling, transport, and storage of grain following the establishment of an agricultural research network, financed in part with official external aid. The case study of Tanzania provides an example of low-income country not generating sufficient returns from its foreign-financed projects to justify commercial borrowing. This seems, however, to be the exception rather than the rule. Most microeconomic evidence suggest that projects financed with concessional aid have rates of return as high as those financed with other funds, and much higher than the real interest rate (see World Bank 1982 for evidence from International Development Association projects). Such evidence has been used as a basic presumption in the efficiency arguments justifying aid to even the poorest countries. Thus, while the investment to GDP ratio is clearly important in the demand for foreign borrowing, there does not seem to be any *a priori* or empirical reason why investment rates should rise as incomes rise, which would help explain the transition to commercial borrowing.

The demand for commercial funds may be affected by the composition of investment as well as by its level. For any given project, the maturity of borrowed funds is typically linked to the gestation of investment returns. Extrapolating this tendency to a macroeconomic scale, it does not seem likely that poor countries with an orientation toward infrastructure projects would typically demand short-maturity commercial loans. At the aggregate level, however, it is less important to match maturities on debt to the gestation of returns from investment, provided other funds can be tapped for debt service purposes—a situation likelier to be found in more advanced countries with broader industrial bases, where, in principle, debt service can be made with proceeds from earlier projects. Needs also change in more complex economies. Stable long-term funds are available in greater quantities from domestic savings, while foreign savings are used more for banking, trade, the provision of financial services, and other general funding purposes. These latter requirements are often unpredictable and require access at short notice. Thus, because administrative costs and time delays are lowest in the highly competitive private credit markets, private capital becomes relatively more attractive for higher-income, complex developing countries. In the estimation below, these effects are incorporated through income dummy variables used to proxy the stage of development.

The demand for foreign borrowing to smooth consumption over time will depend largely on the expected growth rate of income. Controlling for

investment. foreign borrowing is negatively correlated with domestic savings. With a higher rate of income growth, there is a rise in domestic savings, normally attributed to a delay in raising consumption standards as incomes accelerate. Therefore, higher expected growth should be accompanied by a fall in the demand for foreign funds. In addition to reacting to expected growth rates (proxied below by a three-year weighted average of past annual real GDP growth rates), borrowing will also respond to temporary shocks. These are included separately in the demand equation, with a distinction drawn between shocks in the traded goods sector and those in the nontraded sector. A terms-of-trade adjustment is used to measure the transitory traded goods shock, which estimates the income losses associated with changes in the terms of trade. A positive shock should reduce the demand for foreign borrowing and vice versa. Conversely, transitory improvements in nontraded income are likely to increase the demand for traded goods consumption and hence for foreign credits. Nontraded transitory income is measured by subtracting transitory tradable income (actual exports less trend exports predicted from a constant growth rate model) from transitory total income (actual GDP less trend GDP predicted from a constant growth rate model).

Because external loans are denominated in foreign exchange and must be repaid in foreign exchange, changes in the real exchange rate over time will affect the cost of borrowing in terms of home goods. Governments, in making their foreign borrowing decisions, should anticipate the need to engineer a future depreciation in order to generate exports for debt servicing needs. Incorporating this factor would raise the estimated cost of foreign borrowing and cause demand to decline. The exchange rate effect has proven to be particularly important in Latin America and Africa, where the price responsiveness of exports has been low, and sizable real devaluations that should have been anticipated earlier, along with corresponding reductions in demand, have become the norm.

Additional variables included in the demand equation are official concessional and nonconcessional loans; the real interest rate (a dummy for the 1980s); and a dummy for rescheduling with a lead for one year, as countries are likely to reduce their demand for funds in the face of an imminent payments crisis entailing a rescheduling. Introducing the aid variables is a means of testing whether official assistance creates its own demand or not. As concessional flows clearly add to developing country income, however, they can be expected to increase expenditure and the current account deficit somewhat. By contrast no such effect is expected for nonconcessional official flows.

Supply factors. In many cases lenders may be responsible for setting the pace of the transition from official to commercial funds. This pace will be dictated by the magnitude of official loans, the retrenchment of official lending as incomes rise, and the level at which private creditors restrict credit. While the levels of official lending are easy to observe and can be treated as

exogenous at actual levels, the credit ceilings imposed by private creditors are not directly observable. As discussed in the Appendix, these ceilings are likely to shift with a country's macroeconomic performance and with international economic forces such as the terms of trade and interest rates. In the most common empirical models of credit rationing, it is supposed that banks will consider the costs and benefits to a country of repudiation. They will lend only an amount at which the costs of repudiation are higher than the benefits. Hence, repudiation should never occur.

The benefit to a country of repudiating debt is simply the discounted stream of debt service payments, and is calculated as the ratio of current debt service to GDP. However, the data include only debt service paid on public and publicly guaranteed debt. Interest on short-term debt, debt service on private nonguaranteed debt and other payments to foreigners (dividends, royalties, etc.), and rescheduled debt service are excluded. Thus the debt service variable is not very satisfactory. One would expect that the higher the debt service payments are, the lower the current account deficit will be.

In most instances, the government is the principal borrowing agent, and it is the benefits to the government that enter the credit constraint calculus. Governments with low capabilities for raising domestic funds may find it more beneficial to repudiate rather than squeeze expenditure to meet debt service obligations. We use the ratio of government revenue to GDP as our proxy for fiscal factors. The higher this variable, the higher the credit ceiling.

The costs of repudiation are typically characterized as arising from forgone borrowing opportunities and from other penalties that lenders may impose on a borrower in default. The former implies that the variables entering the demand equation should also enter supply. The higher the demand for funds, the higher the cost of being excluded from future capital markets in the event of repudiation and hence the higher the credit ceiling. Thus growth, investment, and the change in the real exchange rate should all appear in the supply equation with the same sign as in the demand equation.

One exception to this may be investment. Gersovitz (1984) argues that higher investment in import-substituting industries may lead to a contraction of the credit ceiling. Sachs and Cohen (1982), however, suggest that the investment impact on the credit ceiling is reinforced by other penalties. They argue that autarky is a likely cost of repudiation and that this would adversely affect the returns on capital. Therefore, the greater the capital stock, the greater the penalty suffered as a result of repudiation. The autarky argument can also be interpreted to imply that more open economies, particularly those with high exports/GDP ratios, would stand to lose the most from repudiation and would therefore be in a position to borrow the most. Hence, we expect exports/GDP to appear with a positive sign.

While the long-run demand variables should appear in the supply equation with the same sign, the opposite is true of the short-run demand variables. Countries experiencing a transitory external terms of trade gain,

for example, would tend to smooth some of the gain into the future by adding to international reserves. The increase in the future availability of traded goods should permit a relaxation of the current period credit ceiling. Conversely, a nontraded transitory windfall would tend to increase current demand for tradables consumption and to decrease the future supply of tradables. Hence, it would lead to a tightening of the credit ceiling.

A primary purpose of this chapter is to investigate the role of official concessional and nonconcessional flows in rationed environments. Both of these variables should increase the current account deficit. In fact, the major rationale for official aid is that it is last-resort lending for countries that would otherwise be unable to borrow from private capital markets. The magnitude of the coefficients on these variables is also of interest. Values equal to one would imply that official credit has few externalities elsewhere in the economy—the money is simply spent on, for example, imports for a particular project. A value less than one would imply that a country is not rationed and therefore barely changes its expenditure pattern when it has access to foreign funds. Finally, values greater than one imply that official credit is a complement to private capital flows—the latter are drawn in when official credit is made available. We also test to see if there are any differences between the coefficients for the 1970s and those for the 1980s and across income groups.

Data, estimation, and results. Our sample contains 225 observations covering 30 developing countries for the years 1974–85. Each country-year is taken as a separate observation; several countries do not have available data for all years, particularly toward the end of the sample period. These observations are not included. After accounting for leads and lags, the sample period is further shortened. The sample contains both middle-income countries and low-income countries. We would surmise that both groups would have some rationed and some nonrationed experiences.

The model was estimated using a switching-regressions package (LIMDEP) to maximize the likelihood function. Although this function may be unbounded in the general case, if the variance of one of the equations tends to zero, convergence was achieved without imposition of arbitrary constraints to bound the variances from below. To avoid problems of simultaneity bias, lagged values of the exports/GDP, government revenue/GDP, and debt service/GDP ratios were used. Several runs were carried out. In the base run, the coefficients are assumed constant over time, and a dummy is added to differentiate among the 1970s and 1980s. In the alternative specifications, coefficients were allowed to change between the 1970s and 1980s on several variables, to allow for possible changes in the international lending environment, and among our three country-income groupings. The dummy approach was adopted in preference to splitting the sample into two time periods, because of problems encountered with the latter approach. It seems that most countries were rationed in the 1980s, and there are not enough

observations of nonrationing to achieve a satisfactory estimate of the demand equation. As we are using pooled cross-country, time-series data, particular care should be taken in interpreting the results. This is unavoidable in an analysis of this type. There are simply not enough observations to undertake pure time-series analysis. We should also note that because of the linearity of the system, the estimated coefficients and standard errors are likely to be sensitive to the precise model specification.[4]

The estimated coefficients are shown in Table 15.3. They lend strong credence to the proposition that countries are indeed divided into two groups, one rationed and the other not. This is seen by the fact that the two-equation formulation is clearly appropriate. Inspection of the coefficients shows that if just one equation were used, the explanatory power of the model would be substantially reduced. Most of the coefficients have the signs predicted by the previous discussion and are significant (that is, the absolute value of their *t*-statistics is greater than two). In the demand equation, growth, investment, transitory shocks, and the rescheduling and 1980s dummies are highly significant with the expected signs. Conditional on investment, fast-growing economies have lower current account deficits. High investment, however, requires additional foreign financing—about thirty cents on the dollar. The transitory income terms are also important determinants of the current account deficit. However, the change in the real exchange rate and the real London Interbank Offered Rate (LIBOR, the standard rate of the cost of capital in Eurocurrency markets, used here as a proxy for the cost of international capital) are not significant (although they have the predicted sign); nor are concessional and nonconcessional aid. This implies that concessional flows to the nonrationed group of countries do not affect savings and investment behavior—they simply provide a cheaper means of financing investment. The aid has a pure income transfer effect.

The supply equation is also well determined. As expected, the growth and investment variables appear with the same sign as in the demand equation and are highly significant. The coefficient on the investment variable is of particular interest. It suggests that foreign creditors are prepared to finance about seventy cents per extra dollar of investment. Conversely, it also suggests that adjustment programs featuring major cutbacks in investment are likely to be highly inefficient, because as investment shrinks, reducing demand for foreign funds, the "safe" credit ceiling also shrinks, thereby augmenting the required adjustment.

The transitory income variables appear with the correct sign but are not significantly different from zero. Interestingly, a terms-of-trade windfall gain appears to increase the current account deficit in credit-constrained countries. This accords with the apparent procyclical behavior of commercial banks and helps explain why some countries expanded commercial borrowing on the basis of price fluctuations that they knew would be temporary. For

TABLE 15.3 Maximum Likelihood Estimates of Credit Demand and Supply (t-statistics in parentheses)

Variable	Base run	
	Demand	Supply
Constant	0.514	-0.172
	(2.09)	(-4.20)
1980s dummy	-0.040	0.103
	(3.57)	(3.14)
Growth	-0.507	-0.458
	(-3.58)	(3.99)
Investment/GDP	0.286	0.719
	(4.09)	(5.40)
Transitory tradable shock/GDP	-0.410	0.177
	(-7.98)	(1.32)
Transitory nontraded shock/GDP	0.378	-0.074
	(4.08)	(-0.71)
Change in real exchange rate	-0.001	-0.117
	(-0.02)	(-2.14)
Real LIBOR	-0.087	
	(-0.32)	
Rescheduling dummy	-0.026	-0.046
	(-2.56)	(-0.69)
Concessional aid/GDP[a]	0.264	2.888
	(1.33)	(3.83)
Nonconcessional aid/GDP[a]	0.260	2.612
	(1.30)	(3.22)
Government revenue/GDP[a]		0.234
		(2.84)
Exports/GDP[a]		-0.215
		(-4.68)
Debt service/GDP[a]		0.789
		(1.70)
Change in real LIBOR		0.245
		(0.89)
Low-income dummy		0.109
		(1.58)
Low-middle-income dummy		0.027
		(1.92)
Standard error	0.036	0.037
	(11.49)	(9.57)
Log likelihood value 440.9		

NOTE: Blanks indicate variable not included in equation.
a. A positive coefficient implies a larger current account deficit.
SOURCE: Authors' estimates.

example, Colombia increased its foreign borrowing in the aftermath of the coffee price increase in 1978, which was clearly associated with temporary frost conditions in Brazil. This is rational debt management by both lenders and borrowers if the country was initially credit-constrained.

Government revenues appear significant in expanding the credit ceiling. This suggests that adjustment programs that support domestic resource mobilization help reduce the total scale of adjustment required. However, two other variables that have featured prominently in adjustment programs, namely the ratios of exports and debt service to GDP, do not perform well. It seems that lenders take advantage of the opportunities offered by higher exports to reduce the credit ceiling. This runs counter to the notion that high exports involve greater repudiation costs and, by increasing debt service capacity, encourage higher lending. Surprisingly, the debt service variable itself is also insignificant. Reducing current debt obligations, through reschedulings for example, does not open the way for higher lending. This might reflect the fact that reschedulings have not actually reduced the net present value of debt service obligations, and that in the present environment, the current debt service value is a poor proxy for future obligations. One example of this is the Philippines, where reschedulings have lowered the debt service ratio to 20 percent, a level normally considered safe. However, when principal repayments fall due after 1992, debt service obligations will rise sharply, offsetting the impact of low current debt service.

Two variables of particular interest in the context of this discussion are concessional and nonconcessional net aid flows. Both appear with coefficients significantly greater than one. Two main inferences may be drawn. First, aid is particularly important in rationed regimes, as the coefficients on aid variables are much larger and more significant. The evidence clearly supports the notion that aid represents lending of a last resort. Second, in the supply equation aid has played a significant role in attracting other forms of foreign capital in future periods. Each dollar of aid increases countries' net borrowing by about 2.5 dollars. These results underscore the continuing importance of official flows as a catalyst for new private lending. Both concessional and nonconcessional aid play this role to the same extent.

We investigated whether there have been differences in the impact of aid in different time periods and across different income groups. The values of the coefficients, when each is isolated, are shown in Table 15.4. A note of caution is in order in interpreting these results. Ideally, all the different slope coefficients should be estimated jointly. In practice, however, this was impossible because of the high multi-collinearity among the resulting set of variables. Furthermore, in some cases—primarily involving nonconcessional aid in the demand equations—there were non-negligible changes in other coefficients, particularly those that were not significant in the base run reported above.

Even bearing in mind these caveats, the pattern indicated by the coefficient changes in Table 15.4 is suggestive. First, there does not appear to be

TABLE 15.4 Change in Aid Variable Slope Coefficient (t-statistics in parentheses)

	Concessional		Nonconcessional	
Sample variable subgroup	Demand	Supply	Demand	Supply
1976–80	0.096	3.401	0.398	1.235
	(0.44)	(4.13)	(1.37)	(1.72)
1981–84	0.338	1.552	0.180	1.353
	(2.00)	(3.25)	(0.619)	(2.18)
Low-income countries	6.085	6.796	-0.094	0.796
	(1.47)	(1.93)	(0.31)	(1.20)
Lower-middle-income countries	0.392	2.011	1.180	2.231
	(2.02)	(3.69)	(6.57)	(4.429)
Upper-middle-income countries	0.654	2.615	0.422	1.224
	(2.92)	(4.24)	(2.29)	(2.515)

SOURCE: Authors' estimates.

any significant change in the coefficients between 1976–80 and 1981–84. With the possible exception of the impact of concessional aid on supply of overall capital, which does seem to have declined, the other coefficients show little change across the time periods. Second, comparing the income-specific coefficients, it is evident that in all cases concessional and nonconcessional aid have their biggest impact on overall borrowing when a country is rationed, as their coefficients are positive and larger in the supply equation. This suggests that aid is best utilized as last-resort lending and that in these cases it serves to draw in other funds. Third, the coefficients display the same pattern in their magnitudes as anticipated in the earlier discussion of stages of financing. In the supply equation, concessional assistance has its greatest impact on low-income countries and a much lower impact in higher-income countries. Moreover, nonconcessional aid is not significant for low-income countries, where it is probably a substitute for concessional assistance, but has its largest impact on lower-middle-income countries.

To summarize the empirical findings, we return to the issues identified at the start of this section. The data indicate that the existence of widespread credit rationing by commercial banks has halted the transition from official to private lenders. The adoption of credit rationing, which intensified during the 1980s, does not, however, seem to be an exogenous reluctance on the part of commercial bankers to lend. Rather it has stemmed from global factors and from the process of adjustment. One key variable is the terms of trade. As commodity prices plunged in the 1980s, the demand for foreign exchange in borrowing countries rose while supply contracted. Faced with a shortage of funds, countries were forced to cut back on investment expenditure, given short-term rigidities in consumption, particularly in the public sector. The reduction in investment, however, compounded the size of adjustment required, as lenders further withdrew access in the face of a declining number of bankable projects. Official assistance accentuated this vicious circle. After peaking in 1981, official assistance steadily declined, causing

private creditors to become even more conservative. The combination of declining terms of trade, investment rates, and official credit largely explain the sharp slowdown in new private credit and, consequently, the emergence of debt service difficulties.

The widespread existence of credit rationing by private creditors implies that the transition from official to commercial credit is largely driven by the behavior of official donors. There is no evidence to suggest that the demand for private capital rises as incomes rise; rather, the transition occurs as a result of falling levels of official assistance leading to a substitution with private capital. Because of the rationing of private funds, such a transition can only occur when the overall demand for funds is low. In the 1970s official creditors tried to wean countries in an environment of high demand for foreign funds. Once credit ceilings were reached, however, new flows could only be sustained through a complementary increase in official and private capital.

There appear to be four criteria under which a country can safely rely primarily on private credit for development. First, the level of demand must be low enough so that credit limits are not quickly exhausted. Second, the rate of investment must be high so that credit ceilings are pushed outward. Using foreign credit for investment expands access to new resources, while using it for consumption quickly erodes future borrowing opportunities. Third, foreign borrowing should not be a substitute for the government tax effort. Maintaining or increasing public revenues, which are the final source of funds for debt servicing, is necessary to expand the credit ceiling. Fourth, the external environment should not be unfavorable. Improved terms of trade help to extend credit lines. Only under these conditions can private flows replace official flows. When these conditions are not met, a country's access to foreign funds will largely depend on its ability to attract official financing. In the aggregate, the flow of resources to developing countries will depend on the budgetary constraints governing official assistance.

New Instruments in Private Capital Markets

The preceding analysis has shown that there are limits to the extent of commercial credit to which countries have access. The implication is that countries must either reduce the volume of net inflows to live within this ceiling, slowing down the overall pace of their transition toward private financing, or else search out new sources of private capital. This section briefly explores this last option.

Several authors (Lessard and Williamson 1982; Barth and Wall 1985) have pointed to the importance of securitized instruments in general, and foreign portfolio investment in particular, as sources of development finance. Iqbal (1987) argues that equity investments have several characteristics that should make them attractive to host developing countries: long maturities, risk sharing, risk dispersal within the economy, and correlation of

service payments with ability to pay. To tap this potential to its fullest, however, policy changes in host countries are required. This section addresses the issue of whether aid flows can assist in the transitional phase of adjustment.

The composition of development financing reflects in part the development strategy adopted in each country. In large measure, the success of international credit flows is the mirror image of an overall development strategy built on credit. A successful strategy combines microeconomic structures at the firm level that provide a demand for credit with macroeconomic policies that facilitate its supply. Actual experience, however, has often been very different.

In many developing countries, including Korea, Brazil, and the Philippines, credit directed by government to specific industries has been a prominent development instrument. Special development banks have been set up to institutionalize such flows. Other forms of government intervention in credit markets have also fostered dependence on debt financing—special rediscount windows at the central bank, government guarantees (both explicit and implicit) for loans to "priority" sectors, and official encouragement of loans to government-sanctioned infrastructure projects or large-scale public enterprises.

A second underpinning of the credit-fed economy is the financial structure of domestic corporations themselves. The leverage firms have in most developing countries is significantly above levels considered prudent in more advanced countries. For large companies, it has been suggested that high financial leverage accompanies high political leverage—governments are often unwilling to allow major domestic corporations to go bankrupt. In addition, government policy often gives a clear financial advantage to high leverage; the most obvious case is where directed credit programs contain a subsidy element. Other policies, including the double taxation of dividends and the deductibility of nominal interest payments from taxable income, also increase the bias toward undercapitalized firms. Together, these policies have created an artificial demand for credit, often funded from abroad, without appropriate economic underpinnings.

Macroeconomic policies have reinforced the demand for credit and facilitated its supply. On the demand side the most important factor has been large government deficits. If domestic bond markets are thin, governments face a choice between inflationary credit creation and foreign financing. While the latter is preferred in the short run, in the long run debt service obligations add to the fiscal deficit. When the exchange rate is fixed or managed, the attraction of foreign financing in the short run is increased as it permits current account deficits to be financed without running down international reserves. Thus the interaction between fiscal, monetary, and exchange rate policy has also introduced a bias toward credit extended to the government.

Where domestic bond markets are more active, a fiscal deficit does not necessitate foreign financing. Although a fiscal deficit will cause a current

account deficit when the exchange rate is controlled, this could be financed by any source of funds chosen by the private sector. In practice, however, the link between government deficits and foreign credit is not really broken. Domestic commercial banks hold most government debt, and they fund these purchases by foreign borrowing, facilitated by the implicit umbrella of government protection over fledgling domestic financial structures. There are few developing countries that have risked allowing a tottering bank to default. Instead, the central bank orchestrates a rescue operation, through merger, takeover, or recapitalization, that preserves the value of the debt to the foreign creditor.

The issues above suggest that if developing countries are to move toward more securitized instruments in financing their development, they must meet the following three requirements: first, the financial system should be reformed to do away with directed credit and, in particular, subsidized credit; second, corporate tax policy must be reviewed for biases against equity financing, and governments must take a stronger position vis-a-vis socialization of private losses; and third, fiscal deficits must be brought under control and new institutional arrangements developed to broaden the market for government debt.

These reforms have been increasingly supported by aid agencies in recent years. In conjunction with this trend, several countries, including Thailand, Korea, the Philippines, Mexico, Brazil, and Malaysia, have encouraged the development of equity funds, such as pension and mutual funds, that would be attractive to foreign investors. Although the main attraction of mutual funds is the potential for high returns from domestic stocks and the inverse correlation of many emerging stock markets with those of the developed countries, some mutual funds may also hold developing-country government securities denominated in local currency to provide a more steady income stream. Thus they provide a channel whereby foreign equity investors can finance moderate developing-country government deficits. Meanwhile, the macroeconomic risk of volatile, speculative flows, which have in the past been associated with portfolio investments and short-term capital movements, can be reduced by the use of "closed-end" mutual funds, open only to foreign investors. Under such schemes, any foreigner who disinvests is replaced by another foreign investor, so there is no net outflow of principal from the country.

The potential for equity flow is thought to be moderate. Estimates in the range of $2.5 to 4 billion a year have been made (Barth and Wall 1985). Such sums are about 12 percent of the total private net flow to developing countries and about 35 percent of existing equity investment (primarily through foreign direct investment). Thus, although funds from new sources can play a significant role at the margin, they are unlikely to replace commercial credit as the major source of private flows. The stage of private bank credit to public and publicly guaranteed borrowers will likely continue as a precursor to private-private international development financing.

Conclusion

There are four primary functions of official aid. First, it provides foreign exchange resources in cases where these would be unobtainable from private sources. Second, in many instances it provides funds at concessional rates that permit debt financing without overburdening the government budget or debt servicing capabilities. Third, it provides guidance on development policy and project design and implementation, creating an environment more conducive to private finance. Fourth, it serves as a catalyst for other sources of funds.

This chapter explores the implications of these diverse aid functions for the overall financing of development. We argue that the institutional setup of public aid donors and private foreign investors is conducive to a sequence of stages in development finance, with a steady progression from concessional to nonconcessional official assistance and then to private credit and finally private equity flows on the supply side, and from the public sector to the private sector on the demand side. These stages are not presented as immutable but are based on current conditions and medium-term prospects.

Commercial bank credit is the first type of private funding instrument to become available, and its use grows as countries develop. Banks, however, are likely to ration credit as a response to imperfect information on borrower and project characteristics (particularly the risk of repudiation). Rationing arises largely because of the nature of sovereign lending and the absence of legally enforceable collateral provisions. Thus, in turning toward the banks as a source of finance, countries will inevitably face a ceiling on the amount of credit they can obtain. They must then lower the volume of demand for funds or switch toward other sources of private finance.

The empirical evidence strongly supports the notion of credit rationing. It also indicates that upper-middle-income countries are currently more severely rationed than lower-income and lower-middle-income countries. Rationing is affected by country performance, including investment, GDP growth, and exports; by exogenous developments like terms of trade movements; and by official aid. In examining the determinants of rationing, it appears that two main forces have been at work in contributing to the observed recent decline in net commercial lending. First, countries have reached their credit limits as a natural stage in the debt cycle. Second, important variables in the supply equation, such as investment and the terms of trade, have moved in a direction to further restrict credit supply. Investment cutbacks have been particularly blunt, high-cost instruments for achieving balance of payments equilibrium. Although they help reduce the current account deficit, they also reduce financing. The capital account situation has also deteriorated because of adverse developments in the terms of trade. After correcting for these and other factors, however, we found no evidence to support the notion of an institutional unwillingness on the part of international banks to supply credit to developing countries, at least up to 1984.

The results clearly indicate that aid is vital as a catalyst for private flows. Concessional aid is most important and effective in low-income countries but becomes progressively less so as income levels increase. Nonconcessional aid is best directed at lower-middle-income countries. These results support the "stages" hypothesis advanced earlier. They also strongly confirm the proposition that aid is best used for last-resort loans.

For developing countries to progress into the most mature stage of development financing, changes are required in their internal policies, including macroeconomic policies on fiscal credit and exchange rate management and microeconomic policies on corporate and personal income taxation. Many of these policy changes, particularly with regard to financial liberalization, are being supported by aid agencies. Thus, it seems that the foundations are being laid for a broader development of internal domestic financial markets and greater financing from international private capital markets toward the domestic private sector.

APPENDIX TO CHAPTER 15

Model of Credit Rationing Underlying the Analysis

The general credit rationing model considered in this chapter is adapted from Cohen (1988). He shows that if a credit limit is imposed so that debt repayment never becomes heavy enough to make repudiation a superior alternative, the general form of that limit is

$$\frac{B_t}{\Omega_t} < h^* (i,n) \tag{A1}$$

where Bt is the credit limit, Ω is the country's resource base (on which the penalty is based in the event of repudiation), i is the interest rate and n the growth of the resource base; h^* is the borrower's debt-to-resource limit perceived by creditors. In a world of certainty, equation (A1) implies that the supply of credit is kinked, perfectly elastic at the risk-free world interest rate, i^*, and inelastic at a quantity h^* (see dashed line in Figure 15.1). Now, consider a stochastic element in (A1). If credit exceeds its *ex post* ceiling, the country repudiates and lenders get zero return. It is easy to show that the supply curve bends (Sachs and Cohen 1982). The intuition is that as the interest rate rises, borrowers' actions are altered and the probability of repayment to the lender falls. Above a certain point, the expected return to the lender from a given volume of credit falls as the interest rate increases, so the supply curve bends backward.

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Figure 15.1 also shows the availability of concessional and nonconcessional official aid. Rationing may also occur if the demand curve intersects the two vertical portions of supply that separate official from private flows. In such situations, it is evident that an increase in supply will be fully reflected in an increase in the quantity transacted. What is less clear, and will be the subject of empirical investigation below, is what happens if the demand curve intersects the backward-bending position of the supply curve and there is an increase in official concessional or nonconcessional aid. The total credit supply may or may not increase, according to whether official aid "crowds out" private credit.

It is clear that private credit markets will be characterized by two regimes. Where demand is given by a curve that intersects the supply curve in a relatively elastic portion (such as the demand curve D_0 intersecting the supply curve at E in Figure 15.1), the interest rate can adjust to clear the market in Walrasian fashion. The quantity transacted is given by Q_t^w. On the other hand, if the demand curve intersects the supply curve at a more inelastic portion (such as D_1 in Figure 15.1), then the equilibrium will be characterized by credit rationing. Lenders will provide a quantity of credit, Q_t^c, at the interest rate $\bar{i}$, as at point G. The interaction between demand and supply will not be the transaction point.

The overall market characteristics can be summarized by a switching-regressions model:

$$Q_t^w = X_t' \cdot \alpha_1 + u_t \tag{A2a}$$

$$Q_t^c = Y_t' \cdot \beta_1 + \beta_2 \cdot \bar{i} + v_t \tag{A2b}$$

$$Q_t = \min\,(Q_t^w, Q_t^c) \tag{A2c}$$

These three equations have the familiar form of a market in disequilibrium. Equation (A2a) says that the quantity transacted can be written as a function of a set of exogenous variables, X_t, which characterize the supply and demand curves. Note that the interest rate, i, is an endogenous variable and is therefore factored out by inclusion of other exogenous supply variables in X_t. If supply is perfectly elastic at i^* in this region, the X_t will only contain demand variables. Equation (A2b), on the other hand, represents the quantity transacted when the credit ceiling is binding. The interest rate at which supply is maximized, $\bar{i}$, is independent of the level of demand. The credit ceiling will depend on $\bar{i}$ and on other elements entering h^*. These are summarized into a vector Y_t.

The estimation procedure uses maximum likelihood methods for markets in disequilibrium developed by Goldfeld and Quandt (1972), Maddala and Nelson (1974), and others.

Model Specification

There are several analytical problems involved in moving to a specific form for the general model given by equations (A2a), (A2b), and (A2c). The most fundamental question is, what is being rationed? Gross debt to commercial creditors, debt net of reserves, and the flow of new resources are among the leading candidates. Consider rationing of the stock of debt. Assume a country has reached a credit limit, which was imposed previously when expectations about the world environment were favorable. There follows an adverse shock. Creditors would prefer to ration the country at a lower limit. They cannot, however, force the country to reduce its debt because this could precipitate a repudiation. The solution, as shown by Cohen (1988), is for creditors to keep the credit limit where it happens to be. It is the flow of new resources that is under lenders' control. Accordingly, this is taken as the item that may be rationed. To translate the stock constraint into such a flow constraint, we need take only first-difference equation of equation (A1).

$$\dot{B}/\Omega = h^* + n\Omega = n\Omega \tag{A3}$$

if h^* is a constant; or if there is a cyclical pattern to resource growth, then

$$\dot{B}/\Omega = (\bar{n} - n_t)\, h^* + n_t\Omega \tag{A4}$$

where n_t is the growth rate in period t and $\bar{n}$ is the long-run growth rate. Note that the same variables that enter the stock constraint (summarized by $h^*(.)$) also enter the flow constraint.

The scope of new resources that is rationed must also be defined: public and private medium- and long-term credit, short-term trade credits, etc. Theory would suggest that it is total credit that should be rationed, including lending by both foreign and domestic residents. The latter are likely to anticipate taxes on domestic wealth (through inflation, for example) associated with excessive country debt service obligations and may increase their foreign asset holdings accordingly (capital flight). The country as a whole would then be limited in the net resource transfer from abroad made available. Thus, $\dot{B}$ is interpreted as the current account deficit.

Focus on the current account is also convenient from the viewpoint of specifying demand. Assume that the aggregate behavior of a developing country can be approximated to that of a representative household. The standard axioms of intertemporal choice can be applied to identify the net demand for new foreign inflows. There is, however, one potential problem, which we merely note here. As a country gets close to its credit limit, the expectation of being rationed in the future may affect its current demand for loans. We will nevertheless assume that the probability of being rationed does not enter into the demand function.[5]

We can now interpret equations (A2a) and (A2b) as the demand and supply for new flows. Although (A2a) is in theory a reduced form amalgam

of demand and supply factors, it is clear that in the elastic portion of the supply curve, the quantities transacted are essentially demand-determined. If the supply curve were infinitely elastic, then (A2a) would be exactly identified with the demand curve. The assumption of highly elastic supply below the credit rationing ceiling fits with existing evidence (Harberger 1983) on the spread between marginal and average interest rates in international lending. These studies find that a higher *stock* of debt leads to slightly higher interest spreads. The impact of a higher *flow*, however, is likely to be negligible.

CHAPTER 16

JOHN WILLIAMSON

Recent Developments in the International Capital Market

After collapsing in the Great Depression of the 1930s, the international capital market revived in the 1950s, exploded in the 1960s, and became accessible to middle-income developing countries in the 1970s. As a result, savings could once again move from capital-rich to capital-poor countries where the marginal yield of investment was presumably higher. Prior to the 1970s, this function had not been realized in a substantial way since the heyday of the classical gold standard (1870–1914).

The access gained by these developing countries was almost universally viewed as highly positive, since it seemed to offer the possibility that countries would graduate from their dependence on foreign aid at roughly the same time as they increased their ability to absorb productively large net resource transfers (see Kharas and Shishido, this volume). Foreign aid, inherently limited by the generosity of taxpayers in developed countries, could be concentrated on the poorest, who would be unlikely to command the creditworthiness necessary for commercial borrowing. And since countries do not like the apron strings that almost invariably condition the provision of concessional aid, they would be motivated as well as able to substitute commercial for concessional finance as they achieved creditworthiness.

The attractions of the process were further enhanced by the fact that the ultimate origin of the savings transferred to middle-income developing

countries was not the industrial countries but the savings-surplus (low-absorbing) oil exporters, whose structural surpluses could thus be offset without the developed countries incurring regular current account deficits. Capital theory could be invoked to explain how the intertemporal welfare of both lenders and borrowers was being enhanced by the transfer of savings to areas where real returns on investment exceeded the world rate of interest from areas where the marginal yield on investment would certainly be lower (Williamson 1983: ch. 6). The Bretton Woods institutions monitored the comparative growth of debt and debt-servicing capacity (the value of exports) and, even up to the recession of 1982 (Williams et al. 1982), declared the situation manageable. Markets were once more vanquishing the skeptics.

The most obvious development in the international capital market of relevance to developing countries is that nowadays no one would describe its past operation in such glowing terms. Since the debt crisis erupted with the Mexican moratorium in August 1982, the net resource transfer to developing countries has vanished. Many middle-income countries are again confronted by a foreign exchange constraint from which the international capital market once seemed to have liberated them.

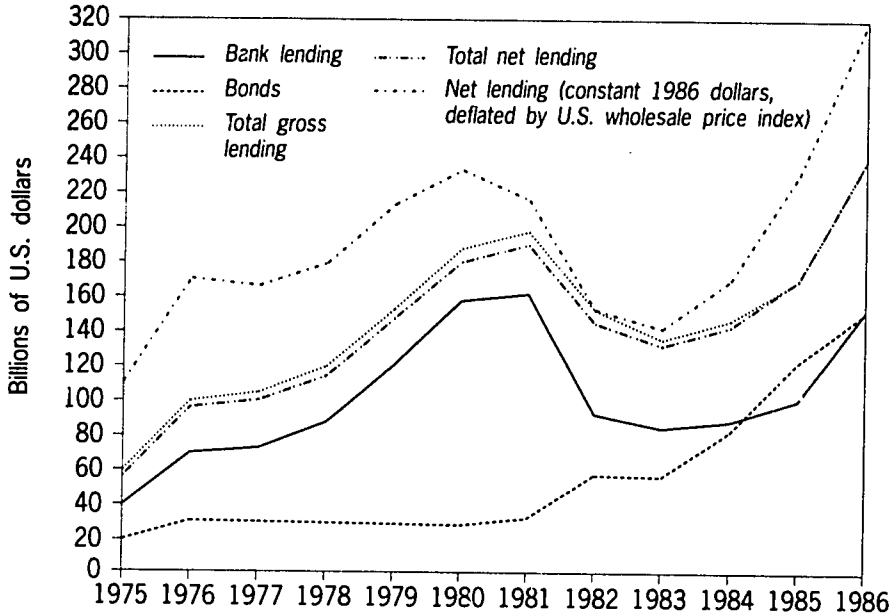
The contrast between the easy availability of foreign exchange in the late 1970s and its crippling shortage in the mid-1980s suggests that capital mobility was used perversely to transfer resources from a time when their marginal value was high to one when it was low. Countries like Colombia and India that resisted the coaxing of bankers and refused to borrow do not seem to regret their decisions (see the country papers in this volume). The ideologues of the free market now explain that debt-equity swaps, not syndicated lending, are the true expression of their creed. In retrospect, it is not at all clear that capital mobility was a net benefit to developing countries.

This paper reviews a number of recent developments in the international capital market from the standpoint of their impact on developing countries. The topics discussed are changes in the size of the market, changes in the geographical direction of capital flows, involuntary bank lending, securitization, globalization, instruments for risk management, the expansion of international equity investment, and the growth of debt swaps. The paper concludes with an evaluation of the past operations of the market and an appraisal of the role private capital markets may play in financing development in the future.

Size of the Market

The size of the international capital market is perhaps most usefully measured by the volume of net new lending. Estimates of new lending by the two main financial instruments, bank credits and bonds, are shown in Figure 16.1 for the period since the market matured in the mid-1970s (comparable statistics are not available for earlier years). In stock terms, the market was

FIGURE 16.1 Net International Lending, 1975–86



NOTE: All flows exclude revaluation effects caused by exchange rate changes.
SOURCE: Bank for International Settlements *Annual Report* 1978, 1982, 1987.

still tiny in the early 1960s, but it doubled in size every two to four years between 1964 (when the external assets of European banks reporting to the Bank for International Settlements [BIS] were $12 billion) and 1975 (when they reached $258 billion).

The expansion of the market is somewhat less dramatic if inflation is considered (see net lending in Figure 16.1), but even in real terms the volume of net new lending expanded in almost every year until 1980. In terms of the stock of credit outstanding, the market has continued to grow: the stock of total financing outstanding at the end of 1986 was estimated by the BIS at $2.47 trillion. of which some $365 billion was loaned to developing countries.

Between 1981 (or 1980, using real terms) and 1983, the flow of net lending fell precipitously. The decline in lending to developing countries accounted for about half of that fall. The other major factor responsible for the reduction was financial liberalization in a number of major countries, which reduced the artificial incentives to channel lending through the international markets. In 1983, the flow of net lending resumed its upward trend, but this has been limited to flows among the countries of the Organization for Economic Cooperation and Development (OECD). This rise is presumably attributable to their increasing financial integration, which is tending over time to diminish the probability that a borrower seeking credit will look to lenders in his

domestic market rather than abroad. However, this process of increasing financial integration has excluded virtually all developing countries (except Hong Kong and Singapore) since 1982.

The Geographical Direction of Capital Flows

Historically, the bulk of the deposits in the BIS reporting banks originated within the reporting area (essentially, the developed countries), just as most of their loans were made to borrowers within the area. This is especially true in terms of gross deposits and loans, before netting out interbank transactions.

Table 16.1 shows flows of bank lending and deposits with six areas outside the BIS reporting area: four groups of nonoil developing countries, the Organization of Petroleum Expoerting Countries (OPEC), and Eastern Europe. In 1979 and 1980, the net flow of bank finance to these areas follows the "traditional" mid-1970s pattern of the banks intermediating the OPEC surplus back to the developing countries, especially in Latin America, and to Eastern Europe. Thereafter, OPEC ceased to supply significant sums and

TABLE 16.1 Net Commercial Bank Transactions with Nonindustrial Countries, 1979–86 (billions of U.S. dollars)

	1979	1980	1981	1982	1983	1984	1985	1986
Bank lending to								
Latin America	23.2	27.4	30.5	12.1	8.3	5.3	1.7	-1.6
Middle East (non-OPEC)	1.2	2.1	2.3	1.7	0.3	-0.4	0.2	-0.6
Africa	2.7	2.0	2.0	1.7	0.6	0.1	0.9	-0.4
Asia	8.2	7.4	5.1	4.3	3.4	4.8	8.3	2.7
OPEC	7.2	7.0	4.2	8.2	9.8	-1.9	0.2	-0.2
Eastern Europe	7.1	6.8	4.8	-4.6	-1.1	-0.1	5.7	4.4
Bank deposits made by								
Latin America	4.9	-0.9	4.7	-1.9	5.8	10.1	0.4	0.4
Middle East (non-OPEC)	1.7	2.7	1.5	1.8	-0.9	-1.6	1.5	-0.5
Africa	1.8	0.7	0.5	-0.8	0.2	1.0	1.4	-0.2
Asia	3.9	1.5	2.8	5.5	5.3	9.8	2.4	11.7
OPEC	37.0	41.9	3.2	-18.2	-13.0	2.1	7.6	-22.1
Eastern Europe	4.6	0.9	0.1	2.0	2.7	4.3	2.8	-0.1
Net bank lending to								
Latin America	18.3	28.3	25.8	14.0	2.5	-4.8	1.3	-2.0
Middle East (non-OPEC)	-0.5	-0.6	0.8	-0.1	1.2	1.2	-1.3	-0.1
Africa	0.9	1.3	1.5	2.5	0.4	-0.9	-0.5	-0.2
Asia	4.3	5.9	2.3	-1.2	-1.9	-5.0	5.9	-9.0
OPEC	-29.8	-34.9	1.0	26.4	22.8	-4.0	-7.4	21.9
Eastern Europe	2.5	5.9	4.7	-6.6	-3.8	-4.4	2.9	4.5

NOTE: Flows are estimated at constant end-of-period exchange rates.
SOURCE: Bank for International Settlements *Annual Reports*.

indeed withdrew funds on a major scale in several years. Bank lending to developing countries collapsed after 1982 in net as well as in gross terms. Only Asia has maintained a significant level of new borrowing.

Involuntary Lending

The willingness of the commercial banks to continue lending to developing countries was shattered by the Mexican moratorium of August 1982. All the countries of Latin America, including prudent Colombia (see Ocampo in this volume), as well as sub-Saharan Africa, suffered by association. For a while, it looked as though Asia might also become a no-go area for the banks—even Korea was suspect—but in the end only the Philippines had to reschedule.

Since the debtor countries were in no position to repay on schedule once the banks started refusing to make new loans, it became necessary to reschedule outstanding loans. Furthermore, it was quickly recognized that rescheduling alone would not be enough: if the debtors were to continue paying the interest bill on past loans, they would need to continue receiving a certain amount of new money. The cost of immediate elimination of the current account deficit would have been so great, in terms of recession, that countries would surely have been driven to declare moratoria.

The principal purpose for which the International Monetary Fund (IMF) had been endowed with lending powers was to ease the adjustment process by providing interim finance until expenditure-switching measures could take effect. Over time, the IMF had developed a set of conditionality policies designed to ensure that adequate adjustment measures were implemented, which provided a de facto "seal of approval" for a resumption of lending by the banks. However, the Fund had found in Turkey in 1980 that an injection of its money had allowed the banks to decrease their exposure, rather than induced a resumption of bank lending. All the signs suggested that this would have happened again in 1982 had the Fund simply followed its traditional practice.

For this reason the IMF's approach to the 1982 debt crisis contained some novel elements. The Fund still supplied its own money in return for the debtor country's acceptance of a traditional adjustment program, involving some combination of devaluation and demand restraint. It withheld its approval, however, until the banks had agreed not only to reschedule but also to supply sufficient new money to limit short-run deflation to what it judged to be a politically tolerable level. The Fund thus acted as an intermediary between the countries and the banks in deciding the severity of short-run adjustment and, the other side of the same coin, the quantity of new money to be made available. Moreover, in an entirely new role, the IMF bullied the banks into doing what it had decided was their duty.

The obligation of each bank to provide new money was determined in proportion to its exposure outstanding at the start of the debt crisis. The

process of persuading individual banks to subscribe their allotted quotas was left up to the bank advisory committees, but it has been troublesome, for "free-rider" reasons. With the exception of large banks that wish to maintain a permanent relationship with the country in question, an individual bank can benefit by avoiding supplying new money itself while others provide the resources out of which it can be paid interest. European and regional U.S. banks have been particularly reluctant to continue contributing. As a result, the process of providing new money via involuntary concerted packages has periodically been pronounced dead, though it survived at least until 1987.

While the banks could be browbeaten into concerted lending through political pressure, they were nevertheless extremely reluctant lenders. This can be inferred from the cutback in lending recorded in Table 16.1. The original strategy to counter the debt crisis had been conceived as a cooperative effort between the developed countries (which would stimulate growth, reduce interest rates, and maintain open markets), the developing countries (which would accept adjustment measures), the IMF (which would oversee the adjustment process and lend), and the banks (which would continue lending on a moderate scale). The hope was that within three or four years this would lead to a revival of voluntary lending.

By 1985, the feeling prevailed that the banks had failed to fulfill their part of the bargain. The Baker Plan, launched at the World Bank/IMF meetings in Seoul in that year, was a response to this perception. It put a new emphasis on reviving growth in the debtor countries through such supply-side measures as privatization, proposed that the World Bank should lead in the next phase of debt crisis management, and urged increased lending, both by the commercial banks (about $7 billion per year) and by the multilateral development banks (about $3 billion per year).

Since 1985, private lending has remained weak, although the concerted lending packages with Mexico and Argentina, as well as a semi-concerted arrangement with Colombia, seemed likely to lead to a temporary increase in loans to Latin America. The latest idea, partly incorporated in the recent agreement with Argentina, is to offer the banks a "menu" of alternative ways in which they can fulfill their duty of providing new loans. For example, William Cline (1987) suggests the following options:

- special bond issues, to be taken up by the banks, with the dual objectives of providing de facto seniority for new lending and facilitating sale on a secondary market that might widen the pool of investors
- capitalization of a portion of interest due
- payment of a portion of interest in local currency available for investment in equity claims, either direct investment or equities quoted on local stock markets

- payment of a portion of interest in local currency that could then be on-lent to the banks' local clients
- new loans on the traditional model
- exit from the process of continued lending, by way of either (a) a *de minimis* exemption for banks with very small exposure, (b) discounted conversion of debt to equity, or (c) the purchase of exit bonds with concessional interest rates but no obligation to participate in further new money packages

The idea is that each bank would be free to choose the combination of options it finds most attractive in the light of its own situation, its commercial relations with the country in question, and its assessment of the country's future prospects. This would presumably help overcome the banks' reluctance to continue participating in new money packages. The need for such proposals, like the Baker Plan, is an acknowledgment that the earlier hopes for a rapid return to voluntary market access have not been fulfilled.[1]

Securitization

Figure 16.1 shows the breakdown of net new lending in international markets and the shifting fortunes of bank lending and bond finance. (These amounts add up to more than the total gross lending shown in Figure 16.1 to the extent that banks buy international bonds.) In the mid-1970s bond finance accounted for one-third of international lending, but by 1980 this declined to under 15 percent. The invention of the floating-rate note in the early 1980s led to a revival of bond finance, which in recent years has rivaled, or (according to some sources) surpassed, bank lending. Indeed, by 1986, almost half of bank lending took the form of bank purchase of international bonds.

"Securitization," i.e., issuing bonds that can be passed among lenders instead of simply securing bank credit that is expected to remain with one bank until maturity, seems to have arisen because creditworthy borrowers discovered that they could borrow at a lower rate by going directly to the capital market.[2] In effect, this means that the borrowers and the ultimate lenders can divide between them the banks' traditional spread between their borrowing and lending rates. In order to retain business with the more creditworthy borrowers, the banks are obliged to lower their lending rate to match that of these new lenders. The banks justify this with the knowledge that they will be able to pass the bonds on should the need arise. This belief, however, is correct only when a need for liquidity arises from the lender's difficulties; the bonds naturally become unattractive when the financial problems lie with the borrower.

Securitization may also have been encouraged by the practice, during the debt crisis, of exempting bonds from the process of rescheduling that applied to bank credits. The growth of the secondary market in bank credits,

where banks dispose of unwanted sovereign debt, has doubtless reinforced the trend as well.

Despite the growth of securitization, bank lending will continue to dominate when creditworthiness is in question. Only large-scale lenders will find it worthwhile to make investments in assessing—and nursing—a borrower's creditworthiness. Loans to such borrowers are unlikely to become marketable, except under the distress terms typical of the secondary market for bank credits.

Globalization

Much has been said and written in recent years about the globalization of financial markets. This globalization is defined by four components: an increase in the number of securities traded in more than one market, a greater willingness to commit funds for investment in several markets, a rise in the number of financial institutions that are present as active traders in more than one market, and improved communications between different financial markets. The process of globalization has two results. One is an ability to trade, at least in a limited range of standard assets (primarily foreign exchange and government securities of the major financial powers), at very short notice and at any hour of the day or night. The other is a widening in the range of assets that are considered potential candidates for investment.

It is doubtful whether twenty-four-hour trading, giving the trader the ability to react to new developments instantaneously, serves any important social function. Of course, it is vital for any individual trader to be in a position to react as fast as anyone else, and any lead time he can gain will give him an enormous advantage. This, however, is a negative-sum game: everyone's being able to react faster is like everyone's standing up at the proverbial football game: it leaves participants in general worse off. (Traders surely sleep less soundly now than they did in the 1960s, for which reason *inter alia* they are now compensated by astronomical salaries.)

A greater range of potential investments, in contrast, offers real possibilities for social gain. It means that more projects have the chance to attract finance from a wider range of investors. This development is especially likely to benefit potential borrowers outside of the major financial centers, such as those in developing countries.

Risk Management

In recent years, financial markets have developed novel techniques to allow agents to hedge some of the risks to which they are exposed, and the use of these techniques has been growing at an explosive pace.

The longest-established markets of this nature are futures markets for commodities and forward markets for currencies. Futures markets can be used to lock in prices currently quoted as soon as reasonable estimates of crop size are available, thus permitting somewhat greater certainty that expenditures planned for a few months ahead can be financed without drawing on reserves. Similarly, the currency forward markets can be used to ensure that a known stream of export earnings denominated in one currency can be spent on goods whose price is denominated in another currency without a risk that subsequent exchange rate movements would force an unplanned drawdown of reserves. In both cases, however, the opportunities for risk reduction are very limited, in part because the longest maturities traded in these markets are modest and in part because contracts can be covered only when the size of the sum involved has been determined.

The new markets for interest and currency swaps appear to offer greater potential, since the maturities offered are greater. An interest swap involves two parties, one of which typically has a fixed-interest obligation and the other a floating-interest obligation of similar size, agreeing to service each other's debt. The arrangement can be attractive to both parties when their preferences as to the form of debt they service do not match their comparative advantage in borrowing. For example, the World Bank is much better known in the bond markets than are most commercial banks, while both are about equally well placed to raise floating-rate debt. When a commercial bank wishes to make a fixed-rate loan, both parties may be able to gain if the World Bank borrows at a fixed rate and enters into a swap with the the commercial bank. The risk involved in entering a swap is limited but still significant, since a default by the partner can oblige the other party to service its original loan (while relieving it of the obligation to service the partner's loan).

Similarly, a currency swap typically involves two parties who have raised similar-sized loans denominated in different currencies and who agree to service each other's debts. This arrangement would be attractive to both parties when their projected foreign-exchange receipts are in a currency that does not match their comparative advantage in borrowing. Such a situation would arise, for example, when a German corporation exports to the United Kingdom, and thus has a net surplus of sterling earnings, but is unknown to the U.K. capital market, while a British corporation earns a deutsche-mark surplus, but is unfamiliar in Frankfurt. The risk involved in a currency swap is somewhat larger than that involved in an interest swap, given how sharply currencies can move and the fact that principal as well as interest obligations are swapped, but this is to some extent offset by the tendency of interest rates and exchange rates to move in opposite directions.

So far, developing countries have made little use of the exploding swap markets. This may be due in part to their failure to realize that currency swaps, in particular, offer potential for a useful reduction in risk exposure. In fact, a significant cause of the debt crisis was the reduction in the dollar

value of developing-country exports induced by the dollar appreciation, which eroded the ability to service debts that were predominantly dollar-denominated. One way of avoiding this risk would have been to contract debts in a bundle of currencies that matched the destination of exports. A simpler technique now potentially available is to swap dollar debt-service liabilities for liabilities in a bundle of currencies that match the currencies in which the country earns net exports.

Banks have so far been reluctant to enter into swaps with developing countries. They resist taking on a counterparty whose underlying liability could be rescheduled and tend to demand prohibitive fees for such transactions.

Another potential future development that might permit developing countries to improve their risk management would be further expansion of the options markets. Unlike a futures contract or a swap, an options contract does not oblige its purchaser to effect a future transaction at a price specified now, but simply gives the purchaser the right (i.e., option) of making such a purchase or sale. Clearly, he will decide to exercise his option and make that purchase (or sale) only if the price specified in the option is lower (or higher) than that prevailing when the option matures. Options have a great advantage relative to forwards or swaps for developing-country borrowers: the issuer accepts no exposure to the credit risk of the purchaser of the option, which is paid for in advance in cash. Thus, the existence of transfer risk should pose no barrier to use of this market. At present, both interest and currency options markets are too short-term to provide any very useful protection to developing countries, but they are beginning to lengthen.

Equity Investment

International portfolio investment (i.e., excluding direct investment, where the foreign investor exerts effective control over the local enterprise) has in the past consisted overwhelmingly of loan capital—bank credits or bonds, whose debt-servicing cost is independent of the success of the enterprise being financed. The main alternative form of portfolio investment involves the purchase of foreign equities, that is, claims to a share in the profits of foreign private enterprises.

In recent years there has been a sharp increase in cross-border equity investment, mainly among the OECD countries. From 1974 to 1979, the average aggregate outflow of equity investment by five of the six principal countries involved[3] was 0.60 billion Special Drawing Rights (SDR), while the inflow averaged SDR 1.65 billion. From 1980 to 1985, these figures jumped to SDR 7.36 billion and SDR 8.56 billion.

Today, pension funds are the principal source of demand for foreign equity holdings. This demand has been growing especially quickly, because of the rapid growth in both the size of the portfolios commanded by pension

funds and the proportion of those portfolios invested in foreign assets. Foreign commitments of U.S. pension funds reached $16 billion at the end of 1984, more than double their level only two years earlier. By the end of 1982, British pension funds had placed some 15 percent of their assets abroad, compared to only 6 percent three years earlier when exchange controls were abolished. The proportion has risen further since. Similarly, the liberalization of capital outflows by Japan allowed Japanese pension funds to use up to 20 percent of the monthly increase in their portfolios to acquire foreign assets worth up to 10 percent of their portfolios; by March 1985 they had placed about 8.3 percent of their total assets abroad. Nowakowski (1983) estimated that at the end of 1982, some 4 percent of the worldwide assets of private pension funds, or $43 billion out of a world total of $1,175 billion, was invested outside the home market.

The reasons for the increase in international equity investment are not hard to find. The most important is the rapid acceptance of the theory of risk diversification that emerged from academic work in the 1960s: it is now well understood that the overall risk of a portfolio can be reduced, and its expected return increased, by holding a widely diversified portfolio, even if some of the individual securities in it are quite risky. Not only has this been accepted theoretically by the financial community, but in 1974 it was embodied in the Employee Retirement and Income Security Act (ERISA). This legislation provides the basis for regulation of U.S. pension funds. It explicitly states that pension fund managers can satisfy their fiduciary responsibility by appropriate diversification, provided that they undertake the research necessary to ensure that securities offer expected returns commensurate with their risk. Moreover, the theory has been confirmed by experience; for example, American investors who had already diversified internationally before the late 1970s found that their foreign holdings provided valuable support to overall returns during the period of a weak dollar. A second factor supporting increased international equity investment is the marked improvement in information on foreign companies—a product of the information revolution. A third factor is that the sums available—particularly in pension funds—have been growing rapidly, in most cases faster than the capitalization of the domestic equity market.

Two years ago, Lessard and Williamson (1985) reported that up until that time

> the vast majority of international equity investment [had] taken place among the developed countries. Well over 90 percent of the foreign investments of U.S. pension funds are placed in other OECD countries. In fact, foreign equity investment in what the IMF classifies as developing countries has been of significant size in only five countries (Hong Kong, Israel, Malaysia, Singapore, and South Africa), of which only Malaysia would be classified unambiguously as a developing country. Hong Kong, Singapore, and South Africa probably account for over 90 percent of such foreign investments as

> U.S. pension funds have made outside the OECD. Total foreign equity investment in "core" developing countries . . . has been estimated at $700 million, with a further $50 million invested by institutions and the general public in a few developing-country stocks listed on developed-country stock exchanges.
>
> The bulk of such investments as have been made by foreign investors in developing-country equities has taken place through the medium of investment funds. Thus, $150 million has been invested in Mexico through the Mexico Fund, $120 million in Korea through two funds, some $50 million each through several funds in Taiwan and Brazil, and $50 million in India (in a fund accessible only to Indian expatriates). A Thai Fund has just been set up. . . . Perhaps another $100 million has been invested through regional funds in Southeast Asia.

We went on to urge the virtues of increased investment in the equity markets of developing countries by institutional and other northern investors, arguing that this would be mutually beneficial. To northern investors, the emerging equity markets offer good possibilities of very attractive yields. Although the risks involved are also high—these small equity markets tend to be extremely volatile, and both political risk and the danger of insider trading are greater than in most industrial countries—they can be diversified to some extent (returns have been negatively correlated with those in the large industrial countries in the past). Such risks should certainly be acceptable on a small proportion of the portfolio.

Developing countries would gain access to an additional source of external finance, with relatively attractive characteristics in terms of cash flow required for debt servicing. Investments in equity markets of developing countries would also have beneficial effects on those countries' internal economies. These benefits include the reduction of the cost of capital to private enterprise, a stimulus to the growth of domestic financial intermediation, and, in the long run, a more equitable income distribution as rents are bid down. Countries may wish to protect their domestic firms from foreign takeovers, but there are ample precedents for achieving this by limiting foreign share ownership to a maximum of, for example, 25 percent.

When our study was published, our recommendations for innovative sources of finance were met with considerable skepticism. So far, this skepticism has been justified regarding most of our proposals, but equity investment in developing countries has made considerable strides. The following country funds have been created since mid-1985:

Korea Growth Trust (Hong Kong)	$32 million
Seoul Trust	$31 million
Seoul International Trust	$31 million
Bangkok Fund (London)	$10 million
Thailand Fund (London)	$62 million

Taiwan Fund (AMEX)	$24 million
Formosa Fund (London)	$26 million
Emerging Markets (Luxembourg)	$133 million
Taipei Fund (London)	$26 million
India Fund (London)	$128 million
Templeton Emerging Markets Fund (AMEX)	$100 million
Korea-Europe Fund (London)	$32 million
Malaysia Fund (NYSE)	$84 million
Equity Fund of Brazil	$88 million
Scudder New Asia Fund (NYSE)	$84 million
Asia Pacific Fund (NYSE)	$98 million
Gartmore Frontier Markets Trust (London)	$80 million
Total	$1,069 million

Thus, in two years an additional sum of over $1 billion was invested in the equity markets of developing countries, more than doubling the equity investment of developed-country investors. All the countries with vigorous equity markets covered in this study, except Mexico, benefited from new country funds, and probably from some of the general funds as well. The total sum involved is still modest in comparison to bank finance. Nonetheless, it is growing quickly enough to give rise to real hope for the future.

Debt Swaps

The emergence since the debt crisis of a secondary market in sovereign debt has given rise to several innovations involving the swapping of debt.

Originally, most participants in the secondary market entered with the intention of making *debt-debt swaps*. The main objective of banks was to eliminate their exposure in some countries, so as to save costs or to withdraw from countries where they had no confidence in the longer-term outlook. Presumably some of these sales were made to investors for cash, but in most cases it seems that banks accepted the debt of another country in which they were planning to maintain a presence in the long run. In some cases, banks from developing countries swapped the debt of another developing country for that of their own, presumably with the intention of receiving interest in local currency.

More recently, *debt-equity swaps* have involved the purchase of debt on the secondary market in order to take advantage of government programs in the debtor countries that allow the use of foreign debt in order to make local equity purchases. (Of course, a creditor bank can use its own debt to make such purchases if it so desires.) The attraction to a foreign investor is that it can invest more cheaply than if it simply bought local currency in the foreign exchange market. If, for example, sovereign debt were selling at a 50 percent discount in the secondary market and the central bank was prepared to

TABLE 16.2 Debt-Equity Conversions (millions of U.S. dollars in face value, up to April 1987)

Country	Total authorized[a]	Period of program
Argentina	500	Feb. to Aug. 1985
Brazil	2,300	Since 1982[b]
Chile	420[c]	Since June 1985
Mexico	950	Since May 1986
Philippines	60	Since April 1986[d]

a. Note that authorized conversions may differ from amounts of debt actually cancelled. In Mexico, for example, of $953 million authorized as of April 1987, $722 million in face value of debt had been canceled.
b. Since November 1984, only direct swaps by original creditors may be registered for purposes of future capital repatriation or dividend remittances.
c. In addition, about $750 million has been retired through debt-peso swaps.
d. Program formally launched only in August 1986, but the figure includes swaps accomplished between April and August.
SOURCE Roberts and Remolona (1987: Table 2).

redeem the country's debt at par in local currency, then the foreign investor would be able to get twice as much local currency for each dollar as he would through the exchange market. In practice, the authorities redeem their debt at less than par, thus splitting the proceeds of the secondary-market discount between themselves and the foreign investors. In some cases the central bank has auctioned off the right to sell debt to it in exchange for local currency to be used in equity investment, thus ensuring that it secures a part of the market discount while allowing market forces to determine who gets the rest.

Table 16.2 shows debt-equity swaps authorized up to April 1987. The sums are larger than those involved in new equity investment in developing countries, but still modest relative to the total of bank debt.

Bankers like debt-equity swaps. Indeed, it is the only form of business with Latin America that has fired them with enthusiasm since the beginning of the debt crisis. It gives them the opportunity either to obtain some return on assets that they wish to dispose of or to exchange their risky loans for assets that, while still risky, have good upside potential. Nor should one neglect the fact that debt-equity swaps are usually extremely complex deals, which carry fees to match.

Evaluation of the benefits and costs to the debtor country is far more difficult. The benefits seem to be as follows:

1. The time stream of debt-service payments is typically improved, inasmuch as (a) countries usually impose grace periods before profits and/or capital may be remitted; (b) the demand to remit tends to be high when the economy is prospering; and (c) a substantial proportion of earnings is usually reinvested.
2. The resources are usually used for productive investment, sometimes helping to achieve objectives of privatization or enlarged investment in priority sectors.

3. The country's external liabilities are reduced to the extent that the central bank redeems the debt at less than par.

But debt-equity swaps also impose a number of costs on the debtor country:

1. To the extent that the investment financed by a debt-equity swap would have been made anyway, the country loses an inflow of foreign exchange. Instead of obtaining cash with which it can increase its imports, it merely retires some of its debt.
2. Unless the proceeds of the swaps are used to buy newly privatized concerns from the government, the payments to foreign investors will increase the money supply. This may threaten to increase inflation or, if the increased money supply is sterilized, to raise interest rates and crowd out domestic investment.
3. Equity capital tends to be more expensive to service than debt. Admittedly, a good part of the return may take the form of capital gains resulting from reinvested earnings, so the medium-run cash flow implications may not be adverse (see benefit 1 above), but in the long run the country's net worth will be less. (This may, however, be offset by a higher value of the domestic capital stock if the quantity and/or quality of investment rises.)
4. Debt-equity swaps permit a de facto preferential exchange rate for some foreign investors. Like all economic "distortions," this raises questions of both efficiency and equity. Will the investments approved for inclusion in the program be those with the highest social yield? Do foreign investors merit a subsidy that their domestic competitors are denied?
5. A debt-equity swap results in increased foreign ownership of domestic productive assets. Foreign ownership of productive resources has traditionally been resented in many Latin American countries. The reasons would seem to be more political than economic, the reflection of a still insecure nationalism. Note, however, that although debt-equity swaps have been used to date to facilitate direct investment, they could, in principle, also be used to promote minority purchases of stock, with safeguards against foreign takeovers as described above.

A common criticism of debt-equity swaps is that they cost the debtor country an inflow of foreign exchange (cost 1 above). If a debt-equity swap finances an investment that would have been made anyway, the country does not gain any additional real investment, and it gets a retirement of some debt rather than an inflow of free foreign exchange. If, however, the swap induces an investment that would *not* otherwise have been made, the country benefits from increased real investment and debt retirement without losing

any inflow of foreign exchange. These considerations led Roberts and Remolona (1987) to conclude that the critical issue in judging the desirability of debt-equity swaps from the debtor-country standpoint is typically the degree of *additionality* involved. But note that exceptions are possible even here. A country that wished to retire some of its debt but was precluded from buying it back on the secondary market (see below) would do better with a debt-equity swap rather than amortizing debt at face value, as long as the central bank redeemed the debt in local currency at less than par.

The third form of debt swap is what Roberts and Remolona term a *debt-peso swap*, in which the government buys back its sovereign debt from its own citizens, who use their dollar holdings to buy bank debt on the secondary market. It is a method of attracting back flight capital, which to date has been used principally by Chile. With one exception, the issues involved in appraising the merit of debt-peso swaps are similar to those involved in debt-equity swaps. Instead of asking whether one can stomach subsidizing foreign capitalists over domestic capitalists (in the case of debt-equity swaps), one must subsidize those who placed their funds abroad over those who patriotically kept them at home. Debt-peso swaps carry the additional risk of stimulating renewed attempts to get money out through underinvoicing exports and overinvoicing imports, in order to arbitrage it back at the preferential exchange rate.

The newest addition to the family of debt swaps is the *debt-for-nature swap*, pioneered by Bolivia and Conservation International in July 1987. Conservation International bought Bolivian debt on the secondary market and retired it in return for establishment of a Bolivian national park plus endowment of a fund in local currency to maintain it. Other charitable organizations are considering similar arrangements. Debt-for-nature swaps involve some striking differences to debt-equity swaps: (1) the stream of future debt-service obligations is extinguished, rather than just improved; (2) external liabilities are reduced by the full amount of the transaction; (3) the swap creates no short-run monetary pressures, although there will be future expenditures for park maintenance from the endowment fund. Views may differ on the productivity of the investment undertaken. Those of us who believe that developing countries typically underinvest in conservation can hardly help welcoming debt-for-nature swaps.

Another potential addition to the swap family is a *debt-for-dollar swap*, better known as a buyback. A debtor country with free foreign exchange that it wished to use to reduce its outstanding debt would enter the secondary market in order to purchase its own debt at the discounted price. If its debt were selling at a 50 percent discount, every dollar so spent would enable it to extinguish $2 of debt. To date, this practice has been precluded by the sharing clause included in bank syndication agreements, but two recent developments suggest that in certain circumstances the banks may be prepared to renegotiate or suspend those clauses. One of these developments is the agreement that allows Bolivia to buy back its bank debt at a

price close to 10 cents on the dollar by using funds that it is hoped will be provided by donor countries for this purpose. The other is the agreement that allows Mexico to offer a special issue of bonds, whose principal will be collateralized by zero-coupon U.S. Treasury securities, to be swapped with willing banks at a fraction of the face value of outstanding debt. It is not yet clear whether this mechanism will allow Mexico to buy more debt relief per dollar (in this case the dollars will be used to buy zero-coupon bonds from the U.S. Treasury) than would a straight buyback program. However, having let Mexico try, it would be paradoxical if the banks were to refuse to grant a waiver to the sharing clause in cases where countries sought to buy back a part of their debt.

A buyback right might offer an attractive way of splitting the costs of correcting the debt crisis. However, it would need to be preceded by a long-term consolidation of outstanding debt designed to limit debt-service obligations to a path that the debtor could realistically be expected to handle. The country would then know that additional foreign exchange earnings could be used to retire debt at a discount, rather than confront the risk that they will be largely absorbed for additional debt-service payments, which would improve the incentives confronting heavily indebted countries. Banks would individually decide whether to hold on to a country's debt in the hope of ultimately recovering the full present value of their loan or whether to cut their losses and liquidate their portfolio. Banks taking the latter course would provide debt relief—although no bank would be forced to provide such relief. The ability of banks to sell unwanted loans would be much enhanced by the additional demand resulting from a buyback program.

Evaluation

The potential benefits of capital mobility are well known. The classic benefit is that of shifting real resources from places and times where marginal rates of return on real investment are relatively low to those where they are higher. In addition, capital flows may permit a better intertemporal distribution of consumption with output and investment held constant. This might take the form of an acceleration in consumption in a country where income is rising rapidly, the postponement of consumption in a country enjoying a temporary windfall income, or the evening out of consumption in a country with cyclical variations in income.

These *potential* benefits of capital mobility are realized only if countries time their borrowing and lending correctly. If they borrow when real resources are relatively abundant and repay when they are scarcer, it is entirely possible that welfare will be reduced rather than increased as a result of capital mobility. Indeed, this seems to have occurred in countries such as Brazil and Mexico that borrowed heavily in the 1970s and then suffered a major negative net resource transfer after the debt crisis broke in 1982.

Mexico would be better off today if it had resisted the temptation to borrow extensively, as the chapter on Mexico in this volume shows. A substantial part of the debt was used to finance the capital flight induced by reckless macroeconomic policies. Some of what remained did indeed increase investment, for the investment ratio rose by 2 or 3 percentage points after heavy borrowing began in the 1973–75 period. Only in the brief period between 1978 and 1981 did the growth rate show any return at all for this borrowing: an optimistic estimate of the benefit of borrowing would be 9.2 percent growth, which is the cumulative excess of growth in those years over the 3.4 percent annual average per capita growth realized between 1967 and 1974 (Gil Díaz, this volume, Table 10.6). That gain was more than offset, however, by the recession of 1982–83, even if one assumes that growth would have fallen to zero in the absence of a foreign debt—which in fact compelled the government to induce a recession. If Mexico were to be forgiven its entire debt tomorrow, it would still be worse off as a result of nearly a decade of disastrous policies facilitated by the availability of foreign loans.

The evidence does not seem to support an equally strong conclusion in the case of Brazil. Much less of the borrowing was dissipated in capital flight. The investment ratio rose by rather more. While the investment program had its quota of errors (like nuclear power and alcohol to replace gasoline), these were relatively marginal and the country found itself in the 1980s with an industrial establishment much of which was capable of competing on world markets. It would surely have been better if payment adjustments had been pursued more vigorously in the mid-1970s, and the level of borrowing had been limited to that needed to fill the foreign exchange gap, even if the investment ratio had been a point or two lower as a consequence. But it is possible that Brazil's outcome is no worse than if it had foresworn all borrowing in 1974.

Colombia followed a far more prudent policy than either Mexico or Brazil, deliberately aiming to hoard some of the proceeds of the 1977–79 coffee boom and refusing to borrow from the banks, despite their blandishments, until 1979. The short-run attractions of easy borrowing apparently overwhelmed even Colombia in 1979–80, but fortunately, as a result of the problems of its Latin neighbors, the country reversed its policy in 1982 before the damage was irreversible. Consequently, Colombia never suffered negative growth like its neighbors; indeed, it almost outperformed Brazil for the decade 1975–84 as a whole (having grown at about half the rate in the previous decade). Even after Colombia had implemented the needed policy adjustments in 1985, however, the banks were reluctant to resume moderate lending.

Thailand is an example of a country that has tapped the international capital market in a moderate and controlled way to supplement the resources available from official sources. It has not strained its creditworthiness, and has surely benefited by not doing so.

TABLE 16.3 Composition of the Net Flow of External Finance to Latin America and the Caribbean, 1979–86 (billions of U.S. dollars)

	1979	1980	1981	1982	1983	1984	1985	1986
Non-debt-creating flows								
Official transfers	0.6	0.8	0.8	1.0	1.0	1.3	1.5	1.5
Direct investment	5.1	5.6	7.6	5.9	3.2	3.2	3.7	2.8
SDR allocations, etc.	1.3	0.9	-0.1	0.5	0.1	0.4	0.5	0.2
External borrowing								
Official creditors, long-term	3.1	4.1	5.1	5.5	8.6	8.8	2.8	5.3
Private markets[a]	27.1	38.0	55.9	24.7	1.9	5.0	2.6	-3.8
Change in reserves (– = increase)	-11.4	-3.7	1.4	19.1	-2.0	-11.4	-1.6	8.7
Reserve-related liabilities	0.3	1.7	1.2	10.9	9.3	3.0	1.2	2.1
Asset transactions[b]	-2.1	-2.6	-9.5	-9.2	-4.9	-6.9	-1.3	-0.4
Errors and omissions	-2.2	-13.8	-19.0	-15.1	-5.4	0.6	-3.2	1.1
Current account deficit	21.8	30.9	43.4	43.3	12.0	3.8	6.2	17.7
Memorandum items								
Interest payments[c]	16.4	26.0	37.7	45.5	40.5	44.1	41.3	35.6
Net payments of investment income[d]	10.8	15.7	24.3	34.3	32.6	34.7	33.0	28.5

a. Derived as a residual, described as "other borrowing" by IMF. Includes errors resulting from discrepancies in coverage.
b. Primarily changes in export credit extended by Latin American countries (– = increase).
c. Includes dividends.
d. Excludes payments on foreign direct investment.
SOURCE: IMF, *World Economic Outlook*, April 1987.

Future Outlook

Tables 16.3, 16.4, and 16.5 provide an overview of the role of the private international capital markets in the external financing of developing countries since 1979. They show the abrupt turnaround from inward resource transfers (external borrowing from private markets less interest payments, to a first approximation) prior to 1982 to large outward transfers, especially from Latin America, since then. Earlier hopes that the debt crisis would be short-lived and that the debtor countries would by now have returned to voluntary access to capital markets have been disappointed. Most Asian countries (except the Philippines) are still able to borrow, but in Africa and Latin America there is little sign of returning creditworthiness (even Colombia's situation remains delicate). Some reversal of capital flight was experienced by Argentina, Chile, and Mexico in 1986–87, but the bankers remain as reluctant as ever to increase their exposure, and both Argentina and Mexico suffered renewed capital flight in late 1987.

A more hopeful element is the renewed role of equity finance. Increasing sums of new money are being invested in the stock markets of those

TABLE 16.4 Composition of the Net Flow of External Finance to Asia, 1979–86 (billions of U.S. dollars)

	1979	1980	1981	1982	1983	1984	1985	1986
Non-debt-creating flows								
Official transfers	2.6	2.8	2.8	2.8	2.8	2.9	2.7	2.7
Direct investment	2.3	3.2	4.5	3.8	4.1	4.3	4.3	4.5
SDR allocations, etc.	0.4	0.6	-0.2	-0.5	0.0	-0.7	2.6	2.2
External borrowing								
Official creditors, long-term	4.1	5.9	10.5	11.1	9.2	10.9	4.5	10.1
Private markets[a]	18.3	23.3	27.0	13.7	12.5	6.5	17.1	7.4
Change in reserves (– = increase)	-8.4	-10.7	-9.2	-5.4	-9.2	-9.3	-5.3	-23.7
Reserve-related liabilities	-0.1	1.2	3.2	2.3	3.9	1.6	-3.4	-0.5
Asset transactions[b]	-6.6	-7.6	-13.4	0.0	-4.0	-6.3	-7.4	0.5
Errors and omissions	0.0	-1.3	-3.3	-7.6	-1.2	-2.7	0.5	-2.6
Current account deficit	12.6	17.4	21.9	20.4	18.1	7.1	15.6	0.7
Memorandum items								
Interest payments[c]	7.4	10.4	13.7	15.7	15.1	17.4	18.6	19.2
Net payments of investment income[d]	1.7	2.4	4.4	7.3	7.1	7.5	9.0	9.3

a. Derived as a residual, described as "other borrowing" by IMF. Includes errors resulting from discrepancies in coverage.
b. Primarily changes in export credit extended by Asian countries (– = increase).
c. Includes dividends.
d. Excludes payments on foreign direct investment.
SOURCE: IMF, *World Economic Outlook*, April 1987.

developing countries that have well-functioning markets (including, but not only, the Gang of Four—South Korea, Hong Kong, Singapore, and Taiwan); in addition, Brazil, India, and Thailand among the countries covered in this volume attracted new country funds in 1985–87. Whenever a debtor country has permitted, the market in debt-equity swaps has thrived. Currently, some experts recommend allowing a portion of interest payments to be reinvested in equities as a permissible form of recycling. While the creditors are more enthusiastic about most of these developments than the debtors, there also seems to be an increasing recognition on the part of debtors that equity finance is consistent with the more capitalistic style of development that, with greater or lesser degrees of conviction, they are in the process of embracing.

Despite the encouraging progress of equity finance, one cannot expect it to take the place of debt finance in the near term (meaning, perhaps, before the mid-1990s). Debt-equity swaps even tend to reduce cash flow in the short run. At best, with 100 percent additionality, they leave cash flow unchanged. In most cases, however, debt-equity swaps use funds that would otherwise have been a cash inflow to retire debt. These swaps may nonetheless be worthwhile to help countries retire debt or to pave the way for net inflows

TABLE 16.5 Composition of the Net Flow of External Finance to Africa, 1979–86 (billions of U.S. dollars)

	1979	1980	1981	1982	1983	1984	1985	1986
Non-debt-creating flows								
Official transfers	3.1	3.5	3.7	3.3	3.5	3.4	3.9	4.0
Direct investment	0.6	-0.4	0.7	1.9	1.0	1.3	1.0	1.3
SDR allocations, etc.	1.1	0.4	-1.3	-0.5	-0.1	0.1	0.2	0.7
External borrowing								
Official creditors, long-term	6.2	5.7	7.3	4.8	6.8	6.0	7.9	9.5
Private markets[a]	3.4	5.2	6.5	7.4	2.8	0.4	-5.2	-1.6
Change in reserves (– = increase)	-4.4	-6.5	8.0	4.3	-0.1	0.5	-1.5	1.6
Reserve-related liabilities	0.2	0.0	2.6	7.9	5.3	0.4	1.6	-1.9
Asset transactions[b]	-1.7	-1.3	-1.5	-0.6	-0.5	-0.9	-0.6	-0.1
Errors and omissions	-1.8	-1.3	0.3	-3.4	-2.7	-0.4	-3.1	-2.4
Current account deficit	6.6	5.5	26.2	25.0	16.0	10.8	4.3	11.0
Memorandum items								
Interest payments[c]	5.1	7.4	8.2	8.6	8.6	10.0	10.9	10.5
Net payments of investment income[d]	3.7	5.1	5.9	6.9	7.4	8.6	9.5	9.2

a. Derived as a residual, described as "other borrowing" by IMF. Includes errors resulting from discrepancies in coverage.
b. Primarily changes in export credit extended by African countries (– = increase).
c. Includes dividends.
d. Excludes payments on foreign direct investment.
SOURCE: IMF, *World Economic Outlook*, April 1987.

of equity capital, for example. Still, they do not relieve the immediate foreign exchange shortage that confronts many developing countries.

Given the past dominance of bank creditors in the external borrowing of developing countries, it is inevitable that the main burden of providing finance in the next few years will fall on the banks. It is becoming increasingly clear that if they do not find ways of recycling a substantial part of their interest receipts, through, for example, the menu approach of Cline (1987), then the debtor countries will develop alternative mechanisms that are less likely to preserve the value of the banks' claims. These mechanisms are unlikely to include outright repudiation, which would be an act of economic warfare that would not bring any advantages (other than possible populist appeal) to compensate the risks involved. They may nonetheless be more dangerous to both creditors and debtors than long-term debt consolidation designed to cut back negative resource transfers to levels that countries can afford, accompanied by the right of debtors to buy back their debt so as to permit banks that wish to exit to do so (but at the cost of providing debt relief).

The most important lesson of the 1970s, however, is that foreign borrowing can be either a curse or a blessing, depending on whether it is used to

finance bad policies or to support a well-conceived strategy of intertemporal economic management that pays due recognition to creditworthiness constraints. At times, countries may be justified in borrowing just in order to increase investment, even when they are not suffering a foreign exchange constraint, but history suggests that this should be done with caution. In particular, they need to ensure that the additional investment is being used to increase the output of tradable goods so as to permit the higher level of debt to be serviced without threatening their creditworthiness. In that way, they can ensure that capital mobility is in the future the blessing it has the potential to be.

PART IV CONCLUSION

CHAPTER 17

UMA LELE AND IJAZ NABI

Aid, Capital Flows, and Development: A Synthesis

The country studies and discussions of aid issues presented in this volume span a broad range of experiences with external financing, both concessionary and commercial, and economic development. Some of the successes and failures described here are common and easy to draw lessons from. Others are unique to the countries studied but nevertheless provide valuable insights into the "dos and don'ts" of foreign assistance in the development process. In synthesizing the findings, we first review the broad trends in actual flows, noting the shift of multilateral resources from the more prudently managed Asian countries to Latin America and Africa. We then evaluate the central issues in external financing and development in the light of country experience. Based on this experience, we draw lessons for recipients of external financing, aid donors and multilateral agencies, and private lenders and investors.

Recent Trends in External Financing

In the four decades following the end of World War II, transfers of international capital provided a large proportion of investment funds for developing countries. At their peak in 1981, total net capital flows to developing countries reached roughly $137 billion, of which about two-thirds were in the form of private capital and one-third was official development assistance

(ODA). This proportion changed beginning in 1982, when Mexico declared a moratorium on its debt repayments, triggering the debt crisis that virtually cut off the highly indebted middle-income countries' access to private capital. By 1988, net flows of private capital had fallen to around $39 billion.

In the 1980s, the total external debt accumulated by countries in Latin America and sub-Saharan Africa took on alarming proportions and resulted in considerable hardship for the people living on these continents. In 1987, at nearly $500 billion, external debt was more than 60 percent of the gross national product in Mexico, Senegal, Sri Lanka, and Kenya and more than 100 percent in Egypt and Tanzania. The middle-income debtor countries (with per capita incomes ranging from $520 to $5,800) owe their debt mainly to private creditors, while the low-income debtor countries, who are largely poor African countries (with per capita incomes from $130 to $450), are indebted mainly to governments. Not only were the capital flows reflected in these debt figures very large, but they were also generally misused, providing little cushion to help borrowers weather a variety of adverse external terms of trade shocks. Increased debt service, the sudden contraction of capital inflows in the early 1980s, and the need to reduce current account deficits led to a severe belt tightening that included import compression, lower investment, and drastic reductions in per capita consumption. From 1980 to 1987, imports of the highly indebted countries[1] declined at an average annual rate of 6.3 percent, investment at 5.3 percent, and per capita consumption at 1.6 percent. As a result, domestic output in Latin America increased only marginally in the second half of the 1980s, in sharp contrast to the 1965–80 period, when per capita incomes rose nearly 3.5 percent per year.

The 1980s were also a decade of important political developments and greater awareness of internal mismanagement of governments and the problems associated with ineffective use of external flows. The precise effects of these developments vary among countries and are difficult to predict. They can lead, for example, to a popular revolt for democratization as in Eastern Europe or to increased isolation from international financial markets as in Peru. It is in this context that the role of the private international capital flows in future global economic growth must be considered.

If the debt crisis brought commercial capital flows to a virtual standstill, all is not well with aid either. Annual flows of official development assistance, which benefits primarily poor countries, remained more or less constant at $30–$35 billion in real terms during the 1980s. But this stability belied some important shifts under way since the 1960s. These shifts included the graduation of countries such as South Korea, Taiwan, Brazil, Chile, Algeria, and Greece out of "major recipient" status through rapid economic growth; a large increase in real ODA flows from Japan, Germany, Italy, the Nordic countries, and the Organization of Petroleum Exporting Countries (OPEC); a large increase in the share of sub-Saharan Africa in total ODA, together with a sharp decline in South Asia's share (excluding Bangladesh); and, not least important, the increased multilateralization of ODA (see OECD 1985).

Underlying many of these changes was the steady decline in the financial share and influence of the United States, the single largest donor until recently.

From the viewpoint of global economic growth, the allocations of ODA between Asia and Africa and among countries within each continent, are worth exploring further, since increased incomes on these two continents would reduce poverty and stimulate world trade. In the 1960s, Asia (excluding the Middle East) received as much as half of all ODA, while as late as 1970–71 sub-Saharan Africa accounted for only a fifth. By 1987, Africa had raised its share to well over a third and Asia's share had fallen to a third. The decline in India's share of world ODA, from 14 percent in 1970 to 6 percent in 1987, alone accounted for nearly half of the shift toward Africa.[2]

In changing the pattern of ODA flows, donors lost an opportunity to stimulate global economic growth. Despite the important structural adjustment process that aid initiated, increased aid failed to improve Africa's economic performance, not only because terms of trade were falling, but also because aid was misallocated. Following a decade of stagnation in the 1970s, per capita incomes in sub-Saharan Africa declined nearly 2.8 percent annually from 1980 to 1988. In contrast, Asia has experienced continued improvement in living standards since the 1960s. Furthermore, since India and China together constitute 40 percent of the world's population, acceleration of their economic performance would have a major effect on global growth. Within Asia, the combined population of Bangladesh, Pakistan, and Indonesia is more than 85 percent of the entire population of sub-Saharan Africa. Thus maintaining aid flows to Asia would have yielded a higher payoff in terms of global growth.

From the humanitarian viewpoint, however, Africa's claim to official assistance is large and can be strengthened further by implementing policy reform to resume growth. While it is true that South Asia has the largest concentration of poor people in the world, good economic policies and steady economic growth are expected to bring the number down from 480 million in 1990 to 340 million by the year 2000. In contrast, in Africa, where economic mismanagement and lackluster performance continue, the number of poor is expected to increase from 185 million in 1990 to nearly 300 million by the year 2000 (World Bank 1990b).[3] To be effective, therefore, aid should encourage policy change that leads to growth and reverses the alarming increase in poverty in Africa. The evidence we present here shows that small amounts of aid—given in the context of a sound policy environment for the development of physical, human, and institutional infrastructure—are far more effective than large amounts given without attention to the overall development policy. In a correct policy setting, of course, large aid magnitudes would go far toward reducing global poverty and stimulating income growth and international trade.

Meeting the humanitarian and policy reform objectives of external assistance requires stability in aid flows. This stability has often been lacking. For

example, two contradictory tendencies have been associated with U.S. official aid. On the one hand, strategic considerations have caused much instability in U.S. aid flows,[4] as the United States has shifted its military and aid presence among political hot spots in order to provide a Western alternative to communism. On the other hand, the United States has played a more significant leadership role in the development of agriculture, human resources, policy planning institutions, and sound macroeconomic management than other members of the Organization for Economic Cooperation and Development (OECD). Through such leadership, the United States has contributed significantly to accelerating economic growth rates and improving the participation of the poor in many recipient countries. Unfortunately, the instability of its aid allocations has prevented the United States from playing the developmental role more fully.

Given the sheer volume of capital transfers since World War II and their effects on recipients' development efforts, we have now accumulated substantial experience to help us make a determination about where and how to channel future official aid. This determination must be carried out in an atmosphere of growing skepticism about the effectiveness of official aid to the traditional recipients (see, for example, Hancock 1989) and optimism regarding effectiveness in Eastern Europe. The moral appeal of aid remains compelling, but it tends to focus on famine and hunger. Developed countries are now raising questions about the extent to which aid succeeds in expanding markets for their goods and services (one of the original rationales for aid) by increasing income in developing countries. There is also a concern that aid may be "too successful": the export success of the East Asian "tigers" (South Korea, Hong Kong, Taiwan, and Singapore) has increased competition for limited OECD markets and kindled protectionist tendencies. Moreover, the vocal environmental lobbies in the West are concerned that economic growth results in the loss of biodiversity and endangers soils, water, and atmosphere. Finally, the surprisingly rapid opening up of Eastern Europe in 1989 has raised donors' hopes of making a significant impact on that relatively more developed part of the world by redirecting international capital flows, much along the lines of the Marshall Plan in the Truman era. The historical, cultural, and ethnic ties of the OECD donor countries to Eastern Europe and the expectation of quick results make such a redirection especially appealing.

Thus, in a changing international environment, aid effectiveness must be evaluated on stringent criteria. We must consider several questions: How have aid and other external capital flows influenced the recipient's growth performance and macroeconomic management? Did project and program aid help in using resources efficiently and in developing human capital and institutions? Under what circumstances is food aid beneficial? Can foreign assistance help reduce poverty and improve the access of the poor to social services? What is the significance of stability in aid flows and policy advice in the development process? What role can external assistance play in

improving countries' credibility and improving access to private capital markets? Finally, what are the prospects for reduction of debt and resumption of private investment in the debtor countries, and how can external assistance help?

External Financing and Development: The Country Experience

The authors of the case studies presented in this volume have tackled the complex questions concerning the role of external financing in development in the context of the long-term economic, political, social, and strategic objectives and policies of their respective countries. Their conclusions are summarized here.

Country economic performance. The rapid progress made by many developing countries until about 1980 is striking, given the poor conditions they inherited at independence and the adverse external shocks they have faced since then (such as border wars, famines, and a deterioration in external terms of trade). The African countries as a whole did less well than other developing countries, although there were a few notable exceptions such as Kenya. By and large, countries that performed well on a sustained basis also did well in agriculture and substantially reduced the proportion of their population living in poverty.

Of the countries studied in this book, Brazil, Thailand, Egypt, Mexico, Kenya, Colombia, and Pakistan (in that order) grew fastest, with GDP growth rates varying from 9 to 5 percent between 1965 and 1980 (see Table 1.1 in Chapter 1).[5] Sri Lanka and India followed with growth rates of 4 and 3.7 percent respectively. Tanzania and Senegal experienced declines in per capita incomes. Pakistan and Egypt continued their strong growth rates even after the deterioration of the world economic situation in the early 1980s. Growth in Thailand, however, slowed somewhat from the high levels attained earlier, whereas growth in India and Sri Lanka improved. In contrast, growth rates fell sharply in Mexico, Brazil, and Tanzania, and somewhat less in Colombia and Kenya.

Growth was not always accompanied by a significant improvement in social indicators for the poor. Pakistan, for example, achieved strong growth rates and an impressive reduction in the incidence of poverty from 54 percent of the population in 1963 to 23 percent in 1984, but other social indicators showed no improvement. In other cases, such as Tanzania, efforts to improve social indicators were thwarted by the collapse of production. Thailand, and to a lesser extent India and Kenya, achieved growth with improvement in equity. Sri Lanka and Pakistan provide interesting insights into the personal income and the social welfare components of the living standards puzzle, which we shall revisit later.

The macroeconomic effects of external capital. The macroeconomic effects of aid and commercial flows on recipients are subtle and manifest themselves with lags of varying length across sectors and countries. This makes it difficult to establish any direct causality between aid and development, which may explain why econometric studies of aid's impact on domestic savings, investment, consumption, GDP growth, or poverty alleviation have been inconclusive (Cassen and Associates 1986). The relationship between aid and and the recent macroeconomic adjustment efforts is even harder to establish using econometrics. A more useful approach, and the one taken in this volume, is to capture the macroeconomic effects of external assistance through detailed case studies.

A consistent theme emerging from the country studies is that domestic policies determine development outcomes, and as Gil Díaz puts it in the case of Mexico, policies are, in the final analysis, the sole responsibility of the domestic government. If the government is not committed to change, there can be no serious macroeconomic reform.

Moreover, donors often have competing political/strategic and development objectives that prevent them from taking a concerted stance to encourage painful macroeconomic adjustments. This is well illustrated in the cases of Tanzania, Sri Lanka, and Egypt. Collier and Bhalla show for Tanzania and Sri Lanka, respectively, that even though multilateral and bilateral aid in the 1970s was given for development reasons, donors did not agree on the merits of specific policies and thus weakened the overall macroeconomic effects of aid. Besides, when some donors withdrew, others stepped in, in the hope of persuading the country to adopt political stances favorable to them. The strong socialist leanings of the Sri Lankan and Egyptian governments during the first half of the 1970s, for example, attracted a large increase in aid from the communist bloc countries. In 1972, aid to Sri Lanka from these countries reached its highest-ever level of $85 million. Such competition could hardly encourage painful policy adjustments.

Even when aid objectives were clear, its economywide effects were subtle, as illustrated in the chapters by Lele and Agarwal on India and by Nabi and Hamid on Pakistan. Both countries experienced a steady decline in per capita incomes before independence. Since then India has had high domestic savings and investment rates, at nearly 22 percent of GDP in most years during the 1970s and 1980s. Pakistan's savings rate, in contrast, averaged only 13 percent from 1961 to 1988, and its investment rate was well below 20 percent in most years. Yet, India's GDP growth rate was slower than that of Pakistan, which received larger (albeit highly unstable) aid flows and pursued a relatively more outward-oriented growth strategy. This shows that aid, even when not accompanied by improved domestic saving and investment, can result in high growth if recipients follow an outward-oriented strategy. Thus, econometric studies that seek to establish a relationship between aid and growth without accounting for inward or outward orientation of policies omit a crucial link.

Encouraging outward orientation is perhaps one of the more important roles that external financing has played. The advantages of outward orientation are many and are now well documented in the development literature: an outward orientation allows access to technology and markets, and forces domestic producers to become efficient by confronting them with competition. This raises productivity and contributes to growth. The policy instruments used to bring about outward orientation are the exchange rate and reform of tariff and nontariff barriers. The case studies in this volume are replete with episodes of donor-recipient dialogue on these instruments. What we learn is that there has been steady progress in this dialogue, although it is nearly always slow and often acrimonious.

Brazil, Mexico, Egypt, Tanzania, and Senegal all provide examples of the adverse macroeconomic effects of abundant but poorly deployed external capital. In the 1970s, the availability of large amounts of external capital led to wasteful expenditures on megaprojects and created a dependency syndrome. It contributed to the growth of public sector monopolies, increased expenditures on implicit and explicit subsidies, and resulted in a pervasive government presence in the economy. Overvalued exchange rates, which implied depressed prices of tradables relative to nontradable goods encouraged resources to flow into nontradable sectors. This led to the familiar Dutch disease and eventually to balance of payments difficulties.[6] Moreover, easy availability of external capital allowed these countries to increase wasteful public spending, creating rent-seeking vested interests that make it difficult to reform policies. The relationship between macroeconomic performance and external assistance in these countries is intricately linked to strategies for reducing debt, improving access to commercial capital markets, and resuming growth. We comment on these issues below.

Project and program aid. Until the late 1970s, official development assistance was given largely for individual projects. Program loans, precursors of the present-day structural adjustment loans, given by donors such as the World Bank and the United States, were for short-term balance of payments support. Such assistance was given infrequently and only when commercial credit was not forthcoming. The effects of development assistance before the 1980s are therefore best understood in terms of the contributions that donors made through project and program assistance. Several such contributions can be identified.

First, the case studies show that aid improved the efficiency of capital by instituting project evaluation and implementation procedures and techniques that helped recipients choose investment portfolios with relatively high returns to capital. Indeed, in some countries, donors made major contributions to the creation of technical capacity for project appraisal, implementation, and evaluation in key sectors—for example, transport and electricity in Colombia. The evidence, however, is mixed: the experience of

a number of countries such as Kenya, Egypt, and Tanzania shows that even project aid could be wasted.

Second, by emphasizing the importance of agriculture in the economic transformation of countries and by focusing on the development of institutions, technology, and human resources, project and program aid helped accelerate the growth of entire sectors. An excellent example of this is the spectacular success of the Green Revolution in Asian agriculture, illustrated in the studies on India, Pakistan, Thailand, and Sri Lanka. The development of small-scale agriculture requires the government to play an active role in providing irrigation, roads, electricity, and education. Donors, who tend to operate through governments, can clearly help improve public sector capacity to carry out such investments.

Program aid also provided scarce foreign exchange for food imports during critical periods of shortage, as the experience of Asian countries shows. This assistance helped maintain consumption levels of the poor and checked inflation and wages—all crucial in providing the breathing room that policymakers needed to address the complex problems of increasing agricultural productivity and meeting the most basic food needs. (Donors also supplied food aid, which is so controversial that we will visit it again to air the issues more fully.) Indeed, a primary factor behind the successes of Asian countries—in contrast to their African counterparts—has been their ability to overcome the complex problems of developing agriculture.

Third, since projects were implemented as part of the overall economic strategy, such assistance provided opportunities to hold a policy dialogue at the broader sectoral and economywide level. This dialogue helped recipients formulate long-term strategies of development, improve the overall structure of incentives, and restore macroeconomic balance. In India, for example, the World Bank's 1964 Bell mission articulated the importance of appropriate exchange rate and trade regimes and helped set the course for agriculture. Although India had accumulated substantial stocks of foreign exchange and food by 1975, the World Bank's International Development Association (IDA) and the International Monetary Fund (IMF) did not discontinue assistance; instead, they helped reinitiate and sustain trade liberalization (after a disastrous first attempt in 1966). Similarly, the World Bank and U.S. assistance played a crucial role in changing Thailand's investment policy in the late 1950s and early 1960s—public investments, including those assisted by donors, were confined to the provision of utilities and public services, while all other sectors were left open for private investment. Once the basic infrastructure had been developed, the policy dialogue between the Thai government and the World Bank/IMF helped maintain private sector growth as well as overall financial stability in the 1970s and 1980s.

More generally, the country studies make a strong case for well-designed project and food aid on a small but predictable basis to strengthen absorptive capacity of recipients by stressing education, training, and institution building in aid programs. In the 1960s, many Latin American countries, as well as

others such as Egypt and Pakistan, received relatively small amounts of official assistance (mainly from the United States) and they used it effectively. U.S. assistance focused on improvements in human and institutional capacity—especially analytical and policy-planning capabilities at the macroeconomic level and in agriculture. Under foreign assistance programs, policymakers and researchers staffing the new development institutions received training in the finest universities and research centers in the United States and other advanced donor countries.

Aid to Africa in the 1970s, however, placed insufficient emphasis on building the human and institutional capacity necessary for attaining sustainable growth, which may explain some of the policy disasters that followed. The example of Tanzania makes clear that even if aid is given on developmental grounds, ill-conceived assistance to small countries with poor policy environments and relatively little or no absorptive capacity is bound to be misused. Africa needs not only a continued emphasis on macroeconomic reform, but also smaller amounts of well-designed assistance that will increase absorptive capacity for the efficient use of larger amounts later.

Uses of food aid. Food aid is much maligned. It is alleged to create disincentives for domestic food production by reducing prices and to encourage dependency on food imports. Like overall financial aid, food aid *may* create disincentives, but it need not. Food aid to Asian countries in the 1960s helped maintain consumption levels among poor urban groups vulnerable to food shortages when balance of payments difficulties inhibited commercial grain imports. Also, counterpart funds generated by the difference between the cost of food aid imports and their market price allowed donors to influence agricultural policy and research, which helped to bring about technical change. Srinivasan argues that donors and governments ought to take a long-term view of the uses of food aid in the context of an overall agricultural development strategy. Lele and Agarwal have pointed out that in India the politics of food aid made it unpredictable and strengthened India's resolve to achieve food self-sufficiency and to adopt policies that facilitated the Green Revolution.

Although food aid in Africa has provided critical foreign exchange, government revenues, and food, it has not played as positive a role in agricultural development as it did in Asia. Srinivasan observes that this is partly because domestic policies are more distorted in the African countries. Moreover, at independence, research systems and human resources were better developed and irrigation potential was much stronger in Asia than in Africa, allowing for more rapid technical change. To transpose the successful Asian experience to the African countries will require the pursuit of macroeconomic and sectoral policies that do not discriminate against agriculture together with more efficient investments in agricultural support services and human capital. Policy reforms introduced in African countries since the early

1980s are creating an environment more conducive to productive uses of food aid (for example, by reconstructing decaying physical infrastructure such as feeder roads), although overall progress on these reforms has been slower than expected. As long as recipients do not use food aid to postpone necessary but difficult policy reforms and investments in agriculture, and as long as food aid is not made unpredictable by donors' political agendas, such assistance can make an important contribution to growth.

External capital and poverty alleviation. Perhaps the most important declared objective of donor aid programs is to reduce poverty in recipient countries. Poverty alleviation measures include not only direct welfare transfers but also investments in social amenities such as health, education, drinking water, and nutrition programs. These programs improve individual welfare and help to slow down population growth, which is an important contributor to the deepening of poverty in many parts of the developing world. In fact, by investing in social services, recipient countries also achieve their growth objectives: these services help upgrade the quality of human capital, which is essential for sound economic growth. In this sense growth and equity objectives do not conflict—they move in tandem, and the failure to address one ultimately inhibits the other.

To define the relationship between aid and poverty alleviation, we first summarize the country experiences and then outline the role aid can play in ameliorating poverty.

The growth pattern of countries suggests that, with some exceptions, growth was impressive until 1980 and then it slowed down, especially in the African and Latin American countries. During their growth phases, most countries expanded employment and invested in education and health. However, in countries where income growth and public expenditures were unsustainable, as in Mexico, or where public expenditures were not backed by adequate growth, as in Tanzania, there were sharp reversals for the poor, in terms of both falling incomes and access to social services. As Collier has shown, in Tanzania, despite the rhetoric of participation, real rural living standards declined at an average annual rate of 2.5 percent and real urban income by 4.5 percent between 1969 and 1983. Per capita real private consumption fell by 43 percent between 1973 and 1984. Moreover, the government was unable to sustain its impressive investment in social sectors as the economy collapsed. In Mexico, stabilization and restructuring of the economy have halved the real wage, increased malnutrition, and forced sharp cutbacks in expenditures on health and education.

In contrast, the Asian countries have maintained their growth momentum and have continued to register declines in poverty. Between 1970 and 1985, mean per capita income in Thailand, Pakistan, Sri Lanka, and India increased by about 2 percent a year and the incidence of poverty fell by around 1.1 percent (World Bank 1990b). Within countries the record of poverty reduction and expansion of social services was quite different; this

is best illustrated by comparing Pakistan and Sri Lanka. In Pakistan, despite the impressive reduction in poverty, there has been little improvement in social indicators of well-being. Between 1962 and 1984, the average annual income in Pakistan increased by 2.2 percent, of which the poor's share was 1.4 percent. There was also impressive growth of 6.9 percent a year in the agricultural real wage between 1980 and 1987. However, Pakistan's social indicators were dismal: in 1987 life expectancy was 55 years, infant mortality was 109 per thousand, and primary enrollment for boys was 55 percent and for girls an abysmal 32 percent. In Sri Lanka, however, social well-being was exceptional given its per capita income level: life expectancy was 70 years, infant mortality was 33 per thousand, and primary school enrollment for boys was 104 percent and for girls 102 percent. Sri Lanka's growth strategy, however, has reduced poverty (measured in income) less than Pakistan's has. In contrast to Pakistan, Sri Lanka's average income grew by 0.9 percent in the 1963–82 period, the poor's share in it was 0.5 percent, and the agricultural real wage actually fell 0.3 percent. Clearly, aid programs to Pakistan should stress more investment in the social sector to further increase efficiency of investment and growth and improve income opportunities for the poor, while in Sri Lanka the emphasis should be on greater employment-generating investment.

What is the donor record regarding the choice of strategies, programs, and projects to benefit the poor? The case studies show that much of the poverty alleviation content of aid programs was indirect, through investments in rural infrastructure that benefited the poor. Much more could have been done by directly addressing the poor. This situation is now being rectified. For example, in Pakistan, the World Bank has carried out extensive studies of the social sector, which have paved the way for substantial lending that will improve Pakistan's social indicators to complement its poverty-reducing growth strategy.

In addition to helping shape the long-term investment patterns, the donors can also encourage less costly (in terms of its effects on the poor) structural adjustment. In most countries, the poor are concentrated in agriculture: adjustment lending could thus encourage improvements in agricultural terms of trade following exchange rate realignments. To the extent that the poor do not benefit from price changes, nutrition programs could be put in place. Also, fiscal adjustment could be fine-tuned and closely supervised to minimize cuts in primary education and basic health programs that benefit the poor most. Indeed, given the massive fiscal adjustment needed in many countries, poverty reduction objectives may make it necessary to bring the issue of defense expenditure on the agenda in the dialogue between donors and recipients.

Finally, to adequately address poverty, it is crucial to have reliable and updated information about the poor, their sources of income, and their patterns of consumption. Gathering such information on a regular basis is costly in terms of both financial and human resources, and beyond the reach

of many poor countries. An important donor contribution would be to help finance and carry out surveys for gathering such information. The multilateral agencies, such as the World Bank, could monitor poverty indexes on a regular basis as part of their overall economic reporting on their borrowers.

The instability of capital flows. Private and official capital flows to developing countries have been so unpredictable that virtually every author in this volume has emphasized the importance of increasing domestic resource mobilization to ensure greater stability in the rate of investment. Lele and Agarwal, Nabi and Hamid, and Handoussa, in their studies on India, Pakistan, and Egypt, respectively, show how political motives often dominated aid programs and resulted in considerable instability in flows. U.S. food and financial aid (in real terms) declined sharply in the mid-1960s for geopolitical reasons, even when recipients were undergoing major economic reforms and continued assistance would have given them the necessary financial security to continue with industrial and trade liberalization. Sudden increases were just as disruptive as sharp cuts. Pakistan's accession to the Central Treaty Organization (CENTO) and the Southeast Asia Treaty Organization (SEATO) in 1955, for example, led to a large increase in U.S. assistance for nearly a decade. U.S. aid to Pakistan fell sharply after the 1971 civil war in East Pakistan, reaching an all-time low of $50 million in 1980–81. With the Soviet invasion of Afghanistan and Ayatollah Khomeini's seizure of power in Iran in 1979, however, total U.S. aid commitments to Pakistan increased again, reaching nearly $1.7 billion for the period from 1982 to 1987. This increase may have led Pakistan to postpone budget trimmings and domestic resource mobilization efforts and may therefore have contributed to its current fiscal difficulties.

Similarly, Egypt, at the crossroads of superpower interests, has had important strategic ties with the Soviet Union and the United States during different periods. Handoussa writes that from the mid-1950s to the mid-1970s, Egypt accounted for 20 percent of Soviet trade and aid flows and for 29 percent of its military sales. By the late 1970s, however, the United States had succeeded in neutralizing the Soviet influence. Egypt's diplomatic rapprochement with the West following the 1973 war with Israel and Anwar Sadat's attempts at economic liberalization in 1977 led to a massive increase in Western aid, with *net* inflows averaging $1.5 billion annually from 1978 to 1984. Egypt's experience shows that playing competing donors off one another helps to maintain overall aid volume.

Unfortunately, bilateral aid is usually tied to the condition that recipients buy the equipment and commodities, follow the technical advice, and use the shipping lanes of the donor. The technologies accompanying aid from such diverse donors are very different and can adversely affect the overall development strategy. The high cost of tied bilateral aid is recounted in several of the papers presented in this volume.

The discontinuity and unpredictability of aid has set back recipients' development strategies by cutting short their investment projects and adjustment policies (such as those to liberalize industrial and trade regimes) and preventing them from making the necessary long-term commitments to social services that could help alleviate poverty. In fact, large fluctuations in aid resources can result in irresponsible policies. For example, a government may go on an aid-financed spending binge to gain quick popularity. The programs, hastily thrown together, may be ill conceived and, in any case, may not be viable given local resources. When aid is withdrawn, countries are left with ill-designed programs that are politically difficult to close down. Many of the country studies presented in this volume contain such scenarios. In his chapter on Tanzania, Paul Collier argues that recipients should treat aid "booms" the same way they treat other commodity booms. Following the permanent-income hypothesis, they should recognize that both kinds of booms are short-term phenomena and are best used productively to increase long-term internal capacity for growth. This approach will usually involve donors working closely with governments to invest in infrastructure projects and in programs that improve the quality of the work force. These are important ingredients in creating an environment that enables the private sector eventually to play a leading role in development.

The instability in bilateral assistance has, to some extent, been checked by the more stable multilateral flows of the World Bank and other official multilateral agencies, as John Mellor and William Masters point out. Projects and programs left unfinanced because of bilateral withdrawal have often been completed with financing from multilateral institutions. At its best, the World Bank has also helped offset the small-country bias of bilateral aid by assisting large, poor countries. For example, India received substantial assistance from the World Bank's concessional window, the IDA, under Robert McNamara's leadership in the 1970s even though India's relations with the United States (the World Bank's major shareholder) had deteriorated in the wake of the 1971 war with Pakistan and U.S. bilateral aid had declined to a trickle. The World Bank similarly expanded its lending to Thailand in the 1970s to compensate for declining U.S. assistance following the Vietnam War, as Narongchai Akrasanee notes.

Commercial capital flows too have been volatile, and their instability has affected the Latin American countries the most. After lending indiscriminately to projects of questionable quality in the 1970s, private banks have been reluctant to lend new capital to Latin America since 1982. José Antonio Ocampo points out that despite relatively sound economic management, Colombia has suffered from inadequate access to private commercial finance because of this "Latin syndrome" of the private banks. Since the process of transition from official capital to private commercial flows has been temporarily arrested, if not reversed altogether, in countries such as Mexico, Brazil, and Colombia, official multilateral agencies like the IMF and the World Bank

have become increasingly important—an issue explored more fully in our discussion of debt below.

Swings in policy advice and "fads." Over the past four decades, theories of development have undergone a substantial change as knowledge about complex development objectives and processes has grown. A fact frequently overlooked in discussions of aid effectiveness, but pointed out succinctly by the contributors to this volume, is that as the consensus on development theories shifted, donor advice itself underwent big swings—from import substitution in the 1960s and poverty alleviation in the 1970s, to policy reform and export orientation in the early 1980s, and back to poverty alleviation in the late 1980s, with the issues of women in development and the environment added on. Mellors and Masters contend that at times these swings degenerated into "fads."

These shifts in focus reflect several factors. In part, they reflect donor efforts to understand the development process. However, a three- to four-year lag separates the establishment of a consensus on a policy theme among donors and its translation into projects and programs in recipient countries. Meanwhile, the intellectual consensus shifts to another policy theme. Aid rhetoric and practice therefore diverge, leading to the charge of aid faddism by recipients. For example, until the late 1970s, donors continued to promote development projects in recipient countries while the intellectual consensus was to focus on important domestic policy failures and developments in the international economic environment. In the 1980s, aid bureaucracies finally caught up with the intellectual debate and a wholesale shift toward structural adjustment and internal policy reform took place. But it appears to have gone too far: in the pursuit of policy-based lending, donors moved financial and human resources away from project assistance, impeding implementation of critical projects.

The policy swings also reflect the need of aid-dispensing institutions to appeal to aid lobbies that are effective in mustering resources from donor governments. For example, the recent doubling of the World Bank's capitalization reflects U.S. congressional support for the bank's emphasis on private initiative, the free market, and environmental and women's issues. However, as has been argued in this book, if donors bear in mind that it is not the quantity of aid that matters but its quality, which includes stability and predictability in aid flows, there will be less need to appeal to the passing whims of the aid lobbies.

Aid-dispensing organizations also contribute to the policy swings through a tendency to follow "top-down" policy initiatives that appear faddish. They could make better use of the considerable pool of technical and management talent they possess to prepare organization staff as well as recipients to incorporate new ideas into existing lending strategies. Flexibility in implementing new policies in different cultural settings is also essential.

The appearance of faddishness in donor policy erodes credibility among recipients and disrupts the development process—especially since recipients have to cope with their own vested interests built around the donor fads of the previous era. As knowledge of the development process improves over time, the challenge for donors is to maintain a stable policy focus within a consistent framework of assistance for projects and for macroeconomic reform. This strategy will help make donors' policy advice credible and will ensure more willingness by recipients to undertake reform in areas where past policy mistakes need correction.

Structural adjustment and the transition from concessionary to commercial flows. As they become more economically advanced, countries tend to rely less on official and more on private sources of capital. Among the most important advantages of commercial borrowing is the independence from the strategic and political factors that affect access to official capital. Homi Kharas and Hisanobu Shishido show, however, that the transition from concessionary to commercial flows is neither smooth nor unidirectional. It turns out that commercial borrowing is advantageous only when external capital is demanded in moderate quantities, when it does not replace internally mobilized resources, and when it can be serviced (for example, when terms of trade are favorable to the recipient).

In the volatile international economic environment of the 1970s, commercial lending took place without sufficient attention to many of the conditions listed above. The independence offered by external private capital was handled poorly both by recipients such as Brazil and Mexico and by the private commercial banks. The latter made large-scale lending decisions on behalf of their depositors based on inadequate knowledge of the economic circumstances facing borrowers and of the sectors or projects they were supporting. Consequently, when the economies suffered sharp reversals and the risk of repudiation grew, commercial banks had to resort to severe credit rationing. This rationing, combined with unanticipated worsening of external terms of trade and the rise in interest rates, created extreme economic difficulties for the borrowers.

Not surprisingly, many borrowers have again turned to official sources of finance. For example, since 1983, Colombia has had to increase borrowing from multilateral and bilateral agencies. In Mexico, the debt crisis has prompted a thorough reexamination of the development strategy and an expansion of borrowing from the World Bank and the Inter-American Development Bank to support structural adjustment. In addition, the poorer countries (such as Senegal) are more dependent on concessional assistance for structural adjustment programs. These programs are intended to curb fiscal deficits and remove government controls to reestablish recipients' creditworthiness as a first step toward regaining access to commercial capital. There is some evidence of success in this strategy; however, José Carvalho provides a less optimistic scenario for Brazil. The country's price

freezes and quantitative restrictions have failed to bring down hyperinflation, and little sociopolitical consensus exists to support tough decisions. Carvalho stresses that without a strong political mandate, the Brazilian leadership is unlikely to undertake the necessary reforms. The dramatic policy reforms undertaken by the government of Fernando Collor de Mello are a radical departure, and it remains to be seen how long the program will be retained.

Although the country studies do not fully explore the theme of structural adjustment to reestablish financial credibility, a recent spate of literature on this subject reveals several problems (see, for example, World Bank 1988a). First, the time needed to achieve internal consensus on policy reforms has turned out to be much longer than had been anticipated. This delay occurs partly because, as Hazlewood observes, governments face great political difficulties in "selling" conditionality to powerful local vested interests. Pakistan, for example, was reluctant to accept a World Bank agricultural loan that was conditioned on the removal of fertilizer subsidies and an increase in irrigation water rates—actions that the government feared would have negative political consequences in rural areas. Liberalization of maize marketing in Kenya provides a similar example. Without the necessary political commitment and the ability to contain popular discontent and keep in check the vested interests of politically powerful groups, a country may not be able to sustain reforms undertaken as part of donor conditionality.

Second, donors have underestimated the lag between the adoption of structural adjustment measures and the resumption of growth in economies suffering from deficient administrative infrastructure, especially in African countries. Hazlewood points out that although policy-based lending is seen as being more speedily disbursed and making fewer demands on recipients' human resources than project assistance, the experience in Kenya contradicts both claims. Policy-based assistance has required "not fewer, but differently qualified staff," overstretching the administrative resources of both the Kenyan government and donors such as the U.S. Agency for International Development.

Third, policy change presents significant social costs because of drastic reductions in wages and in public expenditures on health and education. (Mexico provides an example.) These costs force a cautious approach to change.

Fourth, continuing pessimism regarding growth prospects means that structural adjustment is unlikely to result in resumed growth quickly. For example, Senegal faces great difficulties in expanding export markets for commodities such as groundnut oil because of low world prices and intense external competition from cheaper substitutes such as soybean oil. Senegal now faces the dilemma of choosing between the long-term import substitution of rice and the exportation of groundnuts—an issue that donors have not adequately helped to resolve. Several other country studies, including those on Pakistan and Egypt, also emphasize the poor export prospects for

their primary and manufactured goods because of limited markets or non-tariff barriers in OECD countries.

Finally, much also remains to be done to reduce the debt "overhang," which has corroded developing countries' financial credibility in the international capital markets and retarded economic growth. We turn to these issues next.

The debt overhang, multilateral financing, and private investment. Barring the Asian countries, which, as the example of Thailand shows, have been prudent external borrowers, the debt problem continues to cause hardship by slowing growth and forcing expenditure cuts that have hurt the poor. The euphoria of the 1970s, when lenders and borrowers were equally irresponsible in the choice of projects and public expenditure patterns, turned into the gloom of the 1980s. A solution requires action on a number of fronts, such as designing imaginative debt reduction schemes, restructuring the debtor economies to build confidence that would again attract foreign capital and direct investments, and reducing protective barriers erected by developed countries that hamper the trade potential of developing countries. As the case of Mexico shows, the multilateral lending agencies have already started to encourage action on some of these fronts.

Progress in resolving the debt problem has been slow, partly because of the difference in the way the protagonists approach the problem. Debtor countries and their supporters favor debt forgiveness or debt suspension, arguing that the debt overhang retards growth, and without growth they cannot pay back the debt. The commercial banks, however, feel that debt forgiveness will erode stockholder confidence and will affect future lending to these countries. To reconcile these views, a debt strategy is needed that would have the following ingredients: (1) reduction of outstanding principal, (2) reduction of service payments, (3) injection of new money combined with structural adjustment in the economies to improve efficiency and build confidence, (4) the return of flight capital, and (5) encouragement of foreign investment. The well-known Baker and Brady plans to reduce third world debt, proposed by the United States in 1985 and 1989, respectively, included such a strategy with a key intermediary role for the multilateral institutions such as the World Bank and the IMF.

The first test case of this strategy is Mexico, which has carried out a remarkably deep and painful restructuring of its economy, sharply reducing fiscal deficits, bringing inflation under control, liberalizing trade and the financial sector, and reducing the number of government-owned enterprises. In response to these reforms, the World Bank and the IMF stepped in with major lending programs, and set aside resources to guarantee Mexico's debt agreements with private banks. This encouraged the banks and the government of Mexico to come to an agreement on the first three elements of the strategy: reduction in the principal, reduction in interest rates, and injection of new money. This agreement, combined with structural reform of the

economy, should help bolster confidence to attract investments and encourage the return of flight capital. If, over time, the strategy works in the case of Mexico, its variants could be applied to other countries. The key requirement is that countries give strong signals they are willing to carry out and sustain politically difficult adjustments. Adjustment attempts in other Latin American countries, such as Peru, Brazil, and Argentina, are not yet seen as sustainable.

The sluggish response of direct foreign investment to such efforts is partly due to the lukewarm attitude of host countries. In Latin America, this attitude is grounded in historical experience; foreign investment has been seen as a manifestation of the colonial attitudes of the developed world. The popular mythology resulting from this experience has led to laws institutionalizing the bias against foreign investment. Thus Brazil has strongly resisted foreign investment, relying on private loans instead. In Mexico, invitations to foreign investment remain guarded because of popular opposition, which, of course, is more difficult to overcome when there is little growth in the economy. The experience of Asian countries such as Thailand and Malaysia presents an interesting contrast. Foreign investment in these rapidly growing economies has increased sharply in recent years and has attracted remarkably little opposition. This experience further underlines the urgency of lightening the debt burden to enable countries to resume growth. Economic growth, in turn, will provide the right climate for foreign investment, for both the recipient and the investor.

Some Concluding Lessons

The country experiences with aid and external financing presented in this book suggest some important lessons for recipients (developing countries), for donors (developed countries and international organizations), and for international private lenders and investors. We present these lessons in three groups:

Lessons for recipients.

1. *Aid is not the most important element in development, but it can play an important role in assisting governments committed to growth-oriented economic policies.* The most important factor is the existence of a long-term growth strategy with a consistent macroeconomic framework to ensure that fiscal and trade deficits remain manageable and the exchange rate gives the right pricing signals. In this setting, aid and other external financing can help fill short-term resource gaps. Also, limited amounts of well-designed assistance can help improve recipients' capacity to plan policies and to prepare and implement

projects, and help develop the critical physical and social capital that is needed to accelerate the growth rate.

2. *In the long run, external capital is not a substitute for fiscal reform and domestic resource mobilization.* Persistent fiscal and trade deficits are unsustainable and are strong signals of fundamental instability in the economy. External capital eventually dries up and, in combination with capital flight, leads to debt problems and economic stagnation. External borrowing should therefore be used to complement to policies for reducing deficits and increasing domestic resource mobilization.
3. *Political commitment is essential for responsible macroeconomic management and policy reform: aid can help cushion painful adjustments.* Given current economic problems in many developing countries, sound macroeconomic management and policy reform require painful adjustments in the trade regime and the financial market, the creation of a conducive legal and fiscal climate for private business, and a reduction in subsidies to trim public expenditures. These reforms are likely to hurt long-established interests and therefore require a strong political commitment. Aid and external financing can help by providing a temporary cushion to soften the adjustment process.
4. *External financing that promotes outward-oriented policies achieves more rapid growth in GDP and employment than support for inward-oriented policies.* An outwardly oriented growth strategy will improve balance of payments and provide resources to invest in technology for future growth. Although there are exceptions, most aid recipients have been more outward oriented than other developing countries. Aid, therefore, has played an important role, complementary to countries' own industrial and trade policies, in shaping sustainable long-term growth strategies. Country experience suggests that, as part of this strategy, developing countries should increase trade among themselves while continuing to expand their share in the protected OECD markets.
5. *Countries that have done well in overall economic performance are those that succeeded in tackling the complex problems of developing agriculture, which employs the bulk of the population at early stages of development.* Agricultural growth was the major instrument for reducing the proportion of the population living in poverty and providing cheap food for workers. Much aid has gone into strengthening agricultural infrastructure, institutions, and technological innovations, which have contributed to agricultural growth. This role of aid will continue to be important.
6. *Although food aid can create disincentives for domestic food production, a well-conceived food aid program can maintain consumption of poor and vulnerable groups while programs are implemented to increase domestic*

production. Recurring droughts and foreign exchange shortages can be a major hurdle in early stages of development and can increase the vulnerability of the poor by increasing the price of food. Food aid can increase the internal supply of affordable food during periods when technological change in agriculture (with its long gestation lags) is occurring.

7. *The key to both growth and equity is investment in human capital.* Access to universal primary and secondary education, health care, and water, together with adequate transport and communications networks, is essential for broad-based participation of the poor in the growth process. By providing technical and financial assistance to these sectors, aid can make an important contribution toward brightening countries' growth prospects and improving equity.
8. *Programs for women in development and the environment can benefit from external financial and technical assistance.* Notwithstanding donors' passing whims, providing development opportunities to women (whose situation needs to be addressed in development programs) and managing the eco-environment should be important concerns of policymakers in developing countries. External financing can help initiate programs in these areas suitable to particular cultural and economic conditions. Donor agencies' technical know-how and their experience of what works and what does not can be quite valuable in designing such programs.

Lessons for official donors.

1. *In an unfavorable policy regime, characterized by serious distortions, aid can harm a country by aggravating distortions and imbalances.* By providing massive capital in periods of poor policy regimes, donors can exacerbate serious distortions and strengthen vested interests in inappropriate policies, making both trends difficult to reverse. Aid should be given only when countries are committed to sustainable growth-oriented policies.
2. *Supporting countries committed to policy reform will improve their future access to commercial capital markets, promote growth, and free up more resources for the less-developed countries.* As more countries realize their economic potential through policy reform, their access to commercial markets will improve, allowing donors to concentrate on those countries where acute poverty will require continued assistance.
3. *Aid programs are important in helping to create an environment that enables the private sector in recipient countries to play a leading role in development.* This objective requires donors to work closely with recipient governments to build infrastructure and improve the quality of the

labor force. These, along with sound macroeconomic management, are the vital ingredients in an enabling environment.

4. *The success of aid depends on its stability and predictability.* Donors should exercise constant vigilance to ensure that capital flows are stable. Abruptly turning the aid taps on and off leads to perverse behavior by recipients, who may treat aid as a temporary windfall and go on a spending binge that can actually retard growth.
5. *Whatever the immediate motives for aid, the long-term development consequences must be kept in view.* Unfortunately too much aid is given for strategic and commercial objectives, and too little for long-term economic growth and development. Greater public accountability regarding uses of aid as well as more public awareness of aid-related issues in both donor and recipient countries will help in spelling out consistent objectives for giving aid.
6. *External financing can encourage the adoption of growth paths that alleviate poverty.* Through policy dialogues related to the provision of long-term financing and short-term adjustment lending, donors can encourage investment patterns and protect public expenditures that support the poor. Investing in human resources (education and health) in the long run and providing nutrition support to the poor in the short run will facilitate short-term adjustments and promote poverty-reducing growth.
7. *Humanitarian aid is necessary for the least-developed countries even if policies are distorted.* In the least-developed countries, which have substantial policy distortions, large concentrations of poor, and no commitment to reform, extensive aid programs may be suspended but donors must continue to provide humanitarian aid for ethical reasons, as well as to create a climate for future policy dialogue on reform.
8. *Donors should avoid rapid changes in focus and the stigma of fads.* New issues such as women in development and the environment should not be added on to programs hurriedly; such a move strengthens the perception that they are passing fads. These important issues should be incorporated into existing programs and projects gradually and should be tailored to suit local cultural and economic conditions. To encourage recipient participation, donors must first create a climate of cooperation through open discussion.
9. *Coordination among donors can result in better aid programs.* Aid coordination among donors has many advantages. It helps prevent a multiplicity of projects in any one sector and overburdening the recipients' nascent public service and administration, and it promotes consistency in policy dialogue. However, care should be taken that donor coordination is not seen by recipients as collusive behavior designed to dictate political or strategic agenda.

10. *Aid tying in bilateral programs can work against the development objective.* Bilateral aid tying is unpopular and can lead to suboptimal use of aid funds by promoting inefficient capital and technology transfer. It also strengthens self-serving aid lobbies in both donor and recipient countries.
11. *In the long run, sustainable capital and technology transfer from developed to developing countries is best done by promoting trade rather than aid.* Donors can strengthen this process and discourage aid dependency by reducing trade barriers against developing countries and by removing restrictions on the transfer of technology.

Lessons for international private lenders and investors.

1. *Commercial banks need to develop more effective mechanisms for evaluating the longer-term macroeconomic, sectoral, and subsectoral effects of their loans and for monitoring their implementation.* Private capital has often been lent without adequate knowledge of the circumstances in which investments are made. Not surprisingly, past experience shows that large amounts of private capital have not necessarily been used more effectively than official assistance, as is usually believed, and may have caused serious Dutch-disease problems. Unless commercial banks invest in a better understanding of borrower circumstances, there is a real danger that a debt crisis may recur if lending resumes.
2. *Lessening the debt burden (through reduction or suspension) will help restore growth and recovery of debt in the long run.* Countries with a serious commitment to improve the investment climate have made a good case for debt restructuring to allow for growth. Without additional resources for investment, growth prospects will remain slim and the debt impasse will be perpetuated.
3. *Investors should sharpen their ability to assess risk in developing countries as a way to bridge the gap between the debtor countries' perception of their economic potential and that of investors.* It takes two to bridge this credibility gap. While developing countries must do all they can to restructure their economies to improve the investment climate, investors should improve their ability to read economic signals and respond quickly to opportunities. Multinational lending institutions that continually assess the economic prospects and performance of their borrowers can provide the information needed to build investor confidence.

Notes and References

1. Uma Lele and Ijaz Nabi, "Concessionary and Commercial Flows in Development"

Notes

1. All dollar values in this volume are in U.S. dollars. Official development assistance (ODA) is defined as those capital flows provided to developing countries by official agencies, each transaction of which meets the following tests: (1) it is administered with the promotion of economic development and welfare of developing countries as its main objective, and (2) it is concessional in character, with a grant element of at least 25 percent.

Total receipts net (TRN) includes ODA as well as (1) other official bilateral transactions that are not concessional or are primarily trade facilitating in character, (2) guaranteed export credits and other changes in bilateral long-term assets of the private nonmonetary and monetary sectors, and (3) private direct investment, portfolio investment, and, to the extent they are not covered in the preceding headings, loans by private banks. Flows from the multilateral sector that are not classified as concessional (for example, the bulk of International Bank for Reconstruction and Development [IBRD] assistance) are also included here.

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2. Uma Lele and Manmohan Agarwal, "Four Decades of Economic Development in India and the Role of External Assistance"

Notes

1. The consumer price index shows inflation rates of higher than 10 percent in only seven years since the early 1950s (Figure 2.10). Such inflation was almost always preceded by major droughts in the 1960s and 1970s (and also by oil shocks in the latter). Until 1981–82 India's commercial borrowing had been limited; by the early 1980s its debt service ratio had actually fallen from higher prior levels to around 10 percent. The picture has changed, of course, with a sharp rise in the ratio (up to 20 percent in 1986–87), as the terms of India's borrowing have hardened in the past few years.

2. There were half as many deaths in a single year on the subcontinent resulting from political violence as the total experienced by the United States in the whole of World War II.

3. The necessity for planning was accepted by the leading owners of Indian private sector enterprises. Their so-called Bombay Plan was more dirigiste than any of the plans adopted by the government.

4. U.S. bilateral assistance to India between 1949 and 1982 totaled about $10 billion. Nearly 60 percent of this total was in the form of food aid, another 20 percent was commodity aid, and only 17 percent took the form of project aid (Goldsmith 1986).

5. For instance in the period 1975–76 to 1979–80, IBRD commitments were about $1.2 billion and IDA commitments were almost $3.7 billion. For the years 1984–85 and 1985–86, total IBRD commitments for the period were about $3.6 billion, and those of IDA less than $1.9 billion.

6. Of this amount about $40 billion has been on concessional terms (for a breakdown of aid by source see Figure 2.1). Most of this aid has been on a long-term basis, though some of the additional food aid in the mid-1960s and some capital inflows since 1973 may have been used to meet short-run exogenous shocks and therefore

did not contribute to implementation of the growth strategy.

7. Although no precise definition of self-reliance was given in the various plan documents, the need to reduce dependence on external assistance was articulated for the first time in the Third Plan, which stated as a goal that no foreign aid should be required after 1970–71. The Fourth Plan (1969–70 to 1973–74), which was drawn up amid the controversies attending the 1966 devaluation, stated that the share of aid should be halved by the end of the plan and eliminated by the end of the Fifth Plan. The Sixth Plan (1980–81 to 1984–85) explains the concept of self-reliance by noting that "The objective of self-reliance articulated the Indian Government's desire to ensure a more equal relationship with the world economy and to reduce our vulnerability to international pressures and disturbances."

8. A number of studies examine the rationale for this strategy and its implications (Bhagwati and Chakravarty 1969; Mellor 1976).

9. This criticism questioned the greater priority accorded to industrial development ahead of agricultural growth (Vakil and Brahmananda 1956); the balance of payments implications (Nurske 1959) and later the entire strategy of import substitution through reliance on quantitative restrictions (Bhagwati and Desai 1970); the neglect of the financial planning needed to support the material balances underlying the plan model (Kalecki 1976); and the inconsistency of the dependence on large capital imports with the stated goal of self-reliance (Veit 1976). Nayar (1972) stresses the incongruence between the political environment needed to implement the plan and the actual balance of political forces and interest groups. The optimality of investment allocations in the plan and the identification of investment of output from the capital goods sector (Bhagwati and Chakravarty 1969) were also questioned.

10. After the balance of payments crisis in 1958, economists such as Max Millikan and W. W. Rostow, who had considerable influence, particularly on John F. Kennedy's thinking when he cosponsored a Senate resolution stating that India's economic development was crucial to U.S. security interests and later when he was president (Rosen 1985; Rostow 1985), had envisaged larger aid flows of about $1 billion a year for the remaining three years of the Second Plan, whereas the Aid India Consortium supplied only about $1 billion for the three years. In the initial years of the Third Plan, by applying considerable pressure on West European governments through the adoption of the matching formula, the U.S. administration was able to mobilize about $1 billion a year through the Aid India Consortium.

11. For a flavor of the internal debate and how external advice interacted with and affected it, see Rosen (1985).

12. Exports during the second and third years of the Third Plan, after provision of export incentives, grew by about 20 percent—namely, by as much as they had been expected to grow during the entire plan period—leading to changing perceptions regarding the export-inhibiting and efficiency-reducing effect of ISI and QRs.

13. For instance, the Foodgrains Policy Committee was established in 1947; another committee headed by T. Rao was constituted in 1950, and the Foodgrain Inquiry Committee was set up in 1957. In addition, a joint Indo-American team was established in 1955 to study policies needed to accelerate agricultural growth, and a Ford Foundation team was assembled in 1958 to study India's food situation.

14. One reason for the discrepancy between our figures and those of earlier work may be that the domestic prices presented in Figure 2.6 represent an average of prices at all markets where measurements were taken, while earlier studies have used the domestic price at only one market. Relying on one market during periods

when price or movement restrictions are in effect may produce unrepresentative and misleading results.

15. Lele and Goldsmith (1986) have documented, for instance, that President Johnson's policy of "short tethering," that is, of holding back shipments of PL 480 wheat to India, and the secret "Treaty of Rome" signed by C. Subramaniam, then the minister of agriculture, at the instigation of Orville Freeman, then the U.S. secretary of agriculture, accelerated the reform process. Srinivasan, on the other hand, argues that the treaty merely codified changes already undertaken by the Indian government on the basis of past experience (personal communication).

16. A similar approach, under the Intensive Agricultural District Programme (IADP) adopted in 1960–61, had been diluted by spreading resources too thinly over too wide an area owing to internal political considerations.

17. It prevented further work on models that suggested that investment allocations in the Indian plans were not optimal and that a shift in investment strategy was needed (Rosen 1985).

18. The devaluation and food aid episodes strengthened the notion that the government was not in control. The defeat in the war against China and the acceptance of arbitration in the border dispute with Pakistan in the West Gujarat area also contributed to the feeling that the government was incompetent. This air of incompetence and Mrs. Gandhi's inexperience led to the defeat of the Congress party in the 1967 elections in several states and a significantly lower majority in the central parliament.

19. Indo-U.S. relations experienced a setback when the United States supplied much less military aid than tentatively agreed upon after the war with China in 1962 and also failed to supply fighter planes. India also felt that the United States was pressuring India to negotiate with Pakistan over Kashmir.

20. Indian policymakers suspected that the pressure to change policies without adequate study and economic and political preparation together with the continuation of President Johnson's short tether policy on PL 480, even when agreed-upon changes were being successfully implemented, were part of a broader U.S. effort to change India's economic and foreign policies. Chester Bowles's report of his ambassadorship during this period suggests that this suspicion was well founded (1971: 439–40). But the Indian Finance Ministry, by not releasing the report to this effect, prevented the emergence of a domestic policy consensus regarding the new policies.

21. The Bell Mission report's agricultural sections were, however, the most effective and later became a blueprint for World Bank lending.

22. Since food-grain imports declined from $670 million in 1965–66 to $270 million in 1970–71, the aggregate figure overstates the extent of decline in industrial imports.

23. India's exports during the Second (1956–57 to 1960–61) and Third (1961–62 to 1965–66) Plans had grown at 0.7 percent and 4.8 percent a year, respectively, while those of NICs grew by 1.0 percent and 5.5 percent, respectively. Indian exports grew at 1.5 percent a year during 1966–68 and at 10.7 percent a year during 1969–74, while those of NICs grew at 7.0 percent and 24 percent, respectively.

24. Primary school enrollment in India, as a percentage of those eligible, rose from 74 percent to 85 percent between 1965 and 1983. Over the same time period, comparable figures for some other developing countries are as follows:

Indonesia: 72 percent to 115 percent (reflecting late enrollments of postprimary students)

Kenya: 54 percent to 100 percent

Nigeria: 32 percent to 98 percent

Tanzania: 32 percent to 87 percent

25. Out of total commitments of about $10 billion in the period 1975–76 to 1979–80, the World Bank contributed about $1.2 billion and IDA about $3.7 billion.

26. There is also currently considerable political support for liberalization, in contrast to the situation in the mid-1960s.

27. For instance, the new automobile policy was to encourage broad-banding so as to permit greater latitude to firms in determining their output mix; they were also to be allowed greater freedom to import modern technology. While the former change has been maintained, the latter has been reversed. After one collaboration agreement between a public sector unit and a Japanese company was permitted, the others were delayed while the new policy was reexamined for its BOP implications. Current indications are that no further collaboration agreements will be approved.

28. The Indo-U.S. relationship seemed to improve when Jimmy Carter became president of the United States and Morarji Desai became prime minister of India after Mrs. Gandhi lost the election in 1977, leading some observers to believe that larger aid flows might result (Lewis 1979). But there was no increase in U.S. bilateral assistance to India. In more recent years, the United States has objected to Indian access both to the Extended Fund Facility of the IMF and to World Bank loans in sectors where commercial loans may be available.

29. This scenario would hold, assuming that (a) export volumes were to grow at 7 percent per year, (b) imports were to grow at 6.5 percent per year during the Seventh Plan--as a result of liberalization—and at about 5 percent per year—the same rate as GDP—during the Eighth Plan (1991–95), (c) there were to be continued significant inflows of deposits from nonresident Indians, which do not need to be serviced, and (d) there were no reserve accumulation. While the debt service ratio is not unduly high, the situation may well be precarious in the mid-1990s, as commercial borrowings will be greater (Agarwal 1989). The World Bank estimates that if India's export volumes grow at 6 percent during the Seventh Plan and 9 percent during the Eighth Plan, the debt service ratio would rise to a maximum of about 25 percent in the middle of the Seventh Plan period before declining. This judgment seems to rely on an improvement in the terms of trade.

30. In a preliminary study, Agarwal (1988) found that cost and price factors were much less successful in explaining the performance of India's manufactured exports than explaining that of manufactured exports of Brazil and Korea, and often had the opposite sign. The growth in exports during 1987 and 1988 suggests that the new policies are effective.

31. It must be recognized that if growth in countries of the Organization for Economic Cooperation and Development (OECD) does not recover and market access is not improved, expanding exports by using an aggressive exchange rate policy means increasing India's export share at the expense of other countries. Increasing India's exports would be easier if OECD conditions were better.

32. Subsidies rose from about 1 percent of GDP in 1983–84 to over 2 percent in 1986–87, mainly for food and the inefficient domestic fertilizer industry; interest payments increased from about 2 percent of GDP in the Fifth Plan to a current level of 3.6 percent, as government expenditures have been financed by borrowings; defense expenditures increased from about 2.8 percent of GDP to over 3 percent of GDP in recent years.

33. The general trend is toward lower tax rates to reduce disincentive effects.

34. Raj (1984) finds ICORs to fluctuate even more and to be generally higher. They rise from about 3 in the first three plans to 6.24 for the years 1965–66 to 1969–70, and to 7.72 for the years 1970–74 to 1974–75. Since then they have declined to about 4.6.

35. Since ICORs have increased in almost all countries—for reasons not entirely clear—the gap between ICORs in India and in other countries has been reduced. For NICs, ICORs increased from 2.9 in 1970–75 to 4.4 in 1975–80, and for developing countries in general from 3.2 during the 1960–65 period to 5.4 in the 1975–80 period (Raj 1984).

36. No less an authority than L. K. Jha has noted that the cumbersome and time-consuming processes associated with the licensing system came to mean that "the time taken in getting final clearances [for major projects] . . . became almost as long as the time needed to construct and commission the project," that "projects belonging to one plan could not go into production until the next plan," and that "the slowing down of licensing hits the capital goods industries most and frustrates the hopes of those who expected that with the expansion of the indigenous capacity to make machines, Indian industries would become capable of self-generating growth" (Isher Ahluwalia 1985: ix–xi).

37. Dandekar and Rath (1971) had set the poverty line at Rs. 20 or $4.19 per month per person according to 1980–81 policies and exchange rates. Since the proportion of the population engaged in agriculture has remained roughly constant at about 70 percent, the number of workers in agriculture has increased. By 1973–74 the number of workers was already higher by 64 percent compared to 1949–50, while cropped area had increased by only 26 percent; thus per capita crop land had dropped from 0.33 hectares to 0.25 hectares. The average size of operational holdings had declined from 2.3 hectares in 1970–71 to 2 hectares in 1977. Since then a much faster decline in operational holdings has been under way, since the labor force has been increasing more than either the gross or the net area (Dantwala in Mellor and Desai 1985).

38. For instance from the 1962–65 period to the 1970–73 period, output grew from 4.5 percent to 7.5 percent in 48 mainly irrigated districts, from 1.5 percent to 4.5 percent in another 102 districts with irrigation and assured rainfall and from 0.0 to 1.5 percent in 62 other districts. The remaining 70 districts had growth rates from –1.5 percent to –3.0 percent and covered more than a quarter of the cultivated area.

39. Recall that the trendline of food production has not changed significantly since independence, but only the source of growth, implying that without productivity growth per capita production would have declined as in the colonial period. There is, however, some recent evidence of increases in food-grain production growth (as well as consumption growth), as stated earlier. On the consumption side, Sarma and Gandhi (1987) argue that there has been a small but steady improvement in income (and total expenditure) levels and in per capita consumption of food grains in the rural bottom quartile, but a decline in the per capita consumption of food grains in the urban bottom quartile, possibly because of the insufficient growth of urban employment referred to earlier.

40. The remaining 40 percent is spent on skilled labor, material costs, land acquisition, maintenance, and the costs of planning and implementing the various schemes.

41. The average wage cost for the employment guarantee scheme was raised in 1988–89 to $1.2/person-day as compared to the earlier $0.6/person-day. Employing two members per household for 200 person-days each, instead of one member for 100 days, a more realistic assumption for removal of poverty among the landless,

would raise the cost to about $23 billion.

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3. Ijaz Nabi and Naved Hamid, "The Aid Partnership in Pakistan"

Notes

1. The Korean boom refers to the upsurge in commodity prices resulting from the Korean War, which led to expansion in Pakistan's commodity exports, especially cotton. This, in turn, financed increased imports. The deficit emerged when the boom was over.

2. The principal focus was on interest-free banking and the creation of profit-sharing institutions.

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4. Narongchai Akrasanee, "Foreign Aid and Economic Development in Thailand"

Notes

1. These trade liberalization measures included, for instance, reduction of the rice premium and elimination of the rice reserve requirement, reduction of rubber export taxes, and the relaxation of export controls on white sugar.

2. Primary commodities as well as manufactured goods—notably rice (Farm Act), tapioca products (VER), textiles (MFA quota), and canned tuna (tariff quota)—face nontariff measures.

3. For the most recent overview, see Sibunruang and Tambunlertchai (1986).

4. The huge trade surplus and the steep appreciation of the yen has accelerated the Japanese capital outflow in recent years. On his official visit to Washington, former prime minister Nakasone announced that Japan would recycle $30 billion of its huge trade surplus over three years to developing countries (Jones 1987: 59).

5. For a comprehensive discussion of privatization, see World Bank (1986: ch. 10).

6. In the 1960s Thailand received a great deal of American military aid. It was frequently said that roads built in Thailand by the United States for security reasons had a major developmental effect by broadening rural markets. Such aid, however, was not entirely beneficial, for American military expenditure also resulted in increased crime, prostitution, and housing costs in some areas, especially northeast Thailand, where the effects of the American bases were most visible.

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5. Surjit S. Bhalla, "Economic Policies, Foreign Aid, and Economic Development in Sri Lanka"

Notes

1. The UNP ruled from 1948 to 1956, 1965 to 1970, and 1977 to the present; the SLFP was in power from 1956 to 1960, 1960 to 1965, and 1970 to 1977. The regularity of alternation even occurred in 1960 when two elections were held a few months apart. An extra election was necessary because the winner of the first election, the UNP, could not hold a majority in parliament.

2. The magnitude of this change is indicated by the fact that for most of the years food subsidy expenditure accounted for between 15 and 25 percent of total government revenue; today, the share is less than 5 percent.

3. Analysis of the ethnic strife between the two major groups—Sinhalese and Tamil—is beyond the scope of this paper. The reader is referred to Tambiah (1986) for a lucid treatment of the ethnic "problem."

4. Dahanayake (1977) examines the Sri Lankan economy in the context of a two-gap model for the 1956–72 period. For this period, previously unpublished data on three aid items are reported: project aid, commodity aid, and grants. Dahanayake noted that "the breakdown of financing items was obtained from the Central Bank of Ceylon through correspondence" (p. 223). A Richards-Stoutesdijk (1970) study suggests that prior to 1965 annual aid to Sri Lanka was on the order of $2 per capita, divided equally between Organization for Economic Cooperation and Development (OECD) and non-OECD countries. This estimate is consistent with the Central Bank series as shown in Table 5.1, suggesting that the Dahanayake–Central Bank data may be appropriate.

One final point regarding the data: Dahanayake–Central Bank data are based on disbursements; what may be more relevant from the policy point of view are data on commitments. From 1970 onward, the World Bank data on commitments are used; before 1970, the disbursements data are used. This should be kept in mind in interpreting the aid data reported in Table 5.1 and elsewhere in this paper.

5. The U.S. wholesale price index (1980 = 100) was used to transform the nominal into a real series.

6. See Summers and Heston (1984) for purchasing power parity figures and Bhalla (1989a) for an analysis of income and living standards in Sri Lanka and other developing countries.

7. The variables in the tables are generally organized around topics or themes, and not according to priority of reference. For example, Table 5.3 refers to farmer prices, a statistic not discussed until later.

8. MEP—Mr. Bandaranaike's SLFP's electoral coalition in 1956—stands for the Mahajana Eksath Peramuna or People's United Front.

9. In Bhalla (1988a,b) effective import tariffs are estimated for the years 1956–85 and are quoted in various parts of this paper. These estimates correspond very closely to the qualitative data available for the different years and are likely, therefore, to be reliable indicators of the underlying reality.

10. Sri Lanka was not alone in its commitment to import substitution in the late 1950s. Indeed, it would be difficult to find many developing countries that were not following such a policy on ideological grounds.

11. The effects of import controls can be seen in the trade deficit ratio of less than 10 percent during 1960–65, a historically low figure for Sri Lankan trade deficits.

12. According to this 1962 act, the U.S. government is forbidden to provide aid to countries that nationalize property of American citizens without "prompt and adequate payment of compensation."

13. This price is based on the unit cost of the first four pounds of weekly per capita rice consumption and is reported in Table 5.3 in units of Rs./kg.

14. Such massive subsidies did not, however, enable the SLFP to win reelection in 1965, apparently because of the confounding effect ot the scarcities of daily items, which the closed economy had brought about.

15. These three crops had accounted for more than 90 percent of Sri Lanka's merchandise exports during the entire period from independence in 1948 until 1968.

16. It should be emphasized that the effective tariff rates reported are for *total* imports. Since food imports accounted for about 50 percent of total imports and were not taxed, the average tariff rates on industrial inputs and consumer durables were about twice those reported.

17. The peculiarities of the voting system—no runoffs among the leading candidates, possibilities of coalition candidates, etc.—made such anomalies possible. See Jayantha (1984) and Bhalla (1988a) for a detailed discussion. Interestingly, the 1988 elections in Sri Lanka were to be on the basis of proportional representation.

18. An educated guess would be that the political rumblings were much more critical in reducing aid than the departures from the donors' economic ideologies.

19. One of the possible effects of the Land Reform Laws of 1972 and 1975 was that a major commodity exporter (that is, Sri Lanka) could not benefit from the commodity price boom. See Bhalla (1988a,b) for details.

20. The inflation figures reported are according to an adjusted price index reported by Bhalla and Glewwe (1985, 1986) and modified by Bhalla (1988a). The official price index for 1970–77 shows an extremely low inflation rate of 47 percent, because the official index was based on subsidized prices rather than market prices. Food (rice) prices were those prevailing in the ration shop, regardless of the quantity made available.

21. Again, the tariff on industrial goods was likely twice this amount since food

imports were not taxed, and they accounted for an average of 42 percent of total imports during 1971–77.

22. In addition to the figures relating to consumer prices, there are also indications that nominal GDP was overstated by 15 to 25 percent during the 1970s (see Bhalla and Glewwe 1985).

23. It is significant that Ronnie de Mel, finance minister during the recent UNP reform years and now a member of the opposition SLFP, stated that the SLFP, if elected, would not go back to the previous controls regime. In other words, the stark dichotomy between the UNP and SLFP economic policies may have ended with the 1970–77 disaster.

24. The new version of the food stamp program in 1986 has increased somewhat the benefits to the recipient households; see World Bank (1988) and Bhalla (1988a,b) for details.

25. This component was initiated (that is, the area of irrigation was identified) in 1972 and financing started in December 1979. Thus, it is a part of both the old and new Mahaweli programs.

26. The aggregate (non–per capita) figures tell a similar story. Real average annual aid levels were $323 million during 1971–77 and were 60 percent higher, at $517 million in 1978–86.

27. The reason this figure is approximate is because a revision in the national accounts data in 1970 biases upward the growth estimate for that year.

28. The past decade in Sahn is a comparison that includes the end years 1969–70 and 1980–81 (as well as data from 1978–79 and 1981–82) but *excludes* the intervening survey of January–February 1973. As pointed out in Bhalla and Glewwe (1985), this is a singularly inappropriate comparison since consumption levels were biased upward in 1969–70 and biased downward in 1980–81. In any case, Table 5.8 presents food consumption data for the above three surveys as well as preliminary results from 1985–86.

29. Anand and Kanbur use the GDP deflator indexed at 1959 = 100.

30. Of course, the issue of improved targeting is ever-present. Indeed, the 1986 reforms on food subsidy expenditures had better targeting as a major goal.

31. Though other items besides rice have been handled by government ration shops, the term "food subsidies" refers primarily to consumer rice subsidies. This conclusion is buttressed by the fact that during the peak food subsidy expenditure period of the early 1960s, both sugar and wheat consumption were *taxed* at rates ranging from 20 percent to 100 percent or so. Consequently, the evolution of rice prices is discussed in the context of food subsidies.

32. It appears that the targeting of the program has been reasonably good. Though obvious leakages are present, it is the case that (data from Edirisinghe) almost 80 percent of the poor (if defined as the bottom 20 percent of the population) received the subsidies.

33. The tax rate is defined as $((P_c - P_m) * 100/P_m)$ where P_c is the effective consumer price and P_m the import price.

34. Unfortunately, the report does not contain estimates of the household size for the urban, rural, and estate residents. Consequently, the assumption has been made that these household sizes in 1985–86 were the same as those in the corresponding sector in 1980–81.

35. For comparability purposes, *only* the data reported in the appendixes of the Anand and Kanbur paper (and used by them) are used in the estimations reported in Table 5.8. Regarding the real income variable, the authors correctly point out that

revisions in the GDP series in Sri Lanka (in 1959–70) underline the need for a consistent series. Consequently, the series reported in Rasaputra (1986) is used by them and in Table 5.8.

36. For both infant mortality and crude death rate, the significance level increases if the data for 1982 (as contained in the appendices in Anand and Kanbur) are incorporated in the regressions.

37. The enrollment rate was obtained by interpolating the population figures for the age group 6–18 years (obtained from decal censuses) and using these estimates to deflate actual enrollment levels.

38. Preliminary work on improved specification and estimation is presently under way by the author.

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6. Arthur Hazlewood, "Foreign Aid and Economic Development: Kenya"

Notes

1. Between 1964 and 1985 the quantity of tea produced for sale increased more than seven times, that of sugar cane nearly six times, that of maize nearly four times, and that of coffee more than twice.

2. Figures in 1983 U.S. dollars are from Cancian (1986: 122).

3. The documents may have been written by foreign advisers who have not accurately reflected the views of Kenyans (Dijkerman 1986: 120).

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7. Paul Collier, "Aid and Economic Performance in Tanzania"

Notes

1. The major exceptions to this neglect are provided by Lele (1984) and Lele and Meyers (1989). While the present paper has the advantage of an extended data set not available to Lele, much of this analysis supports the thesis developed in her work.

2. Two of the rural household surveys, 1969 and 1976–77, were conducted by the Bureau of Statistics and had reasonably similar concepts and methods. The other two were designed by the present author with closely similar income concepts and methods. Finally, the 1982–83 survey was a trace on part of the 1976–77 sample.

3. The Basic Industries Strategy was designed to build a heavy industry base for the economy which would substitute for imports.

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8. Claude Freud, "Aid and Development in Senegal"

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9. Heba Handoussa, "The Impact of Foreign Aid on Egypt's Economic Development, 1952–1986"

Notes

1. A rough estimate of Soviet aid disbursements to Egypt from 1960 to 1970 is $2.40 per capita per year. In comparison, U.S. aid disbursements have averaged $18.80 per capita per year in the 1975–86 period (both figures are in current prices). By international standards, Egypt's ranking as a recipient of aid is only second to that of Israel, which has received a consistent $200 per capita for the past thirty years. See Baldwin (1985: 320).

2. The approximate share of American petroleum companies in profit transfers for 1984–85 was about 70 percent of the $2.06 billion in transfer payments to foreign oil companies in 1984–85. See Statistical Appendixes in IMF (1985), World Bank (1986). The total value of aid transfers from the U.S. in the same year is $1.34 billion. With reference to trade, average U.S. exports (nonmilitary) to Egypt were $2.093 billion in 1983–85, while average aid disbursements were $1.255 billion. See American Embassy (1986).

3. Per capita food consumption was calculated using domestic production data

for wheat, maize, rice, and millet, and trade data from the FAO yearbooks. GNP growth rates are from Ikram (1980).

4. Aid figures for the 1958–66 period are from El Kammash (1968: 313), Madkour (1983: Appendixes), and Ikram (1980: 357).

5. See Abdel-Khalek (1982). The formula used to calculate the grant element is that developed by the Development Assistance Committee of the OECD. The financial terms and resulting calculations are reproduced in the appendix.

6. Cost of wheat imports calculated from IMF (1975: 66, 99).

7. All balance of payments data are taken from World Bank (1986: 91), based on information provided by the Ministry of Finance. It should be noted that some entries vary significantly from those reported by the IMF (1985), which are based on central bank data.

8. Factor service receipts other than remittances consist of interest earned on foreign currency balances held by residents with the banking system.

9. These figures are according to the balance of payments on capital account for the years 1975 to 1984–85, World Bank (1986: 92). The aggregate value of annual grants amounts to $14,360 million; the aggregate value of net annual official loans (disbursements less amortization) amounts to $10,110 million.

10. Import data are based on customs records as compiled by CAPMAS, annual trade statistics, starting in 1975. We have reclassified total imports into five major groups: food imports, building materials, other intermediates (nonfood, nonconstruction), capital goods, and nonfood consumer goods. Food imports include entries from primary goods (for example, wheat and maize), intermediates (vegetable oils and fats), consumer nondurables (for example, flour and sugar). The ratio of expenditures on each group to total imports has then been applied to World Bank data on merchandise imports for consistency. There may be a bias that works to underestimate the value of food imports, because of the lower exchange rate at which official imports of food are calculated. All trade statistics are in £E.

11. World Bank table on Cereal Imports and Food Aid, prepared by EPD Commodity Studies and Projections (World Bank 1987a).

12. The value of capital goods imported by domestic companies in 1984–85 was obtained from the annual report of the central bank (1985–86) and converted at the official rate of £E 0.80 equals $1 to give $2,250 million.

13. IMF data on Law 43 equity participation are in the form of own-exchange imports of capital goods. The annual average for the years 1978 to 1983–84, $312 million, is assumed to have been constant over the entire 10.5 years from 1975 to 1984–85. See IMF (1985: 130–1) and statistical extracts of IMF report (1983). Own-exchange import data in this table exclude imports of Law 43 companies. Series extends from 1978 to 1983–84, for which annual average stands at $451 million.

14. Most of the residual growth (22.4 percent in aggregate public value added) is accounted for by the wage bill in government administration. The balance of 1.6 percent is the share of public authorities, including utilities and electricity, whose contribution is minimal because of the significant losses incurred from their operation. See Handoussa (1986).

15. Results of the 1977 to 1981–82 and 1982–83 to 1986–87 plans can be found in Ministry of Planning (1982, 1987).

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10. Francisco Gil Diaz, "Mexico's Experience with Foreign Aid"

Notes

1. If one looked at the change in the absolute level of external public debt, the scene would appear even more worrisome, since the real exchange rate declined steadily throughout this period.

2. Sexenio is the six-year presidential term.

3. The growth figure for 1987 (1.5 percent) is based on a preliminary estimate.

4. The internal peso debt is considered for this estimate because from 1983 onward nearly all the internal dollar-denominated debt is matched by outside dollar liabilities of the Mexican banks that hold such credits.

5. A credit for $24 million was given to the Federal Electricity Commission in 1949 by the World Bank. The first credit from the IDB, which arrived in 1961, was a credit of $2.2 million given to Nacional Financiera for industry and mining.

6. The exceptions are the SICARTSA II steel mill and the Laguna Verde nuclear reactor station, whose costs have become unreasonably high.

7. From the beginning of 1983 through May 1987, Mexico experienced a net foreign debt amortization (including private debt and the increase in the international reserves of the central bank) of $3 billion, compared to a use of foreign resources of $76 billion during the past two governments (Mancera 1987).

8. Agricultural research in Mexico is largely synonymous with seed improvement. From 1943 through 1960, the Rockefeller Foundation supported research in cooperation with the Department of Agriculture to improve the quality of seeds. See Hertford (1971) and Ardito-Barletta (1971).

9. The Mexican government would offer to the international banks new bonds or part of its old external debt. They would be offered with a discount and a maturity term of twenty years. At the moment of qualification of the different offers, the Mexican government would accept those that allowed for the highest

discount possible, given that this would be directly related to the reduction in the debt finally achieved. The Mexican government would then invest part of its international reserves in U.S. Treasury bonds. The maturity term for these would also be twenty years, in order to have by that period exactly the amount to cover the price the banks paid in the first place for the canceled debt. The net reduction in the debt would be the difference between the debt canceled and the price paid by the banks.

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11. José Antonio Ocampo, "Foreign Assistance and Economic Development in Colombia"

Notes

1. For trends through the mid-1970s, see Urrutia and Berry (1975) and Urrutia (1984). More recent trends of income distribution in urban areas are analyzed by Misión de Empleo (1986: ch. 1) and Reyes (1987). Two recent papers, Aguilar and Perfetti (1987) and Uribe (1987) consider the evolution of rural income distribution.

2. For a detailed analysis of major macroeconomic phases in the postwar period, see Ocampo et al. (1987).

3. For a summary of industrial policies in this period, see Ocampo et al. (1987).

4. See a detailed history of exchange rate policies in Wiesner (1978). This important study disregards, however, the permanent real effects of the 1957 devaluation.

5. Lending to the nonfinancial private sector is overestimated, however, in the balance of payment statistics used to calculate flows in Table 11.3, because net inflows in 1962–66 ($396 million) exceeded the private debt of nonfinancial institutions (including the National Coffee Fund) in 1966 ($324 million) by a considerable margin.

6. See also a detailed analysis of fiscal policy in this period in Perry and Cárdenas (1986) and Cárdenas and Ocampo (1985).

7. See the official account of the crisis in Lleras (1967) and Espinoza (1970). A

conflicting view of negotiations with the IMF in this period has been proposed by Currie (1984) and López (1987).

8. Foreign agencies argued for greater *temporary* flexibility—see López (1987)—but opposed *permanent* flexibility, i.e., the crawling peg. In fact, as clearly demonstrated by Lleras (1967), the system established in March 1967 was expected to be a temporary dirty floating of the exchange rate (similar to that already experimented with in 1933–35 and in 1957) but soon evolved into a crawling peg.

9. See a development of the Dutch disease hypothesis in Edwards (1984) and Thomas (1986).

10. Early in this period there was not, strictly speaking, a foreign exchange shortage. But, because there was an excess demand for imports at the time (see section on External Financing and Economic Development), these years are included as part of a global period of dollar shortage.

11. See, for example, Perry et al. (1981), Londoño and Perry (1985), and Perry and Cárdenas (1986). Gómez and Thoumi (1986), while criticizing the former studies, also find a similar effect (i.e., an elastic response of public investment to external borrowing), particularly in 1974–83.

12. Alternative balance of payments projections—see, for example, Ocampo (1987)—indicate that, despite some inadequate assumptions, gross financing needs are correctly estimated in the figures presented by the Colombian government to the international financing community. Thus, for simplicity, only the latter are used in Table 11.8.

13. For a summary of this debate, see Lora and Ocampo (1987).

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12. José L. Carvalho "Aid, Capital Flows, and Development in Brazil"

Notes

1. Despite the discrimination it faced, the agricultural sector grew at an average

rate of more than 5 percent a year, owing mainly to the expansion of the agricultural frontier. For details see Carvalho (1986).

2. The nuclear energy project and the steel railroad project are two examples of such noneconomical enterprises. A detailed description of the New Energy World Power philosophy that justified this huge investment program appears in the II National Plan for Development, covering the period 1975–79.

3. See Langoni (1973) and Fishlow (1975). Hoffman (1971), for example, estimated a Gini coefficient of 0.45 in 1960, 0.53 in 1970, and 0.59 in 1980. According to the 1980 census, the 20 percent of the population with the lowest income accumulated about 2.8 percent of total income, while the top 20 percent received about 62 percent of total income. For evidence on social mobility, see Gibbon (1979).

4. These three sections are based on Carvalho (1985), Burns (1970), Donnelly (1970), and Skidmore (1967). Some of the data in this paper conflict with those of these previous works; these differences are most important for the national accounts data, which were recently revised by the Fundação Instituto Brasileiro de Geografia e Estatistica (IBGE). I am grateful to Maria Alice Veloso for providing complete revised national accounts data before their publication. The other data differ only slightly due to marginal revisions.

5. This bias against foreign investment resulted from an economic nationalism that was highly compatible with the autarkic development strategy implied by import substitution.

6. The exchange rate remained at Cr$18.7 per U.S. dollar from 1947 to 1953, when the cruzeiro was devalued and a multiple exchange rate regime was implemented together with an auction system of foreign exchange for imports that were still subject to licensing.

7. The military aid was insignificant in dollar value and consisted of training Brazilian personnel in the United States. This military cooperation formally ended in the second half of the 1970s. For more details on the Brazil–United States relationship during the 1951–55 period, see Vianna (1987).

8. The World Bank officials argued that the U.S. Ex-Im Bank should stop financing development projects and programs. For details see Vianna (1987).

9. Balance of payments problems forced the government to change the economic policy and to send missions to the main creditors (United States, England, and West Germany) to reschedule commercial arrears. Besides altering the exchange rate regime, Law 1807 required foreign capital to be registered at SUMOC (the monetary authority) for the purpose of profit remittance and capital repatriation.

10. For the changes in Brazilian import structure see Donnelly (1970).

11. There was a political crisis in 1956 at the moment President Kubitschek took office. A military group, arguing that Kubitschek was corrupt, tried to prevent him from taking office. It was, however, a very short-lived episode both generated and put down by the military.

12. Later, Law 4131 was modified by Law 4390 (8/19/64) and regulated by Decree 55762 (2/17/65), and in the end was quite liberal toward the participation of foreign capital in the Brazilian economy.

13. In 1973 about 70 percent of the petroleum consumed in Brazil was imported, at a cost of $769 million, accounting for about 12 percent of total imports. Then the average price per barrel rose from $3.62 in 1973 to $12.41 in 1974, raising the total cost of petroleum imports to $2,840 million. This new total corresponded to 22.5

percent of imports or about 36 percent of exports.

14. The national steel industry (Companhia Siderúrgica Nacional, or CSN) is a result of this xenophobia. According to Baer (1969), CSN was born as a state enterprise because the government did not allow foreign investment in this sector unless it controlled less than 50 percent of the enterprise.

15. USAID was involved in establishing graduate programs in Brazil, initially in mathematics, economics, and agriculture.

16. The new constitution was proclaimed in October 1988, but the complementary laws required to make it applicable had not been discussed as of April 1989.

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13. John W. Mellor and William A. Masters, "The Changing Roles of Multilateral and Bilateral Foreign Assistance"

Notes

1. The 1950 Act for International Development implemented Point Four of Truman's inaugural address, making it "the policy of the United States to aid the efforts of the peoples of economically underdeveloped areas to develop their resources and improve their living conditions" (Ohlin 1966: 25). The Point Four program is widely recognized as the first modern development assistance program, although a number of international technical assistance and resource-transfer efforts preceded it.

2. We use the term "comparative advantage" in the sense that different foreign assistance donors share broad objectives but have different relative advantages, in terms of both quantity and quality, in provision of the various goods and services required to achieve those objectives. Thus some specialization among donors will increase the total value of the objectives achieved through a given foreign assistance effort. As in the real world of international trade, individual foreign aid donors commonly provide a wide range of goods and services, with the total quantity and proportions of each differing among donors.

3. On the latter it must be noted that the Brundtland Commission report (1987) on the environment places itself squarely in the context of long-term development and avoids the preemptive characteristics of the fads of the 1970s and the 1980s; perhaps the necessary lesson has been learned.

4. Members of the DAC are Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, the United States, and the Commission of the European Communities. (Greece, Iceland, Luxembourg, Portugal, Spain, and Turkey are members of the OECD, but are not members of the DAC.) In 1984 and 1985, DAC countries gave 79 percent of global ODA. OPEC countries gave an additional 11 percent; CMEA (Council for Mutual Economic Assistance) countries, 9 percent; and non-DAC OECD countries, 0.5 percent. The DAC monitors aid flows, and has published an annual "Chairman's Report" since 1962. All of the data presented in this section not attributed to other sources are from various issues of this report, now titled *Development Cooperation.*

5. The term "private" here may be misleading. Although this money is lent from private banks, it is usually borrowed by a government as general obligation sovereign debt.

6. Official development finance (ODF) is bilateral official development assistance (ODA), plus all development-oriented multilateral flows. In this section and throughout this chapter (except where otherwise noted), bilateral aid includes only ODA, but multilateral aid includes both concessional and development-oriented nonconcessional flows. (A major exception is IMF credit, which is typically excluded.) This convention is increasingly used by the DAC, because they judge that interest rates and payment structure (which determine the "concessionality" of aid) do not fully describe multilateral aid. In particular, nonconcessional multilateral aid is additional to what would be otherwise available at that interest rate, is often targeted toward public goods, and may be accompanied by valuable technical assistance. It may also serve as a catalyst for other funds, as shown in the chapter by Kharas and Shishido in this volume. For these reasons, it functions more like bilateral ODA than like a nonconcessional bilateral flow.

7. These were, in the order of their founding, International Bank for Reconstruction and Development (IBRD), Food and Agriculture Organization (FAO), UN Children's Fund (UNICEF), World Health Organization (WHO), UN Relief and Works Agency (UNRWA), UN High Commission on Refugees (UNHCR), and International Finance Corporation (IFC) (*Development Cooperation 1980*: 138).

8. Inter-American Development Bank (IDB), International Development Association (IDA), World Food Program (WFP), African Development Bank (AfDB), UN Development Program (UNDP), Asian Development Bank (ADB), UN Population Fund (UNFPA), and CGIAR.

9. Concentration ratios can hide a great deal of information. In particular, they do not show who the top recipients are, which may change considerably over time. Also, it is important to look at all three ratios, because donors may concentrate on one (e.g., Australia), two (e.g., the United States), or more recipients.

10. The UN General Assembly initially recognized twenty-five LLDCs in 1971. As of 1988 there were thirty-six.

11. The constituencies for aid are discussed at length in Pearson (1969) and Wall (1973). Recent data on public opinion is reported in Contee (1987), in *Development Cooperation 1934*, and in Mosley (1987).

12. Krueger (1986) sees that the public-good nature of aid, particularly from multilaterals, springs from its unique ability to overcome global market failures in international trade and finance, particularly adverse selection and moral hazard in international credit and insurance. By offsetting these market failures, aid agencies increase the efficiency of global resource allocation. Kharas and Shishido in this volume give an example of such a mechanism: they argue that private banks shelter themselves from repudiation risk through the imposition of credit ceilings, and that official development finance helps to raise those ceilings. Presumably, official creditors can do this because they have broader recourse and so face lower risks of repudiation, or because they have a broader portfolio and can tolerate more risk, or because they have a lower cost of capital. In essence they use these advantages to help the banks, thus making the market function more smoothly.

13. It is often argued that the Marshall Plan provided the political and institutional foundation for all subsequent U.S. aid efforts. It was, of course, very different from aid to the Third World. First, for Europe, aid from the United States was a matter of reconstructing destroyed physical capital, in the context of largely intact human and institutional capital. Second, for the United States, aid to Europe was of a much larger magnitude than subsequent efforts in the Third World: the United States spent $13 billion over four years (1948–51), or more than 1 percent of U.S. GNP.

14. Briefly, if all donors' contributions are linked in a rigid matching-funds arrangement, then any cutback in their contributions results in a proportional cutback in program size. Even if each donor pays for only a fraction of a program, if that fraction is fixed, then changing any one contribution changes the entire program's size proportionally (unless funding ratios are adjusted). Thus, if each donor receives exactly the same fraction of the program's benefits as it pays, then they all have every incentive to try to adjust the program's size in accordance with the program's full marginal productivity, as if each one were the full owner of a competitive firm.

In contrast, if a given donor's funding share is larger than its share of the benefits, then it will have an incentive to shirk: to reduce the program's size, increase its marginal productivity, and give that donor marginal returns equal to its contribution. And, if the matching-funds arrangement among donors is not enforced, then

the standard public-goods problem comes into play. All contributors then have an incentive to shirk, looking for a free ride on the donors who have the greatest need for the service in question.

In practice, of course, all this is not persuasive. The benefits from foreign aid programs have never been well defined, let alone allocated among donors. And formal commitments to matching-funds arrangements have been rare, because full information about other governments' intentions is not available. Despite these obstacles, however, matching-funds agreements between governments remain the dominant device for overcoming international public-goods problems, in the absence of international taxation. (For a discussion of the problems of international taxation, see Lewis 1986: Appendix A, "New Means of Generating Concessional Flows.")

15. This is chronicled annually in *Development Cooperation*. In 1984–85, the DAC estimated that 46 percent of bilateral aid was completely untied, up from 37 percent in 1976. Like protectionist trade legislation, the tying of aid probably results in net national welfare losses to the donor. It does, however, transfer resources from a diffuse population (the constituencies for aid) to a focused one (the firms from whom aid-provided goods and services are procured). For recent discussions of who benefits from tied aid, see Mosley (1987), May (1987), and Cable and Weale (1982). Interestingly, a few DAC donors (especially France, Japan, the Netherlands, and the United States) have been able to untie some of their aid partially, allowing procurement from third-party developing countries but not from competing industrialized ones. This often does little to reduce the real cost of resources: it merely redistributes the policy-induced rent, from the donor to a third-party developing country.

16. The Consultative Group is a multilateral body coordinating over $200 million a year in funding for thirteen International Agricultural Research Centers. It mobilizes support for the Centers' budgets by publicizing their needs, while ensuring that their work is complementary and accords with the agendas of the aid community.

17. Such transfers can also be facilitated by private institutions. The Rockefeller Foundation's early work in institution-building technical assistance to agricultural research in India is an important example (Lele and Goldsmith 1988).

18. Participating agencies were from Denmark, France, Germany, Sweden, the United Kingdom, and the United States, plus the EEC and the World Bank. Participating recipients were Cameroon, Kenya, Malawi, Nigeria, Senegal, and Tanzania. Preliminary results of the project are now available in MADIA (1987) and as Research Reports from the Development Strategy Division of the World Bank, while final results will be published in a series of three volumes including Lele and Hanak (forthcoming).

19. An important sociological feature of multilateral activity is that it is helping to create a class of technicians, of all nationalities, who have extensive experience in developing countries. In this sense they are similar to the technicians and administrators of the colonial era. But unlike colonial officers, many modern development practitioners identify more with their profession than with any particular country.

20. Krueger (1981) notes that official aid *always* affects policy, in the sense that it allows governments to do things they would not otherwise be able to do. The real question is, which policies does aid support? Aid consists of foreign capital for public goods. It therefore naturally substitutes for foreign exchange, domestic savings, and taxes. Aid allows recipient governments to attempt otherwise excessively import- and capital-intensive industrialization policies, and to rely on otherwise

untenable fiscal deficits and trade taxes rather than higher yielding and less distortionary (but more politically costly) taxes on land, property, and income. These potential side effects of aid are similar to the Dutch disease effects of a commodity export boom, and can considerably worsen the macroeconomic environment for all activities. This makes policy dialogue, aid coordination, and even conditional aid natural parts of the aid process. All of the country studies in this volume reflect this point. For example, Ocampo discusses how the availability of certain types of aid distorted Colombia's investment policies toward import- and capital-intensive projects, and Handoussa shows how U.S. aid contributed to a Dutch disease–like bias against the tradables sector in Egypt.

21. For fuller discussion of the role of PVOs, see Gorman (1984), Bolling (1982) and Sommer (1977) for the United States, and van Heemst (1985) for Europe. PVOs are also discussed in Krueger and Ruttan (1983) and Cassen and Associates (1986).

22. The higher degree of public confidence in the work of PVOs attests to their performance in this area. In Contee (1987), it is reported that 17 percent of those polled felt "a great deal of confidence" that money given to PVOs reaches needy people, whereas only 7 percent had such confidence in official U.S. aid. While money given to PVOs may indeed reach needy people more than money given to official agencies, the only evidence for this proposition is anecdotal and is spread chiefly by the PVOs themselves.

23. As before, data in this section are from various issues of *Development Cooperation*, if not attributed to other sources.

24. The DAC total averaged $20.803 billion per year for these two years.

25. Some writers suggest that large country missions are no longer in USAID's true comparative advantage, because recipient countries and other aid agencies have improved their own analytic capacities, making USAID's analyses now less important (Sewell and Contee 1987). But if USAID is to be successful at long-term institution building and the creation of absorptive capacity, country-specific understanding will be crucial. Perhaps what is needed is greater autonomy in programming for the country missions, so that USAID can take fuller advantage of their unique position. Strong country missions have now become a virtually unique advantage of the United States in foreign assistance impact and are a major source of comparative advantage in policy dialogue.

26. Total flows from all multilaterals to all developing countries averaged $16.126 billion per year for these two years.

27. The importance of these operations is rarely appreciated. As of June 1985, for example, the Bank had accumulated $5.2 billion in retained earnings from its operations, more than the total paid-in capital from donors of $5.1 billion. For details, see Blitzer (1986).

28. This is an important mechanism by which the World Bank can cooperate with bilaterals, combining the Bank's technical and financial advantages with other agencies' advantages in long-term institution building.

29. In rough order of size, the most important of these are the OPEC Fund for International Development (OFID), the Arab Fund for Economic and Social Development (AFESD), the Islamic Development Bank (IslDB), and the Arab Bank for Economic Development in Africa (BADEA).

30. Lele (1987) notes that aid to Africa has been more susceptible to these fads than aid to Asia and Latin America. This may be because African governments have been newer and weaker than governments in Asia and Latin America, and have had less control over the aid they have received.

31. In retrospect, the emphasis in the 1960s on the construction of large, capital-intensive infrastructural projects was probably a fad as well. Many of those projects failed because they were too large for their surroundings, resulting in unused capacity and inability to service recurrent costs (Krueger and Ruttan 1983). But that era allowed more diversity, and other types of development aid were practiced as well.

32. Specific prescriptions will of course vary across countries and across time. Such a strategy is summarized by Lele and Agarwal in this volume, and discussed at length in, for example, Mellor and Lele (1973), Johnston and Kilby (1975), Mellor (1976), Mellor and Johnston (1984), and Mellor (1986).

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14. T. N. Srinivasan, "Food Aid: A Cause or Symptom of Development Failure or an Instrument for Success?"

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15. Homi J. Kharas and Hisanobu Shishido, "The Transition from Aid to Private Capital Flows"

Notes

1. The grant element is defined as the percentage difference between the face value of the debt and the value of the stream of interest and principal payments discounted at 10 percent.

2. Several market failures that would preclude lending in the absence of credit rationing have been identified. These include asymmetric information (the lender cannot distinguish *ex ante* between "honest" and "dishonest" borrowers; Jaffee and Russell 1976); moral hazard and adverse selection (Stiglitz and Weiss 1981); and repudiation risk (Eaton and Gersovitz 1981; Sachs and Cohen 1982).

3. Only heuristic descriptions of the supply and demand variables are given here. For an analytical treatment based on household utility maximization, see Glick and Kharas (1986).

4. The use of the current account deficit has an advantage in this respect over

the more common use of the stock of credit as the dependent variable. The former approximates the first-difference of the latter (properly defined); thus, any country-specific effects should be eliminated.

5. Eaton and Quandt (1983) report on a methodology that permits the current period probability of rationing to enter demand. This is not, however, the correct specification for the problem noted above, which requires future period rationing probabilities to also enter current demand. Furthermore, they report little change in the results from the more general methodology, combined with large numbers of computational failures and heavy costs. We did not, therefore, attempt to include the probability of being rationed into demand behavior.

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16. John Williamson, "Recent Developments in the International Capital Market"

Notes

1. Our own analysis at the Institute for International Economics had been based on the hope of a rapid return to voluntary market access: see Bergsten, Cline, and Williamson (1985).

2. In national markets securitization has also been promoted by the packaging of standardized securities by intermediaries who saw this as a way of earning a part of the banks' traditional spread.

3. The five countries were the United States, United Kingdom, Japan, Germany, and the Netherlands. Swiss statistics are available only since 1984.

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17. Uma Lele and Ijaz Nabi, "Aid, Capital Flows, and Development: A Synthesis"

Notes

1. These include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Jamaica, Mexico, Peru, Uruguay, Venezuela, Ivory Coast, Nigeria, Philippines, Morocco, and Yugoslavia. See World Bank (1988b).

2. Given India's population of 800 million, its ODA receipts (as well as those of China, not covered in this volume), in per capita terms and as a percentage of GNP, have been minuscule compared with those of the smaller African and Asian countries. India has received less than $2 per capita and 2 percent of GNP in most years, compared with $20–$50 per capita and 8–15 percent of GNP in Tanzania (with a

population of 24 million), Senegal (7 million), and Sri Lanka (16 million).

3. Although the numbers presented here are estimates, the argument is, by and large, a valid one.

4. The U.S. share of total bilateral and multilateral ODA declined from about one-half in the mid-1960s to less than a quarter by the end of the 1980s. The decline in the U.S. share in total bilateral ODA from the OECD countries was even sharper—from nearly two-thirds during the 1960s to a quarter by the late 1970s. The U.S. share rose again to about one- third by the mid-1980s, but mainly because the United States reduced its contributions to multilateral ODA while other donors increased their shares of multilateral ODA. In the aftermath of the Vietnam War and the subsequent changes in U.S. strategic interests, the United States directed its smaller ODA share to only a handful of strategically important countries. In 1987, nearly 60 percent of total U.S. economic and military assistance went to Israel, Egypt, Turkey, Pakistan, and El Salvador.

5. In this chapter we have used the *World Development Report* data presented in Table 1.1, as well as information contained in the country studies (which is mostly derived from national sources). Because of problems of comparability between the two data sets, we have made selective use of both in order to present as consistent and accurate a picture as possible.

6. The so-called Dutch disease refers to the contraction or stagnation of traded goods in response to a favorable shock from either a resource discovery or an increase in the price of a commodity export (oil, for instance). This windfall causes a reallocation of productive factors, which initially move from other activities into the booming sector. Then, because of increased spending on nontraded goods, factors of production move from traded goods into the nontraded goods sectors.

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