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9. ABSTRACT

These proceedings present the contents of a seminar convened in December, 1974, to discuss the results of a research project entitled "Trade Strategies for Economic Development: The Asian Experience," sponsored by the NBER with funding by USAID. Ten country studies undertaken during the project involved Brazil, Chile, Colombia, Egypt, Ghana, India, Israel, Korea, Philippines, and Turkey. The principal results of the individual country studies are discussed in the overall syntheses authored by the Seminar co-directors. Those are entitled "Anatomy and Consequences of Exchange Control Regimes," introduced by J. N. Bhagwati for discussion, and "Liberalization Attempts and Consequences," introduced by A. O. Krueger. The country studies synopsised and discussed include those on the Philippines, Republic of Korea, India, and Egypt. General background papers read and discussed in the seminar were entitled "Projections and Analysis of Trade Development in selected Developing Countries in the Asian Region, 1974 and 1975," by P. P. Chang, and "Development in Trade and Trade Policies in the Developing ESCAP Countries," by S. Nishimoto.

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The Asian Experience

ASIAN DEVELOPMENT BANK
Manila, Philippines

NATIONAL BUREAU OF ECONOMIC RESEARCH
New York, U.S.A.

Throughout this volume, the terms 'China' or 'Taiwan' and 'Korea' refer to the Republic of China and the Republic of Korea, respectively, unless otherwise indicated.

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CONTENTS

Foreword 1

Participants 3

Opening Address: ..... Mr. SHIRO INOUE
President, Asian Development Bank 7

Section 1: *The Project*

A. "Exchange Control, Liberalization and Economic Development" – JAGDISH N. BHAGWATI and ANNE O. KRUEGER 13

B. Introduction: ..... JAGDISH N. BHAGWATI and ANNE O. KRUEGER 25

Section 2: *General Syntheses*

A. Anatomy and Consequences of Exchange Control Regimes

Introduction: ..... JAGDISH N. BHAGWATI 31

Discussants: ..... REHMAN SOBHAN 33
AUGUSTINE H. H. TAN 35

General Discussion 38

B. Liberalization Attempts and Consequences

Introduction: ..... ANNE O. KRUEGER 41

Discussants: ..... JOSÉ ENCARNACIÓN, Jr. 44
KIYOSHI KOJIMA 45

General Discussion 48

Section 3: *Country Studies*

A. Philippines

Synopsis of Study 53

Introduction: ..... ROBERT E. BALDWIN 124

Discussants: ..... AMADO A. CASTRO 127
SUHADI MANGKUSUWONDO 129

General Discussion 130

B. **Republic of Korea**

Synopsis of Study 183

Introduction: ..... LARRY E. WESTPHAL 188

Discussants: ..... NARONGCHAI AKRASANEE 190
WONTACK HONG 192
General Discussion 194

C. **India**

Synopsis of Study 197

Introduction: ..... T. N. SRINIVASAN 290

Discussants: ..... JEAN BANETH 295
IDRAK Z. BHATTY 299
General Discussion 301

D. **Egypt**

Introduction: ..... KARIM A. NASHASHIBI 304

Discussants: ..... MOHAMED ARIFF 309
MICHAEL DAKOLIAS 312
General Discussion 313

Section 4: *General Background Papers*

A. **"Projections and Analysis of Trade Development i.. :ed Developing Countries in the Asian region, 1974 and 19/5"** 317

Introduction: ..... PERRY P. CHANG 364

Discussants: ..... SHENG-YI LEE 366
V. R. PANCHAMUKHI 368

B. **"Development in Trade and Trade Policies in the developing ESCAP countries"** 371

Introduction: ..... SHOJI NISHIMOTO 404

Discussants: ..... KOSIT PANPIEMRAS 404
WARNASENA RASAPUTRAM 406
General Discussion 409

Appendix A: Delineation of Phases 412

Appendix B: Definition of Concepts 413

FOREWORD

The Asian Development Bank and the National Bureau of Economic Research co-sponsored a Seminar on *"Trade Strategies for Economic Development: The Asian Experience"* at the Bank's Headquarters in Manila from 14 to 16 December 1974.

The Seminar discussed the results of the research project on *"Foreign Trade Regimes and Economic Development"* which had been sponsored by the NBER with funding from the US/AID.

The research project was co-directed by Professor Jagdish N. Bhagwati (Massachusetts Institute of Technology) and Professor Anne O. Krueger (University of Minnesota). Ten country studies were undertaken within the project:

Brazil	Albert Fishlow University of California, Berkeley
Chile	Jere R. Behrman University of Pennsylvania
Colombia	Carlos F. Dias-Alejandro Yale University
Egypt	Bent Hansen University of California, Berkeley
	Karim Nashashibi International Monetary Fund
Ghana	J. Clark Leith University of Western Ontario
India	Jagdish N. Bhagwati Massachusetts Institute of Technology
	T. N. Srinivasan Indian Statistical Institute
Israel	Michael Michaely Hebrew University of Jerusalem

Korea, Rep. of	Charles R. Frank, Jr. Princeton University
	Kwang Suk Kim Korea Development Institute
	Larry E. Westphal Northwestern University
Philippines	Robert E. Baldwin University of Wisconsin
Turkey	Anne O. Krueger University of Minnesota

The principal results of the individual country studies have been brought together in the overall syntheses authored by the Co-Directors.

The Seminar was attended by 38 participants from 11 Asian countries, IBRD, IMF, UN/ESCAP, NBER and ADB.

As indicated in the Table of Contents, the topics discussed at the Seminar included the two syntheses, the individual country studies on Egypt, India, Republic of Korea and the Philippines, and the two general background papers.

All participants attended in their personal capacities and the views expressed do not necessarily reflect the views of the institutions with which they are attached nor the views of the National Bureau of Economic Research or the Asian Development Bank.

The proceedings of the Seminar were edited for publication, in consultation with the contributors concerned, by Mohandas K. Samuel of the Economic Office of the Asian Development Bank. The summaries of the General Discussions do not represent the conclusions or the concensus of opinion at the Seminar but are representative of the comments and suggestions made on major issues in the analysis of foreign trade regimes and economic development.

The ten country studies and the two syntheses are being published by the National Bureau of Economic Research and distributed by the Columbia University Press.

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The Seminar was chaired by:

Dr. Yadav P. Pant	First day
Dr. Choh-Ming Li	Second day
Dr. Gerardo P. Sicat	Third day

OPENING ADDRESS

by

Mr. Shiro Inoue
President
Asian Development Bank

Distinguished Participants, Ladies and Gentlemen:

It is, indeed, a great pleasure for me to extend to all of you a cordial welcome to the Philippines and to the Bank.

The National Bureau of Economic Research is to be congratulated on having sponsored such an important research project. I am sure that the technical excellence of the research already conducted and the deliberations of this distinguished group will provide incisive insights into this important field in development.

International trade has generally been an 'engine of growth' in this region and trade policies and practices have been a major base on which most other domestic economic policies have been founded.

This crucial role of international trade has also meant that world economic forces have come to have direct relevance to the acceleration of social and economic development in the region.

I hardly need, therefore, to stress the importance of the subject of this Seminar to the developing member countries of the Bank.

But, we meet today in a rapidly changing world. The orderly development of trade is threatened by the disruptive forces of inflation, slower growth in the world economy and balance of payments' difficulties in many countries. Meanwhile, international capital movements, which are needed to finance both trade and long-term development, are being hindered by the sudden shift in the direction of flow and the uncertainties about the economic future.

The developing countries are, undoubtedly, hardest hit by these changes. Not only must they manage to meet the immediate requirements for trade but also they must, even under much more difficult circumstances, continue to deal with the long-term problems of development.

In the past, many countries in the region have made considerable progress in social and economic development. However, the prospects of sustained growth appear to be very much in doubt; some countries are even facing the prospect of stagnation and deterioration. Where the *per capita* income is already low, the viability of their economies is further threatened by inflation and food shortages.

In addition, in order to meet the changing needs, it is necessary for these countries to restructure their economies. This includes, among other things, the development of locally available energy resources and making even greater efforts for export promotion.

The Bank does not have the resources – nor the mandate – to provide the kind of balance of payments support that today's world economic situation calls for. But, it will continue to play its part in providing the technical and financial resources needed for social and economic development in its member countries.

In almost seven years of operations the Asian Development Bank has provided nearly $2 billion of loan and technical assistance to 22 developing countries in Asia and the Pacific.

Apart from capital and technical assistance, the Bank has, from the very outset, recognized the important role that research could play in a better understanding of the problems and in developing new techniques and policies.

Of the many such activities sponsored or assisted by the Bank, I suppose that the projects most familiar to you would be the Asian Agricultural Survey; the Regional Transport Survey; the Coconut Industry Survey; the Asian Industrial Survey and the Study of Southeast Asia's Economy in the 1970s.

The Bank has also assisted the ILO Employment Strategy Missions to the Philippines and Sri Lanka.

It is very gratifying to note that all these activities have made significant contributions to a better understanding of complex problems. As a result, new institutions have been developed: many new projects have been identified, and more effective policies developed.

In the light of the current conditions, it appears that the promotion of social and economic development in the region will become an even more challenging task. We need new ideas, and bold approaches, to tackle the increasingly difficult problems.

I have no doubt that the deliberations of this Seminar will make a significant contribution.

I will follow your deliberations and conclusions with great interest and wish the Seminar every success.

SECTION 1:

THE PROJECT

EXCHANGE CONTROL, LIBERALIZATION, AND ECONOMIC DEVELOPMENT

By Jagdish N. Bhagwati and Anne O. Krueger*

For the past three years, the National Bureau of Economic Research (NBER) has been sponsoring a research project on exchange control, liberalization, and economic development. In this project, a number of country studies have been undertaken, focusing upon the quantification and analysis of individual developing countries' experiences with exchange control regimes and attempts at liberalizing those regimes, focusing equally on the interaction between the country's trade and payments regime and its economic development.

The countries studied have included Brazil (A. Fishlow), Chile (J. Behrman), Colombia (C. Diaz-Alejandro), Egypt (B. Hansen), Ghana (C. Leith), India (J. Bhagwati and T.N. Srinivasan), Israel (M. Michaely), South Korea (C. Frank, Jr.), the Philippines (R. Baldwin), and Turkey (A. Krueger). Each study has been undertaken within an analytical framework devised by us and agreed upon in advance by all participants. These studies are now completed or nearly so, and they are to be published by the National Bureau of Economic Research through 1973 and 1974. They should be of interest to students of the individual countries as well as to those concerned with trade and development issues more generally. When all the studies are final, we shall have a great deal of material for analysis on a comparable basis of different countries' experiences.

The final stage of the NBER project consists of our attempt to synthesize the results of the individual studies in an overall volume. This paper represents a preliminary report on some of these results. We therefore present an overview of some of the major topics in Section I. In Section II, some of the more detailed results pertaining to the effects of exchange control regimes are presented.

I. An Overview

For each country covered by the Bureau project, individual researchers were asked to trace their country's experience with a view to identifying: (1) when and why exchange control was adopted, and how the

* Professors of economics at Massachusetts Institute of Technology and the University of Minnesota, respectively.

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control regime was intended to relate to the country's domestic economic goals; (2) the evolution of quantitative restrictions after their initial imposition; (3) efforts, if any, to ameliorate the undesired results of the payments regime; (4) experiences with attempts at liberalization and the timing of the economy's response to those attempts; and (5) the resource-allocational, income-distributional, and growth effects of the country's experience. Within that framework, each country's author singled out for in-depth analysis a particular point in time during which the detailed working of the exchange-control regime was analyzed, and selected one liberalization effort for intensive analysis.

On the basis of the results from individual studies to date, we have been surprised at the degree of similarity among seemingly diverse countries. On each topic, certain broad conclusions have emerged.

Motivation for Quantitative Restrictions (QR)-Regimes

Initial adoption of exchange controls was generally an *ad hoc* response to external events. Rapidly, however, quantitative restrictions were perceived as a means of furthering domestic industrialization policies. Whether it was the rapid shift in international market conditions during the 1952-1954 period or memories of the Great Depression, most policy makers were pessimistic – probably to an objectively unwarranted degree – about prospects for growth through industrialization based upon export growth and diversification. The optimal resource allocation dictum – that the marginal cost of earning foreign exchange should be equated with the marginal cost of saving foreign exchange – was generally abandoned in favor of saving foreign exchange at all costs.

In the process of using exchange control to foster the growth of domestic industry, however, the internal working of the QR systems generally frustrated, at least partially, the very domestic goals they were designed to achieve. Bureaucratic allocational procedures, political pressures surrounding the administration of controls, and the private sector response to the unintended incentives created by the regimes led to frustration of the goals the *QR* regimes were designed to serve. We shall return to more detailed examination of the logic of *QR* systems in Section II.

Export Promotion Versus Import Substitution

Among the more interesting results that appear to emerge from our preliminary analysis of individual countries' experience is that countries which have had export-oriented development strategies appear, by and large, to have intervened virtually as much and as "chaotically" on the side

of promoting new exports as other countries have on the side of import substitution. Yet, the economic cost of incentives distorted toward export promotion appears to have been less than the cost of those distorted toward import substitution, and the growth performance of the countries oriented toward export promotion appears to have been more satisfactory than that of the import-substitution oriented countries. If that conclusion is valid, the lesson is that policy should err on the side of allowing a higher marginal cost for earning than for saving foreign exchange.

There are several theoretical reasons which would explain such an asymmetry in outcomes, and the empirical evidence does point in their direction. In theory, there are four reasons why export promotion may be the superior strategy.

(1) Generally speaking, the costs of excess export promotion are more visible to policymakers than are those of import substitution. If there are departures from unified exchange rates, export-promoting growth can be sustained only by subsidies or other incentives costly to the government budget. Thus, there are built-in forces within the government against excessive export subsidization and promotion. The equivalent costs of import substitution are borne by firms and consumers and, hence, no obvious intragovernmental pressure group emerges as rapidly when incentives are biased toward import substitution.

(2) An export-oriented development strategy generally entails relatively greater use of indirect, rather than direct, interventions. There is considerable evidence from the individual country studies that direct intervention may be considerably more costly than is generally recognized (see Section II below). When policy makers are concerned with export promotion, direct controls cannot be as pervasive as they can be under import substitution. Price controls, distribution controls, and a host of other detailed interventions make little sense, even to bureaucrats, when firms' outputs are intended largely for overseas markets, but appear attractive when production is oriented toward the home market under import substitution. The fact that, under import substitution, government officials have power to remove or enhance domestic monopoly positions of import-competing firms implies that those firms can be induced to accept otherwise intolerable (and socially unprofitable) interventions with their decisions. By contrast, officials simply do not have the same degree of power over firms engaged primarily in the export market.

(3) Exporting firms, however much they may be sheltered on the domestic market, must face price and quality competition in international markets. Import-substituting producers, with no competition for domestic markets, are a pervasive fact of life in the developing countries where import

substitution has been stressed. While there is little hard evidence on the subject, there is considerable reason to believe that sheltered monopoly positions may be important explanations of low productivity growth in the newly established manufacturing industries in developing countries. Insofar as the adverse side effects of inadequate competition are less severe under the export-oriented strategy, it may be that export promotion is superior simply because it reduces the incidence of the problem.

(4) If there are significant indivisibilities or economies of scale, an export-oriented strategy will enable firms of adequate size to realize them. When import-substituting incentives dominate the domestic market, import-substituting firms generally are confronted with powerful incentives for expansion through diversification; each new product line provides one more domestic monopoly position. If indivisibilities and/or economies to scale are important, an export-oriented strategy will provide better incentives for expansion of capacity in existing lines. As such, an export-oriented growth strategy is better suited to achieving whatever economies of scale are present than is an import-substitution strategy where firms are generally limited in their horizons by the size of the domestic market.

These and other arguments supporting the case for an asymmetrical behavior of the export-promoting *versus* import-substituting economies appear to be borne out by the contrast in the success of South Korea and the relative failure of India, for example, in the countries studied in the project. Since approximately 1960, the economic policies of South Korea have been heavily oriented toward growth through exporting. The rate of growth of exports has been almost double that of real *GNP*. Close inspection of South Korean policies indicates that the kinds of detailed and chaotic interventions which we have found in other countries are abundantly present in Korea's case as well: numerous *QR's*, high tariffs, and physical targeting of exports and imports. The striking difference, however, is in the remarkable degree to which the government has been willing to use exchange-rate changes and to lean in favor of export promotion *via* preferential allocation of import licenses, etc. Thus, aside from other special factors, such as the high inflow of foreign resources (official and private), the one striking aspect of Korean success has clearly been the significantly less discrimination against exports than in other developing countries, and *not* (it would appear) the presence of a neo-classically efficient allocation mechanism *in toto* in the system.

Whether this asymmetry between export promotion and import substitution is important or not awaits further exploration as the final results of the country studies emerge. What is clear is that, of the countries which have stressed export promotion, none have been free from interventions of the type that economists generally identify with *QR* regimes and import-

substitution strategies, and that the export-promotion strategies generally appear to have higher payoffs.

Nominal Versus Effective Devaluation

Export rebates, tariffs, surcharges, import entitlement schemes, and a host of other devices are generally employed under *QR* regimes, and they lead to a wide dispersion in effective exchange rates (the amount of domestic currency paid when a good is landed per dollar of c.i.f. value) by commodity categories. Moreover, the increasing resort to changes in surcharges and export subsidies and to alterations in effective exchange rates means that, even without a formal devaluation, there are many degrees of partial devaluation in *QR* regimes.

Usually, formal devaluation is accompanied by the partial or total removal of export incentives and surcharges upon imports. The result is that changes in the parity, as reported by the International Monetary Fund, do not necessarily provide a good indication of the economically relevant magnitude of the devaluation. Thus, in Egypt, Bent Hansen's study shows that the 1962 devaluation was little more than a tidying up operation: complicated export bonuses and import charges were replaced by across-the-board measures, so that the average local currency payments and receipts per dollar of international transactions increased by only one-fourth the amount of nominal devaluation. For Chile, Jere Behrman's study shows effective devaluations to be about two-thirds the nominal ones in 1959 and 1963. By contrast, when Chile adopted frequent exchange-rate adjustments in the late 1960's, the effective devaluations slightly exceeded the nominal, although real devaluation was much smaller.

Determinants of Success of Liberalization

Because of the significant differences in practice between nominal and effective devaluation, we believe that it is important, under *QR*-regimes, to distinguish between devaluation and liberalization.

Liberalization may be said to occur when the official price of foreign exchange assumes an increased role in the allocation of resources, whereas devaluation occurs whenever nominal exchange rates are altered. Thus, as illustrated by Egypt's 1962 episode, it is possible to have a devaluation in which the altered nominal price of foreign exchange has little or no effect on resource allocation, and quantitative restrictions and other direct interventions maintain their importance as allocative instruments. In other cases, such as the Turkish devaluation of 1958 and the Indian devaluation of 1966, the devaluations more than offset the reductions and

removals of surcharges, taxes, and export premia. In those circumstances, the official price of foreign exchange increased in importance as an allocator of scarce foreign exchange, at least in the short run.

The difference between nominal and effective devaluations has the important effect that, as happened with the 1966 Indian devaluation, the criteria by which the devaluation is judged are typically confused; and the "rationalization" implicit in shifting from a *de facto* to a *de jure* devaluation (resulting in no effective devaluation) is ignored and the nominal devaluation is assessed as though it was also the effective devaluation.

The studies also point up a number of interesting conclusions regarding the likelihood of effective devaluations leading to *continued* increases in the allocative function of the price of foreign exchange. A few vignettes are worth pointing out here. (1) Starting from the long exposure to automatic protection under the *QR*-regime, few industries will accept the consequence of effective devaluation and reduced reliance on *QR*'s; namely, the need to compete or contract. As Michaely's study of Israel and the Bhagwati-Srinivasan analysis of the 1966 Indian episode show clearly, liberalization works only insofar as imports of noncompetitive goods are involved, and the degree of protection to import-using industries may even increase as imported intermediates get liberalized. (2) The effect of liberalization is often to induce a recessionary tendency rather than the traditionally feared inflationary impact. The recessionary impact follows from governments typically trying to contract monetary and fiscal policy, while ignoring the fact that the devaluation itself sets up endogenous recessionary tendencies. These come from several sources: (a) the excess of imports over exports, thanks to influx of aid and private capital, itself implies deflation with devaluation; (b) the increased imports of materials can lead to increased output and lowered profit margins and may adversely effect investment in the import-competing activities whereas the exporters may not push up investment in time because they expect the increased export incentives to be neutralized *or* the system remains so loaded against exports that exporters find it difficult to increase their investments sufficiently; and (c) as in Turkey, the initial effect of an effective devaluation seems at times to be to reduce construction activity, with adverse effects (at least in the short run) on employment and income.

Payments Regimes and Economic Growth

The determinants of a developing country's overall growth rate are numerous, and the payments regime is only one such factor. The interaction between the payments regime and economic growth is complex and depends upon a host of other factors in individual countries.

That the effects of the payments regime on growth cannot be analyzed without regard to other aspects of the domestic economy cannot be stressed enough. Clark Leith's findings on Ghana provide a good illustration. Its major export, cocoa, is almost unaffected by the payments regime directly. The price paid to producers is determined by the Cocoa Board and is independent of the exchange rate. On the import side, government control over credit allocation under credit rationing, combined with severe capital market imperfections, means that the demand for imports is more a function of government policies in the credit market than it is of the price of foreign exchange. All new investment projects must be approved by the government, which has power to grant or withhold subsidies and other privileges large enough to make the difference between profit and loss on virtually all investment projects. Under such circumstances, it would be folly to analyze the payments regime as if entrepreneurs were responding in perfect markets to price signals alone. This is not to say that the payments regime goes not have its own effects upon resource allocation and growth, but rather that analysis of those effects is considerably more complex than is generally assumed. The individual country studies and our forthcoming synthesis explore these interactions in some detail.

II. The Anatomy of Quantitative Restrictions

Tariffs Versus Quotas

It is always true that every quota has a nonnegative tariff equivalent at each point in time for every recipient of an import license. However, it is not always the case that there is a single tariff-equivalent for a quota for a given homogeneous import commodity, and it is generally false that the resource-allocational effects of a quota are the same as those of the tariff-equivalent even when there is a single tariff-equivalent.

The reason why there may not be a single tariff-equivalent for the import of a homogeneous commodity is that resale of imports is often illegal. In that case, there is no reason to expect a common implicit domestic price in the absence of a perfect and costless black market. Thus, the criteria for allocation and the actual detailed bureaucratic decisions as to who should receive an import license, and how much each should receive, will in general affect resource allocation.

Even when there is a single domestic price for the imported good, the method of license allocation makes an important difference to resource allocation and income distribution. It is useful to think of the differences between the c.i.f. price of the good (at the nominal exchange rate) and

the domestic price as consisting of two parts: (1) the duties, surcharges, and other costs of landing paid by the actual importer, including his normal costs of foregone interest, handling, and so on; and (2) the premium accruing to the recipient of the import license. The local currency cost of the c.i.f. import plus the first item equals landed cost. Landed cost in local currency divided by the c.i.f. price in foreign currency equals the effective exchange rate. Landed cost is then the price that would prevail in the domestic market if there were no *QR*'s upon the import. The premium, therefore, is the windfall gain accruing to the recipient of an import license.

The precise allocation of import licenses makes for important differences because it determines *who* will receive the premium; we note two here. (1) If licenses for intermediate goods imports are allocated directly to producers, these producers are implicitly being subsidized in their production process. A devaluation would increase the costs of the manufacturers using the intermediate good. If, however, licenses are allocated to importers who then resell to the manufacturers, the premium accrues to the importers. If devaluation is then carried out, there will be no effect on manufacturers' costs unless the size of the devaluation exceeds the size of the premium. (2) The calculation of effective protection again must allow for the fact that some imports would be obtained directly by producers at premium-exclusive prices and others at premium-inclusive prices. The resulting estimates of protection can be significantly different than if no adjustment was made for the indirect allocation of imports of intermediates to producers, as illustrated for example by the Bhagwati-Srinivasan study of India.

That the distinction between premium and landed cost is important can be seen by inspection of Turkish data for 1968 presented in Krueger's study. At an official exchange rate of *TL* 9=$1, it appeared that the average landed cost of $1 of imports was *TL* 23.8 and the premium was *TL* 23.1.

Logic of QR's

Once a *QR* regime is established, it seems to have an internal, self-contradictory logic all its own. The tariff equivalent of existing quotas tends to fluctuate widely and the unintended side effects of *QR*'s tend to force other changes. Decision makers do not receive visible feedbacks as to the effects of their actions. Thus, one finds quota categories where the quotas are redundant and there is a zero premium side by side with quota applications exceeding the amount of the quota by exorbitant multiples. Yet these multiples provide little information to those allocating

quotas, because the amount of applications is itself influenced by expectations as to the probable disparity between the amount applied for and the amount received.

But that is only a small part of the story. For, once a *QR* regime is established, quotas inevitably become a tool seized upon by governments to accomplish a host of purposes other than the initial one of restraining *ex ante* payments imbalances. Thus, "priorities" are established and preferential treatment is given to applicants willing to further an officially desired goal. For example, efforts are generally made to encourage capital goods imports at the expense of consumer goods imports, in the hope of accelerating the rate of investment. In turn, the newly established manufacturing capacity often has intermediate goods import "requirements" which can be met only at the cost of reducting capital goods imports, thus defeating the initial purpose of the priority. Moreover, in increasing capital goods imports, consumer goods imports are the first go go, and the production structure of the domestic economy becomes increasingly oriented toward consumer goods.

Once that happens, growth in investment becomes increasingly dependent upon expansion of imports, itself a function of export growth. Yet the protection afforded to producers in domestic markets by *QR*'s is so great that profitability lies in expanding domestic sales and disincentives to export increase. By this point, governments are trapped: if they devalue the currency (which could have been done in the first place as an alternative to *QR*'s), they fear that the rate of capital formation will decline as capital goods become more expensive. If they do not devalue the currency, they must resort to *ad hoc* measures such as export rebates, import entitlement schemes for exporters, and the like in order to stimulate export growth. As these "incentives" grow over time, the regime becomes increasingly piecemeal. In virtually all the countries studied in the project which have had *QR* systems, governments themselves have reacted against these undesired side effects and proliferation of special regulations that seem to result from *QR* systems.

The tendency toward increasingly detailed, often internally inconsistent, controls and the resulting frustration of initial intentions shows up in numerous ways. In India, a major goal was the reduction of concentration in economic power, which presumably meant reducing the share of the large industrial concerns in industrial output. Yet the regulations and procedures surrounding licensing applications (for investment and for imports) became so complex that the large firms had a strong competitive advantage in satisfying license requirements: their share actually increased. In Turkey, import licenses were granted to establish assembly industries in the expectation that those (import-substitution) industries would save

foreign exchange and provide incentives for domestic production of parts and components. Instead, people invested in the assembly industries in order to earn import licenses, and the value of licenses for assembly industry requirements of intermediate goods increased, rather than decreased, during the 1960's, while domestic content requirements had to be employed to induce investments in parts-and-components producing activities.

Wide Variations in Economic Costs

When producers know that they will benefit from complete protection from imports once domestic productive capacity is established, there are powerful profitability incentives to establish capacity regardless of the social opportunity costs of so doing. The drive to industrialize has been such an important goal that few of the countries covered in the Project have been able to resist using *QR*'s to provide those incentives. In India and Turkey, goods have simply become ineligible for importation once domestic productive capacity was established. In Egypt and Ghana, the same thing happened *de facto*. In Brazil, the Law of Similars, combined with domestic content requirements, and a provision that tariff rates be doubled once domestic production started, achieved the same result.

It is easily predictable that under such systems the variation in domestic resource cost among and within industries will be great. One of the purposes of the country studies was to quantify the extent of this variation, and the results show remarkably wide differences. We do *not* find that all import-substitution firms are inefficient. On the contrary, some appear to have very low costs while others require a large multiple of all resources in order to save an equal amount of foreign exchange.

In view of this, a major defect of the *QR* system seems to be its inevitably indiscriminate nature. If, within such a system, low-cost activities could be differentially encouraged, the excess costs of the system should be significantly lower. Yet, the workings of the system seem invariably to result in an inability to reflect differentials in social profitability to individual decision makers.

Actual User Licensing

We have already shown that the allocation of import licenses to firms using imported goods in their production process has different resource-allocational implications from those that arise when premia on licenses accrue to individuals who then resell to actual users. One feature of most *QR* systems is that they have tended to become increasingly actual-user oriented, and the fraction of import licenses allocated directly to user firms has increased over time.

The motive for this method of allocation seems reasonable enough: it is designed to avoid allowing large windfall gains to accrue to persons who apparently do nothing but apply for import licenses and, in addition, it rewards those individuals who have contributed toward the industrialization goal, as well as providing an implicit subsidy for recipient firms.

Difficulty, however, arises from the fact that criteria for allocation of licenses among actual users are needed in the presence of excess demand. Without such criteria, the allocating officials are naturally accused of favoritism. The most frequently adopted criterion has been to allocate licenses to recipients in proportion to different firms' capacities, although almost all countries have made provisions whereby new entrants would be entitled to an initial allocation.

This allocational criterion has had two closely interrelated and deleterious side effects: (1) it has, predictably enough, encouraged the development of excess capacity, and (2) it has resulted in roughly proportionate expansion of all firms in a given industry with little competition between them.

Turning to excess capacity first, in many newly established industries, firms' output levels are determined, within fairly narrow limits, by the volume of imports they obtain. Hence, summing over firms within an industry, the industry's output is closely tied to the imports of intermediate goods allocated to it. The fact that there are excess profits to most firms at that level of output is reflected by the premium on import licenses: any individual firm could increase its total profit if it obtained more imports.

The only way to get more imports, however, is to expand capacity, since one's import rights are a function of his share in total capacity of the industry. Thus, even with existing excess capacity, it may pay to build more, since the return on the investment is the premium to be earned per unit of imports times the expected increment in import licenses.

When policy makers perceive this result, a natural response is to attempt to control the expansion of capacity. Then, investment licensing follows import licensing. Again, criteria are needed and the circle has one more twist: profitability cannot be used as a criterion, since it emanates from import-licensing procedures, and also is regarded with suspicion (the bureaucrats are rewarding the already rich large firms). Thus, the natural temptation is to allow expansion proportionately over all applicants or over all firms. Decisions about the relative rates at which different industries shall be expanded must then be made and private profitability departs further and further from social profitability.

This brings us to the effect of import, and investment, licensing upon competition. For those industries where a firm's imports determine its output, the firm-specific allocation of imports determines market shares. With output fixed in the short run, there is little competition among firms. If there were no investment licensing, it might be that more profitable firms would expand more, with higher equilibrium levels of excess capacity in the long run. In general, however, investment licensing rules out even that form of competition, perhaps diminishing excess capacity, but insuring the growth of efficient and inefficient firms alike. We spoke earlier of the asymmetries of export promotion and import substitution. It may well be that, in dynamic terms, the inability of *QR* systems to foster relatively more rapid growth of more efficient firms is one of the gravest drawbacks of the *QR*-import-substitution development pattern.

III. Concluding Remarks

We have only been able to scratch the surface of the results of the *NBER* project. Many of the statements we have made require, and indeed have, careful documentation and elaboration. Moreover, there are numerous topics on which we have been unable to touch due to space limitations – evidence on export responses to altered real exchange rates, macroeconomic considerations in exchange-rate policy, many of the factors (such as effect on R&D) involved in the trade-regime-growth interaction, and the limits to *QR* regimes resulting from illicit transactions.

INTRODUCTION

Jagdish N. Bhagwati and Anne O. Krueger

The idea of a conference on the experiences of various countries in exchange rate management originated sometime in 1968. Thereafter, at the suggestion of the National Bureau of Economic Research and with the assistance of the US Agency for International Development, the idea was developed into a comprehensive research project to cover a number of countries.

Initially, the co-Directors of the Project had formulated an analytical framework to detail the main concepts which would be generally relevant for empirical quantification in the research studies.

Three essential – and inter-related – issues were identified in consultation with the authors of the individual country studies as requiring basic attention:

1. **The Anatomy of Exchange Control Regimes**

   What sort of logic was there in a particular exchange control regime? What were the circumstances under which a particular regime had emerged? What particular instruments of policy and implementation had been used? How had these measures interacted with other domestic policies and objectives? What had happened over time to such regimes?

2. **The Experience of Devaluation**

   To what extent had countries attempted to alter the nature of trade and payments regimes by recourse to policies of devaluation? Why had countries resorted to such policies? What were the reasons for the success or failure of such policies? What factors were involved in the operation of the complex policy instrument of devaluation? What had the final outcome been?

3. **The Effects on Economic Development and Growth**

   What real effects on the rate of economic growth and other desired goals had resulted in the course of the interaction of policies of devaluation and/or exchange controls with other domestic policies?

The intent of the two Syntheses was to bring together, in a systematic manner, the common aspects of individual country experiences into a general framework. Basically, the Exchange-Control Synthesis[1] consisted of an evaluation of the arguments for, and the evidence available on, the dynamic effects of quantitative restrictions and controls. The Devaluation-Aftermath Synthesis[2] focussed on the exchange-rate changes that had occurred and their aftermath.

It was emphasized that the Project had not intended a cross-sectional analysis but had rather attempted to analyze the specific functioning of individual economies. However, the overall approach in the individual country studies had been to identify common sets of problems which could be examined in relation to a common analytical framework. But, as was expected, the individual country studies had brought up many interesting issues and problems which were often of particular relevance only to a specific country.

There were three fundamental differences between the approach of the Project and the OECD project:[3] firstly, the Project had focussed, in sharper detail, on the anatomy, evolution and the consequences of exchange control regimes in individual countries whereas the OECD project had focussed on the more general issues of import substitution and export promotion; secondly, whereas the OECD project had largely investigated only the static inefficiencies of import-substitution strategies, the present Project had intended to go beyond that by investigating the long-run, dynamic effects of exchange control regimes and import-substitution strategies on rates of growth, savings, innovation, etc., and thirdly, while the OECD project had tentatively concluded that a more liberal regime was preferable, the present Project had also focussed on the processes, problems and the effects of the transition through regimes of differing degrees of liberalization, thus examining both the feasibility and efficiency of the transition to more liberalized foreign trade regimes.

The most fundamental problem left unanswered by the OECD project was whether the better growth performance of certain countries was due to the adoption of neo-classical policies of not unduly interfering with the market mechanism and, conversely, whether exchange control mechanisms which had made the market mechanism inoperative under strategies of import-substitution were crucial determining variables in explaining unsatisfactory performance in those countries which relied heavily on such strategies.

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1 Section 2 A : Anatomy and Consequences of Exchange-Control Regimes
2 Section 2 B : Liberalization Attempts and Consequences
3 A series on industry and trade in some developing countries — Brazil, Republic of China, India, Mexico, Pakistan and the Philippines — edited by Ian Little, Tibor Scitovsky and Maurice Scott under the auspices of the Development Center of the Organization for Economic Co-operation and Development (OECD), Paris.

The Devaluation-Aftermath Synthesis had suggested that the major factor explaining lower growth performance could be the "bias" introduced by policy frameworks which had discriminated against exports. Thus, the lack of neo-classical attention to the *pattern* of import substitution seemed to be less important than the excessive *degree* of import-substitution that restrictive exchange control regimes seemed to imply.

Developing countries had, since the Second World War, generally used exchange controls to regulate the balance of payments. Important attention had been paid in the Project to investigating how exactly the mix of policy instruments to implement the control measures had affected the allocative efficiency of the system. Apart from the static effects of control measures, the Project had sought systematic conclusions on the effects on savings, entrepreneurship, investment, growth, etc.

The different ways in which exchange control systems have been administered and the differential effects observed in the individual country studies have been systematized in the Project in a schematic representation wherein trade and payments regimes were categorized into different Phases.[4] These Phases were a framework to examine particular balance of payments situations and particular methods of handling trade and payments problems: it was not suggested that all countries would fall into these Phases in any necessary sequence.

Phase I was basically the immediate post-War situation where foreign exchange management sought to alleviate balance of payments difficulties by quantitative restrictions rather than by adjusting the exchange rate. It came at different dates in different countries.

Phase II represented a more developed exchange control management where priorities were further defined and where the control mechanism began to perform other functions as well. Phase II was defined to include also the introduction of other policy instruments such as tariffs, premiums and subsidies to promote exports which had been discriminated against in the quota system of Phase I. Under Phase II, the discrimination against exports was often sought to be alleviated but was not eliminated.

The Syntheses had largely examined the effects of Phase II regimes as several countries in the Project had sustained periods in that Phase. In many countries, too, there had been sustained periods of cyclical movements around attempts at liberalization (categorized as Phase III episodes) which had failed and which had necessitated a return to the Phase II regime.

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4 See Appendix A: Delineation of Phases

SECTION 2:

GENERAL SYNTHESES

GENERAL SYNTHESES

A. Anatomy and Consequences of Exchange Control Regimes

Introduction: Jagdish N. Bhagwati

The Exchange-Control Synthesis had mainly focussed on two major aspects of Phase II regimes:

I. **The allocative efficiency** of the regime. That mainly referred to the effects of Phase II regimes, in a static sense, on the allocation of investment, the utilization of capacity, the holding of inventories and the like. These effects have been discussed in the traditional literature and the OECD project as well.

II. **The dynamic effects** on savings. The results of the Project indicated that the effect of Phase II regimes on savings was complex. There was no conclusive evidence either that the static inefficiencies of Phase II regimes led to better long-run effects on savings or that more liberal regimes had produced better results.

Within Phase II episodes there were different regimes which produced basically different results. An example was the process of allocation of import licences. Where import licences were allocated to producers rather than to traders greater incentives were provided to the producers by the premium obtainable through imports. Consequently, too, the incentive effect of a devaluation or an adjusted exchange rate varied greatly depending on whether producers or traders had been the agents in the earlier control system.

Even where import licences were allocated to producers, there were important differences in the incentives provided depending on the criteria of allocation. Differential allocative criteria such as "actual user" licences or allocations based on installed capacity produced varying incentive effects.

Such allocative criteria were part of strategies of import substitution but the specific anatomy of the control regime in operation provided more meaningful insights than a consideration of the "import substituting strategy" in general terms. Thus, for example, the use of quotas to grant automatic protection to domestic industry – and not purely to regulate the balance of payments – produced efficiency results which were very

different from that of quota systems which would allow additional imports when the differential between domestic costs and import prices exceeded given margins.

It was, thus, not the quota system as such which the analyst needed to focus upon but rather the exact form of operation of the system since differential effects resulted.

The concept of domestic resource cost (DRC)[1] had been used to analyze the pattern of import substitution and the allocative efficiency of control regimes. DRCs had been computed for a cross-section of activities at a given time and the dispersion in DRCs had, where present, been linked with the entire domestic and international pattern of incentives established by the total regime The analyses had suggested that the variations noted in DRCs were largely, if not wholly, attributable to the total pattern of incentives that restrictive regimes had generated.

Situations of excess capacity had invariably arisen under conditions of sheltered markets with controlled (licensed) entry into industrial sectors. Many Phase II regimes had provided incentives for the greater utilization of existing industrial capacity. However, even where excess capacity existed, the economic regime provided sufficient incentive to invest in new capacity as the protected market provided automatic access to scarce imports.

There was some evidence to suggest that the liberalization of controls tended to reduce excess capacities with the increased competition for resources and for the market.

Evidence in the country studies had also suggested that the effective under-pricing of imported capital goods and raw materials in restrictive regimes had, given the wide range of possible substitution in production functions, led to an increase in import dependence and to a tendency to hold excess inventories.

The Project also provided further evidence on the reduced competition that resulted from sheltered markets and the delays that arose from institutional and other bottlenecks: very little quantitative evidence was, however, available on the other inefficiencies that resulted from sheltered markets.

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[1] See Appendix B; Definition of Concepts

COMMENTS

by Rehman Sobhan

There appeared to be an implied enthusiasm in the Project for liberal regimes. The indicators used in the analyses seemed selective and had assisted in reinforcing the implied thesis that liberal regimes had been more efficient than restrictionist regimes. However, the results obtained from the quantitative analyses had been inconclusive or highly qualified and the supposed efficiency of liberal regimes had been implied largely on *a priori* grounds and on the basis of questionable links in the data. Restrictionist regimes had been characterized as being less efficient even though the causal links between liberalization and the indices of performance had not been conclusively established.

The indicators of allocative efficiency used in the Project had not reflected the circumstances under which countries had to resort to quantitative restrictions. In an extreme case, for example, where foreign exchange earnings were pre-empted by a few essential imports, the policy option of a liberal regime would not even exist.

The impact of many key policy variables had not been adequately isolated and analyzed. The specific role of foreign assistance, for example, required much greater attention than had been given in the Project. Foreign assistance had played an important role in the effectiveness of many Phase III regimes and its availability had often been linked to the ideological pre-conceptions of donors about the virtues of more liberal regimes.

On an analysis of DRCs the Syntheses and many country studies had concluded that restrictionist regimes had disregarded opportunity costs and had, therefore, been less efficient in resource allocation. The operational relevance of the analyses was, however, minimal as high DRCs were not, in themselves, evidence of resource misallocation as low DRCs could well arise in socially undesirable or low-priority sectors. The effects of particular patterns of resource allocation on the desired composition of GNP were a more important consideration for policy formulation than the optimization of growth of GNP.

The administrative allocation of resources in restrictionist regimes had been characterized as being inefficient because of the disregard for opportunity costs. Distortions in resource allocation arose even with the allocative mechanism of market forces in liberal regimes and, with given social objectives, such distortions in liberal regimes were of more serious consequence than the distortions that arose from administrative allocations.

Resource misallocations in restrictionist regimes also arose from distortions in the optimality of decisions made during plan targetting and from the particular administrative procedures adopted: misallocation was not an inevitable consequence of restrictionist regimes or of administrative allocation.

The important role of the politico-economic circumstances within which trade and exchange regimes had to function had not been considered in the analyses. Basic distortions in factor markets, unequal distribution of income and the interplay of political and economic power were decisive- in both restrictionist and liberal regimes - in determining the extent of command and control over resources. Such factors also made for the relative immobility of resources in developing economies and resources could not, even after liberalization, be expected to necessarily move into low DRC sectors.

The Project results had suggested that there had been a tendency for a compositional shift of investment in restrictionist regimes to the more capital-intensive sectors. That phenomenon was not an inherent feature of restrictionist regimes. Greater capital-intensity in production could arise from varied circumstances as even in liberal regimes, for example, a major motivating factor for capital-intensity in investment had been the managerial problems of organizing and controlling large work-forces.

The Project results had indicated that the tariff structure in restrictionist regimes had provided incentives for investment in the non-essential sectors and had discouraged investment in the intermediate and capital goods industries. The causal relationship observed was, in fact, a *post facto* rationalization as tariff protection could have been obtained even after the establishment of intermediate and capital goods industries: the nominal tariff structure was, consequently, hardly a disincentive to investment in such sectors.

The observed under-utilization of industrial capacity in restrictionist regimes was not due to the policy instrument of administrative allocation but rather to deficiencies in administration and to basic distortions in the politico-economic structure which inevitably warped the process of administrative allocations.

Liberal regimes had been characterized as inducing more efficient resource use by also reallocating foreign exchange resources from the less efficient to the more efficient firms. Such a process of reallocation had not necessarily resulted in a fuller utilization of capacity but rather in a reallocation of capacity utilization. Such short-run reallocations of capacity utilization that followed on a process of liberalization had undesirable

social effects as it benefitted the larger firms with greater control over the market and with easier access to credit. The total availability of foreign resources was, probably, of greater importance than the type of regime. In liberal regimes, too, a temporary shortfall in foreign resource availability due to export price declines or crop failures could affect the smaller firms and intensify the monopoly control of the larger firms.

The Synthesis had concluded that the phenomenon of excessive inventory holdings in restrictionist regimes had been due to the uncertainties which had arisen from frequent changes in the criteria for, and the procedures for, the administrative allocation of industrial inputs. That was only a partial explanation as, in any type of regime, the levels of inventory holding were also determined by the regular availability of adequate supplies, the timing of deliveries, expectations about future prices and anticipated uncertainties in the flow of aid-financed imports.

The conclusion that the lack of foreign competition had induced inefficiencies in restrictionist regimes by not providing incentives to reduce costs of production was also questionable. The most important factor in all regimes was the domestic structure of production and marketing. Monopoly control, foreign collaboration or the marketing of well-known brands, anyway, reduced competition while, except in the case of inelastic demand, the competition for the domestic market and the availability of substitutes tempered the tendency for high selling prices. Imperfect factor markets were common to liberal and restrictionist regimes alike and large numbers of inefficient firms continued to operate irrespective of the type of policy regime: the supposed reallocative effects of liberal regimes, consequently, were neither automatic nor complete.

COMMENTS

by Augustine H. H. Tan

The Project had lucidly presented the hypotheses and theories about protectionist regimes along with a wealth of information.

The main conclusion of the Syntheses was that the static effects of protectionist regimes were generally adverse and significant while the dynamic effects were either insignificant or both positive and negative. The inconclusive results of the analyses of the dynamic effects of protectionist regimes could have arise from the general problem in empirical research of tracing causation in historical data. Existing theories of dynamic analysis in economics were also highly inadequate.

Protectionist regimes could generally be justified only under three exceptional circumstances: firstly, in the case of an optimum tariff - where, too, the effects of possible retaliation and a distinction between the short- and long-run monopoly position would need to be considered; secondly, where countries sought to reduce import-dependence for strategic reasons and, thirdly, to raise revenues in countries where the tax machinery was primitive or for the taxation of specific non-import-substitutable products like petroleum.

Four general propositions could be made about protectionist regimes:

1. Protectionist regimes provided a margin for inefficiency and, as detailed in the Project, even induced a definite bias towards inefficiency. A tariff or quota incentive normally provided by protectionist regimes gave the domestic producer a price differential which could be reflected either in increased costs or in increased profits. On the contrary, the incentive of a corporate tax exemption induced the efficiency to generate profits so that the incentive could be availed of;

2. Protectionist regimes tended to create an inward (domestic market) orientation which inhibited continued expansion and imposed severe costs on production for export;

3. Protectionist regimes tended to generate effects on resource allocation different from that originally intended by the policies;

4. Protectionist regimes tended to create new bottlenecks rather than alleviate existing bottlenecks and distortions.

The analyses of the effective rate of protection and the domestic resource cost of foreign exchange had clearly indicated that protectionist regimes had resulted in a very wide margin of inefficiency which had also varied as between industries. The wider that margin the greater was the potential loss in productivity and output. In addition, protectionist regimes tended to further widen the margin for inefficiency by restricting competition and encouraging monopolies. There was also a bias towards smaller-scale consumer goods industries and against the more specialized, vertically-integrated, large export industries which could generate economies of scale.

The Syntheses had analyzed the effects of protectionist regimes on the allocation of investments and on the choice of techniques. The effects of protectionist regimes on employment were particularly important and severe. The maintenance of an over-valued currency effectively under-priced imported capital goods and encouraged more capital-intensive production to the detriment of employment. The domestic capital goods industry was also adversely affected while the development of a domestic machine industry more compatible with the factor proportions suited to the economy was inhibited.

The Syntheses had drawn attention to the effect of protectionist regimes in encouraging wage increases in the favored sectors. That tendency was exarcebated where entry into the favored sectors in the urban areas was controlled.

Other employment-inhibiting effects of protectionist regimes arose from the bias towards the processing of relatively under-priced imported inputs and the disincentive for the use of domestic raw materials. The processing of domestic raw materials was also discouraged by increasing wages and cost of living while, concurrently, imported inputs became relatively cheaper as the effective protection through import duties was generally negative.

Employment was also inhibited as production based on imported raw materials was generally less labor-intensive than production based on domestic raw materials. In addition, protected industries tended to be more urban-based while domestic raw material processing industries had greater employment repercussions in the rural areas as well.

The Syntheses had concluded that the effect of protectionist regimes on savings was inconclusive. However, it was likely that the margin for savings would be reduced in protectionist regimes because of the high margin for inefficiency; for high wages, salaries and urban consumption and by the encouragement given to the domestic production of luxury goods. Even available savings often had not resulted in productive investment as the inward market orientation provided only a limited market and profits tended to be repatriated because of the disincentives to backward integration and to export industry.

The investment horizons in protectionist regimes were shortened because of the fear of frequent changes in regulations and entrepreneurs largely sought to maximize the returns on corruption and to circumvent regulations. The tendency to seek quick profits by the acquiring of foreign franchises rather than by developing indigenous products was a particularly serious indictment of the effects of protectionist regimes on the time

horizons and the innovativeness of entrepreneurs in such regimes. Industrial entrepreneurial talent was generally in short supply in developing countries and the misallocation and misdirection of available talent in protectionist regimes could result in costly repercussions in the long-run.

The Syntheses had noted that administrative bottlenecks tended to widen the margin for inefficiency. The administrative capacity in most developing countries had, probably, been seriously over-rated and more specific attention should be given to the serious constraint that had consequently developed.

Important attention needed to be paid to the effects of governmental ownership and control over enterprises which characterized most protectionist regimes. A further margin for inefficiency arose under those circumstances by the management function being undertaken by political appointees or government bureaucrats. There was also the tendency for government enterprises to become monopolies or to obtain preferential treatment.

The various hypotheses tested by the Project could have usefully differentiated the effects of protectionist regimes in small and large countries. The circumstances of protectionist regimes could be more damaging to future growth and employment creation in smaller countries where a greater incidence of excess capacity was to be expected.

The Project had implicitly assumed a stable international economic system. In the context of an unstable international system any move towards liberalization would also have to take account of international constraints such as declining export markets, increased trade restrictions, smaller foreign assistance and capital flows and fluctuating exchange rates.

General Discussion:

Restrictive and control regimes had been resorted to by countries which were heavily dependent on the export of primary commodities as a means of stabilizing the domestic economy from externally-induced fluctuations. Thus, even if control regimes had resulted in economic inefficiencies, there was an important trade-off between the achievement of greater economic efficiency and the objective of domestic economic stability which merited greater attention in the analyses of control regimes.

The misallocative inefficiencies of control regimes had not been conclusively established in the Synthesis. The results obtained by regressing total savings on national income, for example, needed to be interpreted

with caution as the results did not necessarily suggest the efficiency of either restrictionist or liberal regimes. The conclusions of the Synthesis had, however, to be carefully qualified partly because of inadequacies in data but more so because causal relationships were difficult to establish as between economic phenomena.

It was noted that restrictionist policies were not *per se* inefficient. Selective protection of industry had proved useful and effective when carefully applied and efficiently managed. A sheltered domestic market did not necessarily imply the absence of competition nor necessarily of grave inefficiencies in resource allocation and competitive ability. There was an essential difference between sheltered domestic markets wherein there was competition for the market and situations where industrial licensing and allocative policies which sheltered the domestic market from both domestic and foreign competition.

The Republic of China had, for example, adopted restrictionist economic policies throughout the 1950s but the industrial structure developed during that era proved to be highly competitive in export markets as well immediately following the liberalization of the early 1960s.

The Synthesis had suggested that restrictionist regimes had tended to make imported capital and intermediate goods relatively cheap and that this had led to relatively high capital:labor ratios and the creation of less employment opportunities. There were, however, situations in developing countries where the cost of labor was so low as to offset the effects of relatively cheapened imports of capital and intermediate goods.

In a historical sense, the judgement of the effects of restrictionist regimes was, probably, been undertaken too soon and, consequently, there appeared to be less sympathy for the objectives and the effects of such regimes. Restrictionist regimes were a particular method of management of national resources through the policy instruments of exchange control, quantitative restrictions, industrial licensing etc. By their very nature these policy instruments were strongly conditioned and affected by the socio-political circumstances within which they operated. Much greater attention should, therefore, have been paid to the concommitant role of institutional factors, the socio-political structure and the efficiency in management of the regime.

Rigidities in economic and institutional structure also needed to be analyzed more carefully as such rigidities also impaired the allocative efficiency and the distribution of income in restrictionist regimes. There

was also the important question of whether the presence of such rigidities could frustrate the success of attempts at liberalization. The effects of transition to more liberal regimes were not immediate and the changed structure of economic incentives invariably faced immediate social and political reactions and often led to a premature reversion to Phase II policies.

It was noted in this connection that because of governmental policies and other institutional and social factors the premium afforded by the sheltered market had, in some countries, resulted in greater investment while, in other countries, had only increased conspicuous consumption. Various other factors such as fiscal and monetary policies also deserved greater consideration as they too affected the impact of restrictionist regimes on savings, entrepreneurship and investment.

The effects of protectionist regimes on the distribution of personal incomes required further analysis for, while the increase of total savings was important from the point of view of growth, many developing countries have placed greater priority on a more egalitarian distribution of personal incomes even at the cost of a slower growth in total output. The implications for income distribution had also affected the manner in which devaluation or liberal policies had been undertaken.

The policy options open to developing countries were not either that of developing export-oriented industry or that of encouraging import-substituting industry. The industrial structure could contain industries of both types and a possible strategy was to develop import-substituting industry within sheltered markets and to gradually phase out the protection granted so that the industries could become export-competitive. Such a strategy, however, required very selective control over imports and in the degree of protection granted and, consequently, depended crucially on extremely good management. A more fruitful approach was, probably, to undertake an export promotion strategy of exchange rate flexibility and subsidies for a selected range of exportable products rather than to attempt to make the entire industrial sector competitive in export markets.

The concept of "restrictionist regimes", as analyzed in the Project, was more comprehensive than that of an "import-control regime". The analyses had attempted to quantify the effects of many and varied factors within restrictionist regimes which affected the allocation of resources, savings, entrepreneurship, efficiency of resource use etc. In the analysis of effective rates of protection, for example, the impact of tariffs as such had been disentangled from the premium granted by a large number of non-tariff factors. More detailed quantification of such various non-tariff

factors was, however, not possible due to the inadequacy of data. The results of the quantitative analyses had, therefore, to be qualified in the light of this constraint as well.

B. Liberalization Attempts and Consequences

Introduction: Anne O. Krueger

The major focus of attention in the Devaluation-Aftermath Synthesis was the analysis of the processes of transition in Phase III regimes to Phase IV. This had been considered in terms of three basic issues:

1. **Changes in Exchange Rates**

   Had changes in exchange rates occurred inevitably or by conscious policy decision? What were the circumstances under which changes in exchange rates had occurred? What sort of policies had accompanied changes in exchange rates? What particular policy packages had led to success or failure?

2. **The Policies of Transition**

   What policy packages had facilitated the desired transition to a more liberal trade and exchange regime? What policy packages had made the transition difficult?

3. **The Effects of the Transition**

   What had been the effects of a successful transition to a liberal trade and payments regime? What circumstances and policies had determined the success of the transition? How could the probability of success be increased? What had been the benefits from liberalization?

The analytical framework adopted in the individual country studies and in the Syntheses had paid detailed attention to the quantification, wherever possible, of the varied components and implications of exchange rates. In Phase II regimes, in particular, and at the beginning of Phase III episodes, the exact implications of exchange rate changes were important because of the variance in real exchange rates and the consequent differential actual effects that parity changes had on individual sectors of the economy. Systematic analyses had, therefore, been undertaken of a wide variety of exchange rates, regimes and sets of policies and some of the gross price effects had been netted out.

There had been twenty-two Phase III episodes in the ten countries studied in the Project. It was striking that in thirteen such Phase III episodes the real exchange rates had fallen back to, or below, pre-devaluation levels within 6 months to two years of the devaluation. The major causative factor had been inappropriate aggregate demand management policies which had brought pressure to bear on the foreign exchanges. That phenomenon had occurred irrespective of whether there had been a liberal trade and payments regime or a restrictionist regime prior to the devaluation. In such instances, too, the effects of the demand management policies had effectively rendered very difficult any systematic evaluation of the effects of the devaluation itself.

Some of the countries studied in the Project had followed aggregate demand management policies which had a regular cyclical pattern of rapid increases in aggregate demand and price increases being followed by sharp changes in exchange rates. No real response in terms of resource reallocation and other economic indicators had resulted from such a policy-induced pattern of economic activity and change as the system had adjusted to the expectation of change.

Apart from quantitative restrictions it was noted that protection could be offered through very many other means including that possible through the price and fiscal mechanisms as well. It was, thus, necessary to draw a basic distinction between processes of liberalization which essentially implied the elimination of quantitative restrictions and processes of bias reduction which narrowed the differential in the incentives offered for import substitution and for exports. Reduction in the variance of incentives was itself an important part of the process of liberalization and, while that distinction was important to proper analysis, the close relationship between the two processes had made it very difficult to quantitatively disentangle the effects attributable to liberalization as distinct from the bias reduction which had followed from devaluation and liberalization.

Devaluation had often been associated with foreign borrowings which had assisted in sustaining import levels. The resort to foreign borrowings had frequently been the only alternative if import levels were to be maintained without recession and a reduction in aggregate demand – as devaluation had been undertaken generally in foreign exchange crisis situations with inadequate foreign reserves and minimal borrowing opportunities. With a devaluation, time was required for resources to adjust and for the transition from an import-substituting orientation to an export orientation to be completed. The real exchange rate, in effect, had to be maintained till exports responded. For, since exports could not respond immediately, the absence of foreign credit or reduced import demand

could mean that import controls would again be required to support the balance of payments. (Domestic demand management policies had also affected the process of sustaining the real exchange rate but such problems had to be treated apart from developments in the balance of payments.) Foreign borrowings, under such circumstances, increased the possibilities that resource re-allocation and export growth would occur and, thereby, also provide the resources for repayment of the foreign debts. The process was essentially different from foreign borrowings which had been utilized to sustain present import levels at the expense of future imports since no basic change in the economic structure then resulted.

An alternative strategy to achieve resource reallocation after liberalization had been to induce domestic recession and reduce aggregate and import demands: the cut-back in import demand, thereby, obviated the need for foreign borrowings to sustain import levels. Such a strategy, however, had a very high social cost in terms of reduced incomes and employment which resulted from the general depression in economic activity: quantitative estimates in country studies had suggested that the output foregone had been very considerable.

The analyses had shown that non-traditional exports had been highly responsive to changes in the real exchange rate. More surprisingly, traditional exports had also responded to changes in real exchange rates. On average (for the commodities and countries studied), a one per cent increase in the effective rate of exchange for traditional exports had led to a one per cent increase in foreign exchange earnings from those commodities.

As regards export response, the differences had been significant as between Phase I/II regimes and Phase IV/V regimes even after making allowance for the effects of more appropriate effective exchange rates in the Phase IV/V regimes. A probable reason for the significant differences in export response between these regimes was the reduced variance in the structure of incentives in phase IV/V.

Data from individual country analyses had suggested that the impact of export earnings on real national product and the rate of growth of output had been greater under Phase IV/V regimes. For all the countries, on average, one per cent growth of export earnings had increased the rate of growth of real GNP by about six-tenth of one per cent. Even after allowing for the effects of growth in export earnings real GNP had grown by about four-tenths of one per cent faster in these Phases.

Overall, the results from the Devaluation-Aftermath Synthesis had suggested that export performance had been affected by the effective rate

of exchange and that the differential in growth of real GNP that had resulted from export performance was linked to particular types of trade and exchange regimes (the Phases of the Project): there had been an eight-tenths of one per cent differential in the growth rate of real GNP arising from the nature of the regime.

However, the causative factors in the better performance observed in different Phases could include many other important contributory factors which the quantitative analyses could not subsume. Liberalized export-oriented regimes also, for example, were distinguished by greater competition, more efficiency, better economies of scale, the advantages of competition on the world market and reduced scope for administrative mistakes. Equally well, there were many important – but non-observable and non-quantifiable – factors which could be significant in the comparatively poor performance of restrictionist import-substituting regimes. Such factors did partly qualify the conclusions of the quantitative analyses but did not negate the major conclusions.

COMMENTS

by José Encarnación, Jr.

The conclusion that the inflationary impact of devaluation was practically negligible had not been warranted by the analysis. While the needed distinction between the once-and-for-all increase in the price level and the continuing price increase resulting from a devaluation had been noted, the analysis had not distinguished between the actual price level change arising from the devaluation and other concommitant policies and the price level impact of the devaluation alone. The actual price level change of the total policy-mix could have been observed where the impact of the devaluation alone – as given by the coefficient of the devaluation variable in a reduced form equation which had the price level as the dependent variable – was clearly positive.

The Synthesis has mistakenly tended to treat equilibrium situations as optimal. More generally, too, given the numerous constraints within economies, the relaxation of some constraints such as exchange controls and quantitative restrictions towards the equilibria could, probably, also reduce social welfare.

COMMENTS

by Kiyoshi Kojima

The term "exchange control regimes" often connoted the control of capital movements and the wider connotation of trade and payments regimes in the Project was better indicated by the term "protectionist regimes".

The Project had analyzed the effects of restrictive trade and payments regimes and their liberalization on the economic development of developing countries. Such policies were, however, only part of the totality of development strategies and the relative importance of trade and payments policies in individual developing economies should have been carefully evaluated in the Project. Also, import controls on trade and exchange had been the main focus of analyses in the Project while the greater contribution to development of export promotion measures had received comparatively less attention. And, while the general conclusion had been that freer trade based on comparative advantage would be more desirable, it remained unclear to what extent such policies could solve the varied difficulties and problems in developing countries.

In spite of the many concepts used to analyze exchange rates and the degree of bias in the economy the results had often been disappointing. The Synthesis had concluded that the ideal measure of the "equilibrium" rate of exchange could not be meaningfully measured and had, therefore, relied on analyses of the "real" exchange rate. However, the crucial determinant of the transition through the different Phases was the undervaluation of the effective exchange rate and the "equilibrium" exchange rate would have provided a yardstick of judgement. Alternatively, the "real" exchange rate appropriate to realizing the desired balance of trade consequent to liberalization should have been estimated. Such an exercise was an essential pre-requisite to the contention in the Synthesis that the optimal strategy would be to devalue by slightly less than the amount deemed necessary. The transition to greater liberalization could, in fact, be easier and more successful if the devaluation was somewhat more than deemed necessary.

It was worth recounting Japan's experience in some detail. In the immediate post-war period of reconstruction Japan had a severe stabilization program that was partly supported by U.S. assistance. By April 1949, the trade and payments regime had moved from Phase I to Phase III with the introduction of a single exchange rate of ¥360 to a dollar (which remained unchanged till December 1971). Assisted

also by the Korean War boom industry and export earnings had rapidly developed and, by the early 1960s, partial liberalization of trade and payments had been effected. That move to Phase IV had been realized without an accompanying devaluation.

During 1963/64 the trade and payments regime attained *de jure* Phase V status consequent on accepting Article XI status with GATT and Article VIII status with the IMF. However, *de facto* full liberalization had been achieved later between 1969 and 1973.

The exchange rate had become progressively under-valued with the rapid growth of export earnings during the 1960s. The under-valued exchange rate had, in effect, afforded an important incentive to the rapid increase in exports and enabled improved competitiveness by the incentive also for greater investment in the diversification of production and export. With a surplus being achieved in the current account balance, the liberalization of 1969 to 1973 had been undertaken: a decision often characterized as having been too cautious and unduly delayed.

Development strategy in Japan had been consciously built around an export-oriented policy supported by (an initially) under-valued exchange rate with only marginal reliance on foreign assistance and foreign capital. The administration of the trade and exchange regimes had also remained flexible enough to progressively liberalize imports along with the growth of export earnings. The under-valued exchange rate had itself been a disincentive to imports.

As against the Japanese experience of export-oriented development with minimal reliance on foreign assistance, most developing countries had adopted policies dependent on foreign assistance flows and on the maintenance of over-valued exchange rates. Over-valued exchange rates stimulated imports and import restrictions had become necessary to protect the balance of payments: it was not that import restrictions enabled the maintenance of an over-valued exchange rate. Such restrictive import policies had also increased the domestic price of imports to levels higher than in other countries.

Over-valued exchange rates had, probably, been maintained to more efficiently utilize foreign assistance and other capital flows as the domestic currency price of imports was kept low. Debt service payments in domestic currency terms were also smaller although the export earnings required to meet foreign obligations had been constrained by the over-valued currency. As a general rule, it had appeared that the inflow of foreign assistance and other capital flows had tended to over-value the exchange

rate to a level higher than what the equilibrium rate would have been in the absence of such flows.

Thus, in broad perspective, an under-valued rate of exchange had generally stimulated selective import-substitution and growth in export earnings while an over-valued exchange rate had enabled the more efficient utilization of foreign assistance and had facilitated capital-intensive investment.

That policy dilemma had been compounded in basically primary commodity exporting economies which had sought to encourage non-traditional exports. With inelasticities of both supply and demand characterizing the traditional primary commodity exports, an over-valued rate of exchange had enabled the maximization of foreign exchange earnings from those commodities: an under-valued rate of exchange could have reduced foreign exchange earnings. An under-valued rate of exchange would have, on the other hand, provided incentive for export diversification into non-traditional and, especially, manufactured exports. Given the importance of the traditional primary commodity exports both the nominal and the effective exchange rates in such countries had tended to remain close to that required by the traditional exports and were, consequently, over-valued.

Even under such circumstances, devaluation could be undertaken to provide incentives for non-traditional exports provided that export taxes were also levied on the traditional exports to prevent any reduction in foreign exchange earnings. Such a policy-mix deserved greater consideration as, while an over-valued rate had permitted the more efficient utilization of foreign assistance, continued over-valuation of the exchange rate would inhibit the structural changes required for more rapid economic growth. Foreign assistance flows could also be affected if no structural change conducive to more rapid economic growth was achieved. Continued over-valuation of the exchange rate would also diminish other capital inflows as there would be a greater incentive to increase exports of merchandise from the capital-exporting countries than to export capital for productive purposes in the developing country. Any adjustments in the exchange rate should, therefore, take account not only of the direct requirements of the trade sector but also of the impact on inflows of foreign assistance and other capital.

Foreign assistance had, while providing immediately required food and other essential commodities, often had undesirable long-term effects on development in many developing countries. With over-valued exchange rates, such imports were available at relatively low prices on the domestic market and had serious disincentive effects on import-substituting pro-

duction. Furthermore, foreign capital flows had often skewed the desirable pattern of development by enabling import substitution of luxury and non-essential outputs which had catered to small rich and privileged groups in the urban areas.

Developing countries should, therefore, seek to stabilize and improve the future balance of payments position through an appropriately under-valued rate of exchange supplemented by the marginal and selective utilization of foreign assistance and capital flows for the purpose of gradual liberalization of trade restrictions. Where administrative capacity was limited, an undervalued exchange rate could also be more efficient in restraining imports and in encouraging exports.

The important role of export promotion policies in trade and development needed greater emphasis in the Project. The Japanese experience had demonstrated the important role in export expansion of a wide range of effective incentives provided through tax concessions, subsidized interest rates, long-term credit and other subsidies provided for export and export-oriented production. The institutional structure of export marketing also merited closer attention: in Japan, for instance, the unique institution of the general trading firm had played a major role. The availability of export credits had been another significant factor and exporters of non-traditional products from the developing countries would, in particular, need to be assisted to provide export credits on terms competitive with that available from exporters in the more developed countries.

General Discussion:

A better allocation of resources and the removal of distortions in relative prices were not automatic phenomena which followed from a process of liberalization since the economic systems in developing countries generally did not enable the price mechanism to operate adequately.

A more liberal regime did, probably, achieve a relatively better allocation of resources -- as concluded in the Synthesis. However, the question remained whether it was the particular strategy adopted which was responsible for the success or failure noted or whether the major factor was the quality of management of the strategy.

There was an important distinction between policies of liberalization and policies which reduced the bias against the export sector. Governmental intervention in, or direction of, economic activities was not always undesirable nor did it always adversely affect the export sector. It was noted that governmental intervention was equally great in many successful export

economies as in many other developing economies which had failed to achieve similar success in exports. Governmental intervention, in the former case, was positively biased in favor of exports while, in the latter case, such intervention was a negative form of control which biased against exports even though the stated aim of policy was to increase exports.

Import substitution and export promotion were not alternate strategies. The important requirement for economic policies was that they should be neutral in bias or, preferably, be biased in favor of exports.. Given the uncertainties and the difficulties of export marketing as compared to production for a sheltered domestic market, subsidies and other incentives for exports could remove the divergence between the private and the social evaluation of production for export.

Exchange rate policies had been considered in the Project not purely in their ameliorative effect on the balance of payments but in their effects on growth, the allocation of resources etc. Demand management policies alone could be used to influence the balance of payments position but that was normally at the expense of growth. A review of devaluations during the 1960s suggested that where devaluations were allowed to be reflected in prices and were adequately supported by demand management policies, a significant increase in exports resulted. Any evaluation of episodes of liberalization had, from the point of view of timing of the evaluation, take important cognizance of the fact that the effects of devaluation and liberalization were not immediate.

The countries analyzed in the Project had a basic industrial structure and sufficient economic flexibility to undertake devaluation and liberalization in order to spur the faster growth of exports and total output. Economic conditions were, however, considerably different in many other developing countries and viable non-restrictive economic policies were difficult to design under conditions of high export dependence on a narrow range of primary commodities subject to wide price fluctuations and inelastic export demand. The constraints were even greater where foreign reserves were limited and additional foreign resources were not readily available.

Japan had achieved high rates of growth in total output through a vigorous strategy of export expansion. However, the experience of Japan was not fully relevant to the developing countries. It was also noted that, while Japan had a minimal reliance on foreign assistance, there had been an implicit foreign resource flow because the defence agreement with the US made for minimal defence expenditures by Japan.

It was suggested that many developing countries had chosen the option of maintaining over-valued exchange rates through restrictive policies as a means of maximizing the utilization of foreign assistance rather than to adopt export-oriented strategies which would have required devaluation and liberalization. It was, however, noted that many developing countries with successful export performance had also relied greatly on foreign assistance. The maintenance of over-valued exchange rates and restrictive regimes might, therefore, have been induced not by the availability of foreign assistance but rather by the insufficiency of foreign resource flows.

The tendency for liberal regimes to revert back to Phase II policies was not evidence, in itself, of the mismanagement or failure of the policies adopted but was, possibly, necessitated by social and political pressures. The experience of the Republic of China suggested also that Phase II policies need not necessarily imply that the industrial structure was inappropriate or non-competitive for export purposes.

The effective exchange rates used in the analyses should have been obtained by deflating the implicit exchange rates by the specific commodity price index rather than by the wholesale price index: it was noted that the results obtained by using the wholesale price index were close enough approximations for the purposes of the analyses.

The analyses had also mainly examined the effective exchange rates on industrial inputs. It was suggested that, as investment and production decisions were made on an evaluation of both input costs and output prices, the analyses of effective exchange rates could also have both these elements.

In the context of the present international economic situation of recession, inflation, floating exchange rates and adverse price trends for the exports of developing countries, it was noted that the adoption of policies of devaluation and liberalization would be all the more difficult in the absence of large and continued foreign resource support.

SECTION 3

COUNTRY STUDIES

Country Study: Synopsis

Foreign Trade Regimes and Economic Development

PHILIPPINES

by Robert E. Baldwin

I. INTRODUCTION

Like so many other developing countries, the Philippines has relied upon foreign trade and exchange rate policies as key tools in promoting economic development since World War II. The purpose of this paper is to evaluate the growth, resource-allocation, and income-distribution effects of these policies from 1946-1971 with special attention being devoted to assessing the efforts to liberalize exchange controls. The fiscal and monetary measures that accompanied trade and payments policies are also examined in order to place these latter policies in proper perspective.

The growth pattern of Philippine net domestic product and its components, as well as gross domestic product, is indicated for various sub-periods in Table 1. As this table shows, the average annual growth rate of gross domestic product was very rapid during the reconstruction period in the latter part of the 1940's, and also was quite high during the early period of import-substitution policies in the first half of the 1950's. A slow-down to a 5 per cent annual growth rate occurred in the last part of the decade, but this was reversed in the 1960's as the average rate rose to 5.6 per cent and 6.0 per cent annually in the next two periods. Manufacturing activity also expanded very quickly during the reconstruction period, and this growth continued at a more than 12 per cent annual rate from 1951-1955. The pace of development in this sector not only declined to 7.7 per cent annually in the 1956-1960 period, but continued to decline to an average annual growth rate of 4.0 per cent in the next five-year period. However, the average annual growth rate from 1966-1971 rose to 5.9 per cent.

The rapid rate of growth in manufacturing increased this sector's share of net domestic product from 10.7 per cent in 1948 to 17.9 per cent by 1960. Between 1960 and 1971, however, the relative importance of manufacturing activity in net domestic product failed to increase further and stood at 17.6 per cent in 1971. One result of the increase in the relative importance of the manufacturing sector has been a sharp

decline between the end of the 1940's and the early 1970's in the shares of imports consisting of simple manufactures and food stuffs. These declined, respectively, from 37.6 per cent to 16.5 per cent and 25.3 per cent to 12.3 per cent. On the other hand, the import share of such items as machinery and transportation equipment as well as various raw materials expanded significantly in order to facilitate the Philippines' industrialization efforts.

The share of agricultural, fishing and forestry activity in net domestic product behaved during the postwar period in a roughly inverse manner to that for manufacturing. The share of this sector fell from 38.2 per cent in 1948 to 31.4 per cent in 1960, and was 30.6 per cent in 1971. As is typical in developing countries, the share of the labor force employed in agriculture is much larger than this sector's contribution to net domestic product. In 1948 the figure was 71.5 per cent, whereas in 1971 it was 56.0 per cent. Manufacturing absorbed 6.6 per cent of the labor force in 1948 and 11 per cent in 1971.

The importance of the agricultural sector in the Philippine economy is reflected in the composition of the country's exports. Seven of the ten leading exports (accounting for 44 per cent of total exports in 1971) are crude or simply-processed agricultural commodities, namely, copra, sugar, desiccated coconut, coconut oil, copra meal, canned pineapples, and bananas. The other three items (accounting for 38 per cent of 1971 exports) are forest or mineral products, namely, logs and lumber, plywood, and copper concentrates. These latter exports reflect the rich endowment of forest and mineral resources in the country. In the mid-1950's more than 60 per cent of the total land area was covered by forests, and logs and lumber have been the fastest growing export during the period covered by this study. Copper mining is by far the most significant activity in mining and quarrying, contributing 75 per cent to the net value-added in this sector, but gold mining, iron-ore mining, and chromium-ore mining also are moderately important.

In terms of the sub-periods used in Table 1, the average annual rate of exports in real terms was 7.4 per cent between 1950 and 1955, 4.5 per cent between 1955 and 1960, 7.1 per cent between 1960 and 1965, and 4.7 per cent between 1965 and 1971. The share of exports of goods and services in real gross national product was 14.5 per cent as of 1971, a figure that was about the same as in 1952. The openness of the economy in terms of exports is roughly comparable to that of Thailand, but considerably less than either Malaysia or the Republic of China.

Table 1: Net Domestic Product by Industrial Sector, Gross Domestic Product, Population and per capita GDP: 1946-1971

		1946-1950	1951-1955	1956-1960	1961-1965	1966-1971
Agriculture, Fishery and Forestry	Value	1,619	2,407	2,981	3,574	4,774
	Growth Rate	12.4	7.2	3.0	4.2	5.7
Mining and Quarrying	Value	41	100	148	176	365
	Growth Rate	70.3	12.0	8.4	4.5	19.9
Manufacturing	Value	440	1,000	1,609	2,058	2,672
	Growth Rate	50.5	12.1	7.7	4.0	5.9
Construction	Value	323	346	370	422	489
	Growth Rate	38.1	-2.7	0.3	8.0	-1.9
All Other Sectors	Value	1,760	2,924	4,146	5,407	7,138
	Growth Rate	16.9	9.1	5.9	5.5	5.2
Net Domestic Product	Value	4,194	6,776	9,255	11,637	15,399
	Growth Rate	18.9	8.1	5.0	5.0	5.4
Gross Domestic Product	Value	4,700	7,619	10,420	13,398	18,207
	Growth Rate	19.9	8.1	5.0	5.6	6.0
Population	Number (1000)	19,044	21,886	25,435	29,526	34,941
	Growth Rate	2.3	3.1	3.1	3.0	3.0
Per Capita GDP	Pesos/Year	246	347	409	453	522
	Growth Rate	17.1	4.9	1.9	2.1	2.9

Notes: Value: average annual value (for the specified period) in millions of Pesos at 1955 prices.
Growth Rate: average annual percentage rate of growth during the specified period.

Source: Income Data: 1948-1967, National Economic Council, *The Statistical Reporter*, January-March 1969, pp. 12-13 and 19; 1970, National Economic Council, "The Philippine Economy in 1970," mimeographed; 1971, National Economic Council. Population: 1946-1959, Bureau of Census and Statistics, *Handbook of Philippine Statistics*, 1960 and 1963; 1960-1971, Bureau of Census and Statistics.

II. TRADE AND PAYMENTS POLICIES IN THE 1940's AND 1950's

The various foreign trade regimes utilized in the Philippines can be examined conveniently in terms of the five phases of exchange control suggested by Bhagwati and Krueger. The first two of these, namely, the period in which exchange controls are introduced and gradually intensified and then the period in which the government adapts various *ad hoc* measures to offset some of the unfavorable aspects of exchange controls, cover the 1940's and 1950's. This section gives a brief description of the main development policies adopted in these years.

A. The Introduction of Exchange Controls

The nature of Philippine economic policy in the immediate postwar years was greatly influenced by the extensive destruction of capital during the war and by the special trading arrangements established between the Philippines and the United States at the time the country gained its independence in 1946. Fortunately, large disbursements by the U. S. Government in the form of war damage payments, relief expenditures, veterans' pensions, and military expenditures as well as a remarkably rapid expansion of export proceeds permitted the country to ease the shortage of domestically produced goods by means of substantial postwar importation. For the two years 1945 and 1946, for example, total U. S. Government expenditures of $393 million more than covered combined imports of $364 million[1]. Policy-makers were, however, concerned at the time by the high consumption component of imports. In 1947 consumption goods made up 68 per cent of all imports (one-quarter of these were textiles), and capital goods averaged about 10 per cent of imports. Although the 10 per cent share for imports of capital goods was not too different from the 14 per cent figure of 1937-1940, top government officials believed that this level was insufficient to meet the country's reconstruction and development requirements. Most Philippine leaders believed that the country needed both additional export-oriented and import-replacing production in order to meet the adjustment problem associated with the gradual phasing out of reciprocal preferential relations with the United States.[2] Achieving these increases in production in turn required additional imports of capital equipment. The concern of government authorities was further heightened by the steady depletion of the international reserves which had been built up in 1945 from large U. S. Government expenditures.

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1 In 1945 the country's exports amounted to less than $1 million and its imports to $29 million. See R. Garcia, "Exchange Rate Policy in the Philippines", *Central Bank News Letter*, 26 July 1966.

2 See *Revised Philippine Economic Development Program*, 1950, Philippine Economic Survey Mission (dittoed).

The policy options available to the Philippine Government to achieve its import-substitution goals and meet the growing deficit problem were severely constrained by the provisions of the Philippine Trade Act of 1946 (the Bell Trade Act). This Act provided for an eight-year period (until July, 1954) of free trade between the United States and the Philippines. For the rest of 1954 each country was to apply 5 per cent of their tariffs on each import item. As of 1955, 10 per cent of the tariffs on imports was to be charged. Thereafter this level was to be raised by 5 percentage points per year until full duties would apply as of January, 1973. The Act also stipulated that until 1973 the Philippine Government could not change the established exchange rate of ₱2.00 per U. S. dollar, impose exchange inconvertibility, or restrict capital transfers without explicit agreement from the President of the United States. Since the United States supplied 80 per cent of Philippine imports in this period, the effect of the free trade agreement between the countries was to rule out tariff increases as a means of reducing imports. Likewise it was evident that permission to devalue the currency or impose exchange control was likely to be given by the United States only if a severe exchange crisis developed. Two other features of the Act that infringed upon Philippine sovereignty were the commitment not to levy export taxes and the agreement to accord Americans equal rights with Filipinos in the exploitation and development of natural resources and public utilities in the Philippines. As Golay points out, the reason that Act was accepted by the Filipinos was that it was accompanied by another piece of legislation providing for U. S. compensation for war damages suffered in the country.[3]

Despite the constraints imposed by the Bell Act, it was not long before the Government found means other than tariffs to restrain imports. One method adopted in June 1948 was to raise the sales tax on luxury and semi-luxury items - most of which were imported - from 20 to 30 per cent and from 10 to 15 per cent, respectively. The measure also stipulated that the sales tax be paid in advance on imported articles, i.e., prior to release by customs officials. More important as a means of limiting imports, however, was the approval of the Import Control Act (Republic Act- R.A. - No. 330) in July of the same year. This law, which was not considered to be inconsistent with the Bell Trade Act, but was not implemented until January, 1949, because of the opposition of foreign importers, authorized President Quirino to establish a system of import control by regulating imports of non-essential and luxury articles and to create an Import Control Board for the purpose of issuing the necessary rules and regulations. The intent of the Act was not so

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3 Frank H. Golay, *The Philippines: Public Policy and National Economic Development*, (Ithaca, Cornell University Press, 1961). p. 64. This U. S. legislation provided the Philippines with $620 million for war damages.

much to encourage the domestic production of non-essential items, but, by restricting imports of luxury goods, to permit the importation of a sufficient volume of essential consumer goods for lower income groups and of essential capital goods for basic reconstruction and development needs.

Despite increases both in the range of items brought under control and in the percentage cutbacks during the second half of the year, the volume of imports actually was slightly larger in 1949 than in 1948. Only imports of tobacco products declined significantly. One reason for this failure was a shifting from high-priced to low-priced imports of a particular commodity. Import controls applied, for example, only to automobiles costing more than $3,500. By purchasing more inexpensive cars, importers were able to increase the value of imported cars from $7 million to $8 million in the first half of 1949. More fundamentally, however, the poor performance in cutting imports was due to an unwillingness of the Government to impose the harsh monetary and fiscal measures needed. The year 1949 was a Presidential election year, and one can observe at this early date the pattern of deficit spending, increases in the money supply, and a tendency to ease controls that characterizes election years up to the present time.

The failure to reduce imports in 1949 probably would not have resulted in the full scale exchange crisis which developed near the end of the year had it not been accompanied by a sharp drop in both exports and U. S. Government expenditures. The value of exports dropped from $327 million in 1948 to $261 million in 1949, even though in volume terms exports rose somewhat. The drop in international reserves from $420 million in 1948 to $260 million in 1949 led the Central Bank, which had only opened for business on 3 January, 1949, to intervene in the exchange market immediately after the election. First, on 17 November, the Bank issued Circular 19 which imposed an 80 per cent margin requirement on all letters of credit covering various luxury and non-essential items. Commercial banks were also prohibited from granting credit facilities either directly or indirectly for the purpose of providing the margin requirements. Next, on 9 December, 1949, the Central Bank instituted foreign exchange controls by issuing Circular 20 under the authority vested in the Bank by the act (R.A. No. 265) establishing the institution. Before doing so, however, the consent of the President of the United States was obtained, as required by the Philippine Trade Act of 1946. The Circular stipulated that all transactions in gold and foreign exchange required licenses from the Central Bank and all receipts of foreign exchange must be sold to the Bank. On 29 December the Central Bank also raised its rediscount rate from the very low rate of 1.5 per cent to 3.0 per cent.[4]

[4] The reserve requirement for demand deposits remained unchanged at 18 per cent from 1949 to 1959. Little use has been made of open-market operations in the Philippines because of the absence of a significant bond market.

Thus, the immediate reason for the imposition of exchange controls was an exchange crisis touched off by liberal spending and credit policies related to the 1949 election. However, more basic reasons for the underlying weakness in the country's balance-of-payments conditions were pent-up consumption and capital-goods demands coupled with an unrealistically low price for foreign exchange.

Although the promotion of domestic industrnal development does not appear to have been the main purpose of the early import controls, the Government, soon after gaining its independence, did utilize special tax and financing privileges for the specific purpose of fostering "new and necessary" industries. The Act (R.A. No. 35, September 1946) that was passed exempted new industries from all internal (but not import) taxes for a period of four years from the time the industry was organized. While "new and necessary" industries were not defined in the Act, the Secretary of Finance in an implementing order specified these industries to be ones that "had not been commercially exploited in the Philippines before the war" and that "contribute to industrial and economic development". The latter phrase was regarded by the Finance Secretary as being general enough to cover a very wide variety of manufacturing activities. However, despite this broad interpretation plus the fact that aliens as well as Filipinos could enjoy the tax benefits, only one new manufacturing corporation was receiving the tax exemption as of March 1948.[5] It was not until import controls were introduced in 1949 that the number of firms applying for the privilege became significant. This poor response to tax incentives seems to have been due to the absence of tariffs on imports of manufactures from the United States coupled with the abundance of U. S. aid and the profitability of reconstructing previously established industries.[6]

Another governmental measure that should be mentioned as contributing to the import-substitution efforts initiated in the reconstruction period was the 1946 Act establishing the Rehabilitation Finance Corporation (RFC). This organization, with its initial authorized capital of ₱300 million and below-the-free-market lending rates, became the major source of industrial credit in the economy. In the 1947-49 period the RFC approved loans averaged about $45 million annually. Real estate construction and repair absorbed 51 per cent of this sum (a share that rapidly decreased as war-damaged buildings were repaired or replaced), the industrial sector 28 per cent, and agricultural activities and the government the remaining 21 per cent.

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[5] Vincente B. Valdepeñas, Jr., *The Protection and Development of Philippine Manufacturing* (Manila, Ateneo University Press, 1970), p. 29.

[6] *Ibid.*, p. 29.

B. *1950-1952: The Early Years of Exchange Controls*

The first few years of the 1950's are noteworthy with respect to exchange-control experience for two main reasons. First, after exchange controls were introduced by the Central Bank in December 1949, government controls rapidly spread to all types of international transactions and became increasingly complex. Second, prices of imported goods increased sharply, in part because of the Korean War but mainly because of the restrictive import controls. The Government responded to the price increases by adopting tax measures designed to capture the windfall gains associated with exchange controls and also by liberalizing import controls over the more essential consumer goods and raw materials. It was during this period that the pattern -- so typical in many developing nations -- was firmly established of protecting commodities generally classified as luxury items compared to capital goods, essential raw materials, and basic consumption goods. Table 2 summarizes the main policy changes in the 1950-1952 period.

C. *1953-1959: Further Efforts to Promote Import-Substitution*

The year 1953 is an important one in any survey of Philippine experience with trade controls because the Congress, in response to continued charges of favoritism and excessive delays on the part of the authorities administering import controls,[7] failed to extend the Import Control Act when it expired in June of that year. The Executive branch responded by placing the entire control mechanism in the hands of the Central Bank. This shift reduced the number of charges of favoritism and excess delays in the allocation of foreign exchange but did not change the general goal of import-substitution. This objective was vigorously pursued by the Central Bank and other agencies throughout the rest of the fifties. By 1959 protective rates of 400 per cent or more were not uncommon in the non-essential consumer goods category. The effect of the controls in shifting the composition of imports can be seen from Table 3.

Besides holding the belief that exchange controls were helpful in fostering industrialization while still providing low-priced essential consumer goods for lower income groups, Central Bank authorities found

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[7] For an elaboration of these charges, see Caridad Carreon Semana, *Some Political Aspects of Philippine Economic Development*, Ph.D. Thesis, Harvard University, June 1965.

Apparently payments to government officials amounted in some cases to as much as 50 per cent of the value of foreign exchange licenses. See A.V.H. Hartendorp, *History of Industry and Trade of the Philippines*, (Manila: Philippine Education Press, 1962), pp. 300-301.

Table 2: Major Trade, Payments and Related Economic Policies, 1950-1952

1950 (May)	–	A new Import Control Act requiring import licenses for all imports, stressing the import-substitution objective, and giving preference to Filipino citizens.
1950 (June)	–	Price controls instituted covering essential consumer goods, raw materials and machinery.
1950 (Sept.)	–	Increases in sales taxes with the greatest rise occurring in luxury consumer items.
1950 (Dec.)	–	Issuance of an Executive Order that permitted certain highly essential consumer goods and raw materials to be imported without quota limitations in order to hold prices down.
1951 (Feb.)	–	Increases in the base on which the sales tax calculation is made for imported goods. Again, the greatest increase occurred for luxury consumer goods.
1951 (Mar.)	–	Imposition of a 17 per cent excise tax on the peso value of foreign exchange sold by the banking system.
1951 (May)	–	Adoptation of still another Import Control Act that completely decontrolled a number of essential consumer items but also extended the import-substitution goal by stating as an objective that non-essential commodity imports be reduced or banned. The reexport of certain essential goods was also banned.
1951 (June)	–	Further easing through an Executive Order of the importation of additional essential commodities in order to stem the increase in domestic prices.
1951 (Aug.)	–	A retrenchment of the liberalization policy by reducing the number of decontrolled items and establishing a list of banned items.
1952 (May)	–	Introduction of measures designed to make it more difficult to undervalue exports.
1952 (Aug.)	–	Reduction of the rediscount rate from 3 per cent to 2 per cent.

Table 3: Imports Classified by "Official" Categories, 1954-1963
(as per cent of total imports)

Year	Essential Producer	Semi-Essential Producer	Non-Essential Producer	Essential Consumer	Semi-Essential Consumer	Non-Essential Consumer	Unclassified	Decontrolled
1954	40.2	16.5	7.9	2.1	1.1	6.8	12.6	12.7
1955	46.5	11.6	8.4	3.9	0.7	5.3	9.5	14.0
1956	54.8	12.1	6.8	2.5	0.5	3.2	5.6	14.4
1957	52.0	12.2	6.9	3.4	0.7	3.5	8.0	13.2
1958	50.4	12.4	4.9	4.9	0.5	0.8	7.1	18.9
1959	61.3	11.9	3.7	1.1	0.6	1.1	7.1	13.1
1960	59.4	10.2	4.8	2.0	0.4	1.1	6.7	15.3
1961	60.2	9.4	6.2	1.6	0.5	1.6	6.8	13.7
1962	64.0	11.9	6.9	1.3	0.5	1.8	5.4	8.2
1963	59.7	11.3	7.5	1.4	0.6	2.7	8.3	8.5

Source: Central Bank, *Statistical Bulletin*, vol. 16, March 1964 as cited by Gerardo P. Sicat, "Industrial Policy and the Development of Manufacturing in the Philippines," Institute of Economic Development and Research, School of Economics, University of the Philippines, Discussion Paper No. 65-1 (January 6, 1965).

exchange controls desirable from the viewpoint of their responsibilities "to maintain monetary stability" and "to preserve the international value of the peso". Fear of inflation and a resulting exchange crisis and depreciation should controls be removed was frequently expressed by these authorities during the 1950's. However, there were growing pressures from exporters to be permitted to trade at a more favorable exchange rate. They pointed out that the overvaluation of the peso acted to discourage production for export purposes. Finally, in 1955 a "no-dollar import law" was passed that enabled certain exports to be bartered for imports outside of the exchange system.[8] Largely because of this law, the second phase of the Bhagwati-Krueger schema, namely, the adoption of *ad hoc* measures to offset some of the unfavorable aspects of exchange control, can be dated as beginning in 1955. Table 4 summarizes the main trade-related policies adopted between 1953 and 1959.

Monetary and Fiscal Policies: The same year (1953) in which the Central Bank assumed full authority for quantitatively controlling imports was also an election year. The Central Bank responded to the consequent pressures for easy exchange-control and credit policies by repealing the 80 per cent cash-deposit requirement for imports of specified luxury and non-essential items and by reducing the required ratio of net foreign exchange holdings, cash in bank vaults, excess reserves, etc., to letters of credit from 70 to 50 per cent. Furthermore, government spending was significantly increased and the internal government debt rose 45 per cent.

These expansionary policies were continued after the election of President Magsaysay, who immediately recommended that the National Economic Council plan and put into effect a truly integrated development program.[9] In order to finance the governmental portion of the resulting plan, the Congress authorized the President to borrow up to 1 billion pesos. As part of the general expansionary program, the rediscount rate was lowered in January 1954 from 2 per cent to 1-1/2 per cent per year.

Central Bank authorities were, however, concerned about the potential inflationary effect of the monetary and expenditure expansion and did succeed in obtaining a credit tightening in 1957. The rediscount rate was raised from 1-1/2 to 2 per cent in March and to 4-1/2 per cent in September. The rate of interest paid on savings deposits was also

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[8] Imports under "no-dollar remittance" referred to commodities for which no foreign exchange allocation was made by the Central Bank.

[9] The function of the National Economic Council was to coordinate government economic policies.

Table 4: Major Trade, Payments and Related Economic Policies, 1953-1959

1953 (June)	–	Expiration of the 1951 Import Control Act and the placing of the entire import control mechanism under the control of the Central Bank.
1953 (Oct.)	–	Repeal of the 80 per cent cash-deposit requirement for specified luxury and non-essential items.
1953 (June)	–	Enactment of a new tax-exemption law for "new and necessary" industries covering import taxes as well as internal taxes.
1954 (Jan.)	–	Reduction of the rediscount rate from 2 per cent to 1-1/2 per cent.
1955 (Sept.)	–	Revision of the U.S.-Philippines Trade Agreement which included accelerating the rate at which Philippine duties would be levied on imports from the United States and eliminating statutory U.S. influence over the management of foreign-exchange matters.
1955 (Sept.)	–	Replacement of the 17 per cent excise tax on foreign exchange by a gradually declining (1.7 percentage points per annum) tax on imports.
1955 (Sept.)	–	Enactment of a "no-dollar import law" permitting certain exports to be bartered for imports outside of the exchange system.
1957	–	Tightening of monetary policies by means of a two-step (March and September) rise in the rediscount rate to 4-1/2 per cent, establishment of ceilings on various categories of loans, and reintroduction in September and December of differential cash-deposit requirements on letters of credit for the importation of various types of goods.
1957 (June)	–	Introduction of a new tariff schedule which provided for low rates on essential consumer and producer goods and high rates on items classified as nonessential.
1958 (Feb.)	–	Easing of the cash-deposit requirements on letters of credit.
1959 (Feb.)	–	Further tightening of monetary controls by increasing the rediscount rate to 6-1/2 per cent (but establishing lower preferential rates for crop loans and export bills) and raising the reserve requirement against demand deposits.
1959 (Jul.)	–	Imposition of a 25 per cent margin fee levied by the Central Bank on sales of foreign exchange.

raised from 2 per cent to 3 per cent in September. Furthermore, in April 1957 the Central Bank adopted a system of priorities on credits to commercial banks and imposed ceilings on the various categories established.[10] But it was not until after the Presidential election in November that the pressures on the trade balance could be eased by significantly tightening import controls. The deficit on trade account reached $182 million, the highest since 1949.

The main restraining measure adopted was the reintroduction of margin requirements on letters of credit in September of 1957. A 100 per cent cash-deposit was established for imports of goods classified as non-essential items. In December, imports of decontrolled items, essential consumer and producer goods and semi-essential producer goods were also made subject to a 100 per cent margin requirement and imports of semi-essential consumer and non-essential producer goods to a 200 per cent margin requirement. Also at that time the opening of letters of credit for non-essential consumer goods, including those purchased through barter, was prohibited.[11]

As the balance of payments quickly improved, most of these measures were relaxed. In February 1958, margin requirements were lifted for imports of decontrolled items and for imports by essential and semi-essential producers. In October the margin requirement was reduced from 200 per cent to 100 per cent for semi-essential consumer goods and non-essential producer goods. In early 1959, non-essential consumer-goods imports were permitted, first only on a barter basis and then on a normal payment basis. However, a 100 per cent margin requirement was established for such imports.

At the same time that the Central Bank moved to ease its very stringent import controls, it also took various actions to curtail excess demand and reduce windfalls. The rediscount rate was raised in February 1959, from 4-1/2 per cent to 6-1/2 per cent with preferential rates of 4-1/2 per cent given to agricultural crop loans and 5 per cent on export bills. In addition, the reserve requirement against demand deposits

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[10] In order of priority the categories were: Priority I - industrial loans; Priority II - public utility loans; Priority III - real estate loans; and Priority IV - consumption loans.

[11] Imports of essential producer raw materials for industrial plants approved by the Central Bank and National Economic Council plus essential industries established before 9 December 1949, required only a 50 per cent margin requirement, and capital-goods imports under deferred payment arrangements only a 25 per cent requirement. Another important feature of this restraining measure was the clause stating that imports "by the Philippine Government, its subdivisions, instrumentalities, government-owned and controlled corporations and all other government agencies and importations under U. S. Public Law 480 and all ICA imports shall be given the same treatment as ordinary imports".

was raised in stages from 18 per cent to 21 per cent. Most important, however, was the imposition in July 1959, under R.A. 2609 of a 25 per cent "margin fee" levied by the Central Bank on sales of foreign exchange. The fee was not a tax in that it accrued to the Central Bank rather than the Government. The level of this fee was reduced to 20 per cent in November 1960, 15 per cent in March 1961, and finally abolished on 31 December 1965.

The 25 per cent levy on foreign exchange was designed not merely to curtail the excess demand problem of the period but also to serve as a significant but uniform cushioning measure for the exchange decontrol that the Government had finally decided to undertake.[12]

Toward this end, the Act establishing the margin fee permitted the Central Bank to set the rate as high as 40 per cent and stipulated that it must be uniform. There were a number of exemptions from the fee, e.g., drugs and medicines, medical and hospital supplies, canned milk, and fertilizers, but significantly they did not include "new and necessary" industries. This move away from preferential treatment for these industries as well as other long-favored groups was further extended by two other laws approved in June 1959 (R.A. 2351 and R.A. 2352) that eliminated the exemptions of "new and necessary" industries from the special import tax in force since 1955 as well as from the income tax.

As the preceding description indicates, during the 1950's (and also the 1960's) the Government did not hesitate to employ deficit spending and easy credit policies either to improve the reelection probabilities of the party in power or to implement a particular development program. Consequently, the Central Bank alternately pursued liberal and strict monetary policies. At the outset of a new administration, for example, it would be required to provide credit on a liberal basis in order to stimulate economic growth. However, when this overly liberal monetary policy resulted in strong inflationary pressures as well as serious balance-of-payments problems, the Central Bank would attempt to solve these problems by quickly applying the brakes to this monetary expansion.

Increases in Tariff Levels: As the expiration date (1954) for the period of mutual free trade under the U.S.-Philippine Trade Agreement of 1946 approached, the Philippine Government requested a reexamination and adjustment of various provisions of the Agreement. The Agreement was widely criticized in the Philippines on the grounds that it prevented the Philippines from exercising control over its own exchange rate,

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[12] President Garcia stated in a speech on 2 July 1959, that over a three or four year period there would be a substantial relaxation of controls. Reported in *Central Bank News Digest*, 14 July 1959, pp. 4-5.

resulted in a sizable loss of potential tariff revenue, and granted the country a considerably smaller margin of preference in U.S. markets than initially because of subsequent U.S. tariff cuts. The result of the ensuing negotiations--and after the free trade period had been extended to the end of 1955--was the Revised Trade Agreement, better known as the Laurel-Langley Agreement. This new agreement accelerated the rate at which imports from the U.S. would be subject to the full amount of Philippine tariffs, while slowing down the initial rise in the application of U. S. tariffs to imports from the Philippines.

In addition to accelerating the rate at which the full height of Philippine tariffs would apply against U. S. imports, the Government also took steps to raise the level of these duties. The tariff schedule that went into effect after the war was essentially that which had prevailed since 1909. This schedule had been constructed mainly with revenue considerations in mind and aimed at an *ad valorem* tariff level of about 23 per cent on dutiable imports from countries other than the United States. Under the 1957 Act, duties were lowered on essential consumer goods (e.g., canned milk) and on essential raw materials and producer goods (e.g., tractor fuels and machinery) that were not likely to be produced in adequate supply domestically in the foreseeable future. On the other hand, they were raised on non-essentials and goods for which import substitution possibilities were regarded as favorable (e.g., textile products and paper and paperboard manufactures). Valdepeñas calculated the following 1957 nominal tariff averages for a sample of 111 commodities classified by the essentiality categories of the Central Bank: highly essential goods, 15 per cent; essential consumer goods, 18 per cent; non-essential consumer goods, 51 per cent; essential producer goods, 25 per cent; non-essential producer goods, 30 per cent.[13] On balance, the simple average of duties rose from 23 per cent in 1949 to 36 per cent in 1957. A consideration of tariff changes by major commodity categories from 1949 to 1957 brings out that duties for such simple manufactures as textiles and prepared foodstuffs, tariffs were sharply increased, whereas for raw-material groups such as chemicals or capital-goods categories such as mechanical and electrical equipment, they were reduced on many items

Tax and Financial Assistance to Industry: The policy of import-substitution was further strengthened in the early 1950's by the enactment in 1953 of a new tax-exemption law (R.A. 901) for "new and necessary" industries. The new law covered not only internal taxes but, unlike the old 1946 law, it also covered external taxes (i.e., import duties, the sales

[13] Valdepeñas, *op. cit.*, p. 81.

tax, and the 17 per cent excise tax on foreign exchange). The extent of tax exemption was 100 per cent through 1958, 90 per cent in 1959; 75 per cent in 1960; 50 per cent in 1961, and 10 per cent in 1962, after which the privilege expired. Not only did firms covered by the old act automatically receive the new benefits, but also firms whose exemption period had expired could apply anew for the privileges. The qualifications for "new" and "necessary" industries were similar to those of the previous law. A "new" industry was not in existence on a commercial basis before 1 January 1945, and a "necessary" industry was one that would: (i) "contribute to the attainment of a stable and balanced national economy",[14] (ii) "operate in conformity with up-to-date practices" and give promise of "a reasonable degree of permanency", and (iii) use imported raw materials that "do not exceed 60 per cent of manufacturing cost plus reasonable selling and administrative expenses". Under the previous law a 50 per cent import-content ceiling had been imposed for raw materials.[15] During the six years (1953-1958) when the exemption rate was 100 per cent, the tax-exemption law of 1953 resulted in tax savings equivalent to 12.1 per cent of the annual sale of the firms involved.[16] This figure gradually decreased thereafter, e.g., to 9.1 per cent in 1960, until firms were liable to the full tax rate in 1963.

As already noted, the early response to the 1946 tax-exemption law was disappointing; and it was not until tight import controls began in 1950 that any significant number of entrepreneurs took advantage of the law. In 1950, 13 firms were granted tax exemptions, and by 1952, the number had risen to 48. After the revisions in 1953, the number rose to 321 in 1955 and 900 in 1958. The output of these 900 firms was 650 million pesos, or 21 per cent of the gross output of all manufacturing firms in 1958.[17]

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[14] Industries listed in the appendix attached to the Act as being conducive to its objective of attaining a "stable and balanced" economy were: iron and steel products; processed local fuels; chemicals; copper and copper alloy products; refractors; processed foods; textiles and fibers manufactured from local raw materials; fertilizers; agricultural equipment; refrigeration and air-conditioning equipment; raw plastic materials; porcelain products; paper and paper products; medical and pharmaceutical products; rubber manufactures; electric motors; office and school equipment and supplies.

[15] John H. Power and Gerardo P. Sicat, *The Philippines: Industrialization and Trade Policies* (London: Oxford University Press, 1971), p. 80.

[16] Philippine Chamber of Industries, *Official Proceedings*, Fifth National Convention of Manufacturers and Producers, Volume VIII, 1958.

[17] Calculated from *Official Proceedings*, Philippine Chamber of Industries, 5th National Convention of Manufacturers and Producers, 14-15 March 1958; and Department of Commerce and Industry, *Preliminary Report on BCS Annual Survey of Manufactures*, 1958, Table 1.2.

Still another impetus to economic development during this period stemmed from the easy long-term credit policies of various Philippine and international financing organizations. The Rehabilitation Finance Corporation (RFC),[18] for example, made loans totaling $788 million (1,576 million pesos) between 1947 and 1957 – of which 55 per cent was to agriculture, 19 per cent to industry, 23 per cent for real estate construction and repair, 2 per cent for self-liquidating government projects, and 1 per cent for miscellaneous purposes.[19] The lending rate of the RFC was about 2 per cent below that prevailing in private markets.

Encouraging Exports: Few specific measures were taken in the 1950's to stimulate exports, and it was the pressure of traditional exporters that played a large role in finally bringing about the devaluation of the early 1960's. As will be shown later, during the 1950's exporters suffered a significant decline in domestic purchasing power. The main policy taken to offset in part the penalty on exporters of an over-valued exchange rate was the enactment of the so-called No-Dollar Import Law of 1955 (R.A. 1410). This law permitted certain exports to be bartered for imports outside the exchange control system. The first set of rules limited varter transactions to "minor" exports, to any excess over the U. S. quotas for goods covered by the trade agreement between the two countries, and to any excess over the preceding five-year export average for all other goods. Presumably, the effective exchange rate for these barter transactions was around the black market exchange rate of 3 pesos = $1. Permitted imports were mainly restricted to producer goods and essential raw materials. In 1957, barter exports amounted to 10 per cent of total exports. After considerable oscillation in the rules covering allowable transactions and because of the strong opposition of both protected importers and the Central Bank, the law was repealed in 1959. However, a new law (R.A. 2261) entitled "An Act to Promote Economic Development by Giving Incentives to Marginal and Submarginal Industries" was passed in its place and specified a list of items as eligible for barter trade (subject to the condition that they could not be sold profitably for dollars and were in adequate supply to meet local requirements).[20] In addition, the National Economic Council was directed to recommend annually to the Congress any additional industries that should be covered by the Act.

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[18] In 1958, the name of this organization was changed to the Development Bank of the Philippines and its lending resources were increased.

[19] Rehabilitation Finance Corporation, *Ten Years of the RFC*, Manila, 1957.

[20] Ore and concentrates of copper, iron, chrome, manganese, quick-silver, coal, muscovado sugar, embroidery, pearly buttons, low-grade hemp, saw-logs, low-grade veneers and lumber, railway ties, industrial salt, cassava and products made thereof, snake and crocodile skins, and peanuts made up the list of specified items.

III. TRADE AND PAYMENTS POLICIES, 1960-1965

Continuing pressure from export producers, dissatisfaction with the way in which exchange controls were being administered, and a general disillusionment with the system because of its failure to maintain the high growth rates of the early 1950's finally led to a gradual easing of exchange controls and depreciation of the peso. This section covers Phases III and IV of the Bhagwati-Krueger schema of exchange-control stages, namely, the introduction of exchange control liberalization and the continued liberalization of exchange controls.

A. Decontrol Measures

Table 5 summarizes the major steps taken in the first two years of this liberalization period, i.e., Phase III in the Bhagwati-Krueger schema of exchange-control stages.

With the inauguration of President Macapagal, the liberalization timetable of the previous Administration was scrapped and full exchange decontrol decreed on 21 January 1962, under Circular 133 of the Central Bank. This continued liberalization marks the beginning of Phase IV in the Bhagwati-Krueger schema. Table 6 indicates the major policy changes that occurred in this period.

B. Economic Effects of Exchange-Control Liberalization

In undertaking the decontrol efforts between 1960 and 1965 the main objectives of the Government were to satisfy the persistent demands of exporters for a more favorable exchange rate and, by relying more on free market forces, to meet charges of favoritism and poor administration in allocating foreign exchange. There was no intent to bring about a significant contraction in the industrial sector that had been fostered by exchange controls. It is for this reason that decontrol measures were coupled with such actions as tariff increases, the extension of especially favorable credit terms to certain industries, and the granting of tax exemptions to so-called basic industries. The discriminatory sales taxes and the highly protectionist tariff system, which became effective as quantitative controls were eliminated, also did much to continue to shelter domestic industry from foreign competition. In short, exchange-controls were removed, but liberalization in the sense of a significant easing of all controls over imports did not occur.

Table 5: Major Trade, Payments and Related Economic Policies, 1960-1961

1960 (April)	–	Establishment of a multiple-rate system in which the exchange rate on the dollar, including the margin fee, ranged between ₱2.5 for imports of essential goods to ₱4 for non-essential imports. The exchange rate for exports was set at ₱2.3 = $1.
1960 (Sept.)	–	Modification of the "free market" rate so that the most depreciated rate (i.e., that for non-essential imports) including the margin fee was reduced to ₱3.75 = $1. The export rate remained unchanged.
1960 (Nov.)	–	An increase in the proportion of transactions taking place at the "free market" rate plus a reduction of the margin fee from 25 per cent to 20 per cent. The exchange rate on the dollar including the margin fee ranged from ₱2.4 for imports of highly essential goods and ₱2.5 for exports to ₱3.6 for imports of non-essential commodities.
1960 (June, Sept. and Nov.)	–	Reduction of the rediscount rate in three stages from 6-1/2 per cent to 5 per cent. The reserve requirement was also decreased.
1961 (Mar.)	–	Further increases in the share of transactions taking place at ₱3 = $1. The margin fee was reduced to 15 per cent. Thus, the rate on the dollar, including the margin, ranged from ₱2.75 for exports and ₱2.87 for imports of highly essential goods to ₱3.45 for most transactions.
1961 (May)	–	Additional easing of credit conditions by decreasing the rediscount rate to 3 per cent and further reductions in the required reserve ratio.
1961 (June)	–	Passage of a new tax-exemption law permitting many major domestic manufacturing industries to waive import taxes on imports of machinery and equipment.

Table 6: Major Trade, Payments and Related Economic Policies, 1962-1965

1962 (Jan.)	–	Removal of most exchange controls and elimination of the margin fee. The peso was floated in the free market. However, special time-deposit requirements were imposed on imports, and exporters were required to surrender 20 per cent of their foreign exchange receipts at the old ₱2 = $1. Import duties on many items were raised at the same time that exchange controls were lifted.
1962 (June)	–	Free market rate stabilized at ₱3.90 = $1. With the 20 per cent surrender requirement, the rate for exporters became ₱3.52 = $1.
1962 (Jan.)	–	Both the rediscount rate and reserve requirement were raised (the former to 6 per cent)
1962-64	–	Some easing of the special time-deposit requirement.
1965 (Nov.)	–	Elimination of penalty rate for exporters and formal move to a unified exchange rate of ₱3.90 = $1.

Import Prices and Quantities: From 1959 to 1962, when the exchange rate per dollar including the margin fee rose from ₱2.50 to ₱3.90, or by 56 per cent, the wholesale price index of imported products increased only 22 per cent. If the rise in the dollar price of imports is taken into account, the net rise in import prices associated with the increase in the price of foreign exchange was only 15 per cent. In view of the very high windfall profits that existed on most imported goods, this much smaller rise in the peso prices of imported goods than the peso price of a dollar is not surprising. Permitting unlimited imports of most items at the same time that the currency was depreciated meant that these windfall gains absorbed most of the price-increasing effects of the depreciation.[21]

Further information on price behavior can be obtained by grouping the imported goods included in the wholesale price index according to exchange control classes. Classifying on this basis indicates the following

[21] It is theoretically possible for import prices to either rise or fall when a currency is depreciated and exchange controls are abandoned.

price rises from 1959 to 1962: essential consumer goods, 46 per cent; essential producer goods, 20 per cent; semi-essential producer goods, 11 per cent; and non-essential consumer goods 9 per cent;[22] and higher price rise for more essential goods conforms to what would be expected, since these were already being imported quite liberally in 1959 and importers did not, therefore, reap large windfall gains. Thus, a larger share of the increased peso cost of foreign goods had to be passed on to wholesalers.

This larger price rise in essential goods also meant, of course, that the decontrol efforts were successful in narrowing somewhat the differences in the degree of protection among non-essential consumer goods, essential producer goods, and essential consumer goods. In 1959 the price indices (1949=100) for non-essential consumer goods and producer goods were 2.25 and 1.25 times higher, respectively, than the price index for essential consumer goods. In 1962 these ratios were only 1.69 and 1.03. However, the decontrol effort was only a partial one in terms of equalizing incentives among manufacturing sectors. Removing the windfall gains associated with exchange controls still left the highly protective system that resulted from the 1957 Tariff Code and the discriminatory system of sales taxes. Furthermore, as noted earlier, tariff rates for many import-substitution industries were sharply raised at the time of the 1962 exchange-rate depreciation. The explicit tariff rate for a sample of non-essential consumer goods analyzed by Valdepeñas increased from 51 per cent in 1957 to 83 per cent in 1962-1967 period.[23] Comparable changes in import duties on essential consumer and producer goods were from 18 to 38 per cent and 25 to 47 per cent, respectively.

Some information on the behavior of import quantities during the decontrol episode can be obtained by grouping imports according to exchange-control categories and then constructing quantity indices for these categories. However, because of the well-known serious deficiencies with unit values even at the most detailed level at which import statistics are reported, the results of this exercise must be regarded with some skepticism. They show the following changes in import quantities between 1959 and 1962: essential consumer goods, -13; essential producer goods, -3.0; semi-essential producer goods, -18; and non-essential consumer goods, +19 per cent.[24] The rise in imports of non-essential consumer goods relative

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[22] Table 15 presents price information for these groups of commodities from 1951 to 1970.

[23] Valdepeñas, *op. cit.*, p. 81.

[24] The number of items included in the indices are 9 for essential consumer goods, 42 for essential producer goods, 14 for semi-essential producer goods, and 26 for non-essential consumer goods. Unit values for 1962 were used as weights for the various quantities.

to essential consumer and producer goods is what one would expect from the decontrol program unless there were offsetting tariff changes. Although tariffs on non-essential consumer goods were raised, apparently these increases were not enough to counter entirely the effect of easing the previously severe restrictions on importing non-essential consumer goods. Presumably the significant decline in imports of semi-essential producer goods is related to the rise in imports of non-essential consumer goods, since the former set of goods are used in part to produce the latter goods domestically.

Manufacturing and Export Activities: Many import-competing manufacturing activities were, of course, adversely affected by the liberalization because manufacturers who had directly imported raw materials and capital goods at the ₱2 = $1 exchange rate and thus reaped the windfall gain themselves now were faced with higher input costs. Import prices of competitive final outputs also increased but by less than the price increase for imported producer goods. The average annual rate of growth in the manufacturing sector declined from 7.7 per cent between 1957 and 1959 (a rate already considerably less than that during the early 1950's) to 3.8 per cent from 1960-1962, and 3.7 per cent for the entire 1960-1965 period. The unfavorable impact of decontrol on non-export-oriented manufacturing is confirmed by Castro's study of profit rates before and during the liberalization period.[25] His figure shows that the ratio of net profits (after taxes) to total assets for manufacturing firms (excluding sugar mills, lumber and plywood, and cordage) fell from 11.8 per cent for 1957-1959 to 6.4 per cent for 1960-1962.

The main test of the success of a liberalization effort is whether or not resources are pulled into export activities. Export values did indeed rise significantly during the decontrol period. From a level of about $550 million between 1959-1962, exports rose after the 1962 depreciation to around $750 million between 1963-1965. With the removal in 1965 of the penalty rate against exporters, the value again jumped in the next year to about $850 million.[26] Hicks has shown that there was considerable understatement of the value of exports between 1960 and 1962, whereas exports were slightly overvalued in 1963.[27] After 1965,

25 Amado A. Castro, "Philippine Export Performance," in T. Morgan and N. Spoelstra (eds.), *Economic Interdependence in Southeast Asia* (Madison: University of Wisconsin Press, 1969), pp. 189-192.

26 In volume terms, the increase between 1962 and 1963 was 24 per cent and between 1965 and 1966, 6 per cent.

27 George L. Hicks, "Philippine Foreign Trade, 1950-1965: Basic Data and Major Characteristics" and "Philippine Foreign Trade Statistics: Supplementary Data and Interpretations, 1954-1966" (Washington: National Planning Association, Center for Development Planning, 1967), mimeographed.

declared export values again were too low. Thus, the export rise associated with the devaluation actually consisted more of a fairly steady increase between 1959 and 1966 than spectacular increases in a few years. After adjusting the declared values by Hick's corrective factors, the increase in export values between these two years still turns out to be an impressive 57 per cent. Even deducting the $20 million increase in the value of sugar exports between 1959 and 1966, which was due to the U. S. quota increase, still gives a 53 per cent increase in the value of exports between these years.

The increase in the growth rate of exports covered manufactured as well as non-manufactured commodities. Between 1956-1961 and 1962-1966 the average yearly growth rate of manufactured exports increased from 6.0 per cent to 7.9 per cent.[28] If traditional manufactured exports, namely coconut oil and sugar, are excluded from these exports, the export growth rates for these two periods are 8.5 per cent and 14.6 per cent, respectively. Although these are impressive increases in growth rates, the rise between these periods in the growth rate for exports of non-manufactured commodities was even larger.[29]

Not only was the shift in resources toward export activities reflected directly in the value of exports, but also in profit rates, savings, and levels of productive activity in the export sector. Castro found, for example, that in contrast to the decline for his sample of manufacturing firms, profit rates for mining and agricultural corporations rose, respectively from 11.2 per cent and 4.7 per cent for 1956-1959 to 16.2 per cent and 4.9 per cent, respectively, for 1960-1962.[30] Another manifestation of this shift in income is the findings by Paauw and Tryon that, after a decade of dissaving, agricultural savings turned positive in 1961 and grew rapidly through 1964 (the last year for which they have data on savings).[31] The most significant shift in production in the agricultural sector occurred with respect to that area devoted to commercial export crops and that used in producing food crops for domestic consumption. As Treadgold and Hooley pointed out in their excellent analysis of the redistributive effects of the decontrol effort; the proportions in which the supply

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[28] Gerardo P. Sicat, *Economic Policy and Philippine Development* (Quezon City: University of Philippines Press, 1972), p. 69.

[29] Sicat, *Ibid.*, p. 71.

[30] Castro, *op. cit.*, p. 190.

[31] Douglas S. Paauw and Joseph L. Tryon, "Agriculture-Industry Interrelationships in an Open Dualistic Economy: The Philippines, 1949-1964." in *Growth of Output in the Philippines*, papers presented at a Conference of the International Rice Institute, 9-10 December 1966, pp. 7-34 and Table X.

of cultivatable land is divided between these two types of productive activities are quite responsive (with a time lag) to the relative prices of agricultural export products and agriculture products for home consumption.[32] Thus, when export prices (in pesos) rose relative to the prices of locally consumed foods during the early phases of the liberalization period, there was a sizable shift towards the production of export crops. Specifically, the harvested area of commercial crops, which had risen only about 3 per cent between 1955 and 1960, increased over 40 per cent from 1960 to 1965, whereas the harvested area of food crops increased nearly 30 per cent in the first period but remained unchanged in the second. Similarly, the output of commercial crops increased at an annual average rate of 1.9 per cent from 1955 to 1960 and 6.1 per cent annually from 1960 to 1965 in contrast to an annual rate for food output of 4.4 per cent in the 1955-1960 period and 3.1 in the 1960-1965 years.

Not only did the shift away from cultivating food crops in favor of export crops tend to cause a supply-induced rise in food prices, but the redistribution of income toward the rural sector tended to reinforce this rise from the demand side, since the expenditure elasticity in the Philippines for food products has been found to be 0.76 for rural families compared to only 0.41 for urban families.[33] The net effect of these forces was that the food component of the consumer price index rose 58 per cent between 1959 and 1965, most of the rise occurring in the second half of that period. The other components of the cost of living index increased between these years as follows: clothing, 27 per cent; rent and repairs, 7 per cent; fuel, light and water, 18 per cent; and miscellaneous items, 15 per cent. The rise in the composite index was 33 per cent.[34]

The rise in the absolute price level during the early 1960's was related to the easy credit policies pursued by the monetary authorities. As previously noted, the rediscount rate was cut from 6.5 per cent in 1959 to 3 per cent by 1961, and the reserve requirement for commercial banks was reduced from 21 per cent in 1959 to 15 per cent by 1961. The result was that the money supply increased at an annual average rate of nearly 16 per cent between 1960 and 1963 as compared to an annual average rate of only 6.5 per cent between 1953 and 1960.

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32 M. Treadgold and R. W. Hooley, "Decontrol and the Reduction of Income Flows: A Second Look," *Philippine Economic Journal*, Second Semester, 1967, Vol. VI, No. 2, pp. 109-128.

33 From an unpublished study by J. Williamson and A. Kelley.

34 For a more detailed analysis of the manner in which various items on the index behaved as well as for a general discussion of the food inflation, see A. C. Ross, "Understanding the Philippine Inflation," *The Philippine Economic Journal*, Second Semester, 1966, Vol. V, No. 2, pp. 228-259.

The burden of the rise in food prices fell to a considerable extent upon industrial workers, since their money wage rates rose only modestly in response to increasing prices. From 1959 to 1964, money wage rates for skilled and unskilled workers rose 6 and 12 per cent, respectively, whereas the consumer price index increased 28 per cent in these years. However, in 1965 a ₱2 per day increase in the minimum wage rate helped to restore part of the real wage loss for unskilled workers, so that as of 1965 real wage rates for these workers were 8 per cent below the 1959 level.[35] Of course, the increase in money wages placed still further pressures, in addition to those resulting from the increased costs of imported inputs, on profit rates in the industrial sector.

Conclusions: As mentioned at the outset of this section, the Government dismantled exchange controls mainly because of the corruption and maladministration connected with these controls and the pressures of exporters for a more favorable exchange rate. President Macapagal took special care in his 1962 Address on the State of the Nation to inform the business community that the Government, in removing controls, wished merely to substitute tariff protection in place of the protection provided by the control system.[36] Protection of domestic industry was in itself regarded as a legitimate and desirable goal. Consequently, the fact that the decontrol effort did not significantly reduce the size of the import-substitution sector built up during the period of quantitative controls is not surprising. Actually what must have surprised government officials was the extent of the economic difficulties that the import-substitution sector did face. They did not seem to appreciate that, by providing the export sector with more favorable trading terms and increasing the import costs of raw materials and capital goods, resources would be pulled out of the new industrial sector even if the level of protection on final consumption goods was maintained. In a sense, the decontrol episode was partly successful in changing the production incentives built into the economy during the 1950's despite the intentions of the Government. But the resulting situation was not very satisfactory from an economic standpoint, since a significant liberalization effort that could have established the basis for a new type of export-oriented growth was not achieved and the import-substituting manufacturing sector was left in a relatively stagnant state.

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[35] The increase in the minimum wage also probably increased unemployment among unskilled workers.

[36] President Diosdado Macapagal, *Five-Year Integrated Socio-Economic Program for the Philippines*, 1962, p. 21.

IV. RENEWED ECONOMIC EXPANSION AND NEW BALANCE-OF-PAYMENTS PROBLEM, 1966-1971

The period from late 1965 to mid-1967 is one of complete exchange liberalization, i.e., Phase V of the Bhagwati-Krueger schema. Thereafter, however, there is a return to moderate exchange controls (Phase I) until 1970 when liberalization (Phase III) is again introduced with the peso being floated. The period studied ends in 1971 with a further relaxation of exchange controls.

A. The First Marcos Administration: 1966-1969

Immediately upon its assumption of power in 1966, the Marcos Administration initiated vigorous efforts to accelerate development in both the agricultural and industrial sectors. In the first month of the year, the monetary authorities pursued a policy which they described as one "of massive credit relaxation".[37] The basic rediscount rate of 6 per cent was lowered to 4-3/4 per cent; rediscount ceilings on commercial banks were raised; reserve requirements against savings and time deposits were reduced; and the reserve requirement on special time deposits was cut from 100 per cent to 50 per cent.

Another important financial operation aimed at restoring full utilization of the economy's productive capacity was the so-called rehabilitation program of the Development Bank of the Philippines (DBP). This refinancing program for distressed firms consisted of three parts, namely: (i) refinancing through such conventional methods as loan extensions, deferments, and revision of loan terms; (ii) conversion of DBP industrial loan accounts into preferred stock of the assisted firms which later could be converted into common stock; (iii) foreign exchange financing of imports of machinery and raw materials through credit lines and guarantees arranged by DBP with banking institutions and government export-import agencies abroad.

In addition to providing easier credit conditions, the new administration embarked upon a large scale program of economic development which emphasized rural infrastructure investments such as roads, irrigation projects, schools, telecommunications, etc. The administration apparently chose to focus upon rural development on the grounds that it was the rural sector which was constraining efforts to restore the high growth rates of the 1950's. In particular, the most influential economic advisors of that time believed that the inflation of about 25 per cent in food

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[37] Central Bank of the Philippines, *Annual Report*, 1966 (Manila, 1967), p. 1.

prices between 1962 and 1965 was the major factor in preventing the earlier decontrol and currency depreciation efforts from restoring high growth rates. Expanding the rural growth rate would supposedly provide larger amounts of foreign exchange for imports of capital goods and raw materials by increasing traditional exports and reducing food imports, would increase the supplies of wage-goods for the industrial sector, and would increase the market for domestic manufactures. However, although the volume of capital output rose significantly in the 1966-1969 period, the distribution of expenditures between social and economic development remained essentially unchanged.

In order to finance the capital formation activities of the national and local governments as well as those of such government corporations as the DBP, and also provide funds for expanded current expenditures on developmental services, it was necessary for the Government to engage in extensive borrowing both internally and externally. The internal debt increased from ₱3.1 billion at the end of 1965, or 14.7 per cent of GNP, to ₱5.8 billion by the end of 1969, or 18.4 per cent of GNP; and the external public debt rose from $491 million to $828 million between these years. The Central Bank, the commercial banks, and various government entities ended up as the main holders of outstanding internal debt. Specifically, about ₱2.4 million of the ₱2.7 million total increase in internal debt was absorbed by these institutions.

The monetary authorities continued their easy money policies through the first half of 1967. However, the significant expansion of domestic credit and the rise in government investment expenditures brought about an upward movement in prices as well as a deterioration in the balance of trade. Wholesale prices rose 6.6 per cent between 1965 and 1966 and 7.4 per cent between 1966 and 1967. More important to policy-makers than the price rise was the worsening of the country's trade balance. From a trade account surplus of $24 million in 1965 and a deficit of $9 million in 1966, the merchandise trade deficit rose to $224 million in 1967. To help finance these additional net imports, the country drew on its gold tranche of $27.5 million at the International Monetary Fund. Table 7 summarizes other important policies that were undertaken by the Central Bank in the period from mid-1967 through 1968.

The balance-of-payments situation continued to worsen as the Government pursued deficit-spending activities. The trade deficit was $274 million in 1968 and finally reached crisis proportions near the end of 1969. Table 8 indicates the major actions of the Central Bank in that year.

Table 7: Major Trade, Payments and Related Economic Policies, 1967-1968

1967 (June)	–	Central Bank initiated staged increase in reserve requirements from 12 to 16 per cent; raised rediscount rate from 4-3/4 to 6 per cent and required commercial banks to maintain a one-to-one ratio between actual foreign exchange assets and foreign exchange liabilities.
1967 (June)	–	Reimposition of cash margin deposits on the opening of letters of credit.
1968 (Feb.)	–	Further increase in the rediscount rate to 7.5 per cent.
1968 (Mar.)	–	Imposition of absolute limit on foreign exchange liabilities of commercial banks.
1968 (June)	–	Replacement of cash margin requirement with special time-deposit requirement against letters of credit. The less essential the imported goods, the higher the percentage requirement.
1968 (Oct.)	–	Imposition on commercial banks of ceilings on domestic loans and on foreign currency letters of credit.
1968 (Oct.)	–	Announcement of a staged reduction in the time-deposit requirement against letters of credit for essential producer goods. Imposition of ceilings on credit for import financing and on domestic loan portfolios.

B. The 1970 Exchange Crisis And Its Aftermath

The balance-of-payments situation continued to worsen in 1970. President Marcos underscored the seriousness of the problem when he told a business group in early January, "We have unfortunately financed the foreign exchange requirements of our development with credits of short maturities. I am told by my advisers that because of the increase in short-term debts, the total payment for interest and amortization of foreign obligations of the country this fiscal year ending June 30 will take over one-half of our export earning."[38] More specifically, outstanding

[38] Speech by President Marcos to Rotary Club of Manila, 8 January 1970, as reported in *Central Bank News Digest*, 10 February 1970, p. 6.

Table 8: Major Trade, Payments and Related Economic Policies, 1969

1969 (Apr.)	–	Reduction in the length of the period that the special time-deposit must be held, and exclusion of domestic loans to certain export industries from previously instituted credit ceilings.
1969 (Apr.)	–	Lifting of the ceiling on foreign-exchange liabilities of commercial banks.
1969 (Apr.)	–	Increase in the rediscount rate from 7.5 to 8.0 per cent.
1969 (June)	–	Introduction of a 2 per cent levy on all Central Bank loans and advances. Loans to the government and high-priority export industries were excluded from this charge.
1969 (June)	–	Opening of import letters of credit permitted only for essential consumer and producer goods, semi-essential producer goods, and non-essential producer goods. The ceiling for the permitted letters of credit in these categories was also reduced.
1969 (Nov.)	–	Further reduction in the ceiling on import letters of credit.

public and private foreign debts amounted to more than $1.6 billion by the end of 1969, of which over $450 million was due in 1970 and two-thirds within four years. Of the debt maturing in one year, $196 million was owed by the Central Bank, $58 million by the Government and $198 million by the private sector.[39]

The only realistic method of coping with the exchange crisis was to request again financial assistance from the International Monetary Fund and to ask foreign banks to agree to longer repayment terms. An IMF consultative group arrived in the Philippines on 10 January 1970. Foreign creditors took the position that they would accept a restructuring of their debt provided the Government agreed to the Fund's

[39] G. V. Soliven, "Management of External Debt," reported in *Central Bank News Digest*, 13 July 1971, p. 3.

stabilization recommendations for correcting the country's weak financial condition and thereby obtained its third credit tranche from the Fund.[40] The advice of the Fund on exchange-rate policy was either to devalue significantly or float the peso. The Government chose to float the peso rather than devalue sharply, and freed the peso on 21 February 1970. This action together with the other major policies followed in 1970 and 1971 are summarized in Table 9.

C. *Economic Effects of the Currency Depreciation*

As indicated, the dollar price of the peso increased significantly immediately after it was permitted to seek its free market level on 21 February 1970. The rate thereafter continued to rise gradually, and in December 1970, it was fixed by agreement among the commercial banks. There was a slight decline in August and September 1971, but by December 1971, the rate had returned to its December 1970 level of ₱6.4 = $1.

The fear of further intensification of the social unrest that was triggered by price rises associated with the currency depreciation apparently accounts for the decision to fix the dollar value of the peso. Since excess demand conditions developed soon after the peso was stabilized, bankers again began rationing foreign exchange among established customers. They also began bidding among themselves for exporters' dollars, using such devices as offering exporters lower lending rates than prevailed in the general market. Of course, in effect this depreciated the peso still further.

Exports quickly increased after the currency depreciation. Their value had remained at around $850 million from 1966 through 1969, but rose 24 per cent to $1,062 million in 1970. In volume terms, exports, which had actually fallen about 5 per cent between 1966 and 1969, rose 14 per cent between 1969 and 1970. These favorable performances in value and volume terms continued in 1971. The value of exports rose 5 per cent to $1,122 million, while the volume of exports increased 13 per cent. The balance of trade also improved dramatically. Because of the Government's policies of monetary and fiscal constraint as well as its continued controls over some foreign exchange payments, the value of imports declined over $40 million between 1969 and 1970. The deficit on the trade account fell from $276 million in 1969 to $28 million in 1970. In 1971, the result was not quite as satisfactory as imports rose to $1,186 million, but the trade deficit was still only $64 million.

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[40] G. S. Licaros, Speech before Rotary Club, 16 February 1970, as reported in *Central Bank News Digest*, 10 March 1970, p. 2.

Table 9: Major Trade, Payments and Related Economic Policies, 1970-1971

1970 (Feb.)	–	The peso was floated in foreign exchange markets, and the peso/dollar rate rose to ₱6.4 by the end of the year. Some exchange controls were removed, but exporters of major products were required to convert 80 per cent of their receipts at the old ₱3.90 per dollar rate.
1970 (May)	–	A special export tax of 8 or 10 per cent was substituted for the dual exchange-rate arrangement for exporters.
1970 (May)	–	Beginning of a gradual 2 percentage point rise in the reserve requirement for commercial banks.
1970 (Jul.)	–	Issuance of circular requiring most imports to be covered by letters of credit. Commercial banks voluntarily accepted a 30 per cent (later raised to 50 per cent) marginal deposit against letters of credit.
1970 (Nov.)	–	Passage of a law limiting the power of the Government to borrow abroad.
1971 (Aug.)	–	Central Bank imposed a 15 per cent reserve requirement against the marginal deposit required for letters of credit.
1971 (Nov.)	–	Reserve requirement on marginal deposit against letters of credit raised to 50 per cent.

Among individual items, the coconut products exhibited an especially impressive export performance over the two-year period, 1970-1971. The export quantities of these products from 1969 to 1971 rose as follows: copra, 34 per cent; desiccated coconut, 35 per cent; coconut oil, 96 per cent; and copra meal or cake, 63 per cent. The volume of exports of copper concentrates continued their upward trend by increasing 40 per cent over the two-year period. Bananas also became one of the ten leading exports by expanding in volume nearly 900 per cent. Sugar exports also performed well by rising 37 per cent in the period. Exports of logs and lumber, pineapples, and plywood did not change significantly. Another favorable development on the export side was the 26 per cent increase in the value of manufactured goods

other than the processing of such products as sugar and coconuts. However, these exports still amounted to less than 0.7 per cent of all commodity exports.

D. Export Incentives

One merit of the development efforts of the Marcos administration was the greater attention paid to expanding exports, especially of industrial products, than in previous administrations. The Investment Incentives Act of 1967, which was aimed at stimulating production in key domestic industries as well as in export activities, is another example of this concern for increasing exports. The Act established a Board of Investment (BOI) which determines the industries that qualify for special aid. Firms are registered as either "preferred" or "pioneer", the latter being those that produce new products or processes in the economy. The BOI determines the list of activities that fit these two categories of investment. The main forms of assistance to registered firms are: (i) exemption for seven years from import duties and compensating taxes on imports of capital goods or a tax credit equivalent to these taxes if the capital goods are purchased from domestic firms; (ii) deduction from taxable income of all capitalized preoperating expenses; (iii) accelerated depreciation of fixed assets; (iv) liberal carry-over features for operating losses; and (v) deduction from taxable income of reinvested earnings. In addition to these forms of assistance, pioneer firms are exempted from paying a certain proportion (which declines over time) of all national taxes except the income tax[41] and are given special tariff protection against competing imports.

The Export Incentives Act of 1970 expands the aids to export firms (defined as firms with at least 50 per cent of their sales to foreign countries) in the form of: (i) a tax credit equivalent to all sales, specific, and import taxes on the raw materials and supplies used in export production (this replaces [iii] above); (ii) a deduction of part of the firm's export revenue from taxable items for five years; and (iii) an exemption from export taxes. The rule set forth for (ii) above is that for five years, taxable income can be reduced by the product of the proportion of direct labor costs in total costs, the proportion of local raw materials in total costs, the number 5, and export sales.[42]

[41] An analysis by the BOI staff of selected income statements of proposed firms with respect to the extent of the aid provided by the Act gives the following percentages for the ratio of the increase in profits due to tax assistance to the firm's total costs: mechanical grain driers, 5; globe and gate valves, 3; hand pump manufacturing, 0.6; malleable iron pipe fittings, 5; rolling bearing units, 3; files, 7; and small gasoline engines, 7.

[42] If one assumes all the revenue of the firms in the BOI sample was export revenue, the combined effect of the Investment Incentives and Export Incentives Acts gives the following percentages for the increase in profits to the firm's total costs: mechanical grain driers, 8; globe and gate valves, 9; hand pump manufacturing, 2; malleable iron pipe fittings, 8; rolling bearing units, 6; files, 7 (unchanged since no raw materials); and small gasoline engines, 8.

V. MEASURES OF PROTECTION IN THE PHILIPPINES, 1950-1971

As has been brought out in the preceding sections, the Philippine Government employed a wide variety of trade and payments measures as well as fiscal and monetary policies to attract resources to the manufacturing sector and to assist agriculture. These included such devices as exchange controls, protective tariffs, differential sales and compensating taxes, and exemptions from the payment of both domestic taxes and taxes imposed on imported inputs. Although the overall picture of special incentives provided to the industrial sector is obvious, it is difficult to gain a clear view of the magnitude and relative differences among sectors of these incentives merely from an enumeration of the various policies. The purpose of this section, consequently, is to analyze quantitatively the combined incentive effects of the different policies in terms of various measures that are useful for this purpose. These include effective exchange rates of protection, and effective protective rates.[43]

A. *Effective Exchange Rates*[a]

One very useful measure of intersectoral differences in the incentives provided by an industrialization program is the effective exchange rate (EER) for various types of transactions, i.e., the number of units of local currency actually paid or received per dollar of a given international transaction. In addition to taking account of the different exchange rates applicable to various types of transactions, the EERs calculated here include the differential impact on these transactions of tariffs, discriminatory sales or compensating taxes, special foreign exchange taxes, exemptions from various domestic taxes, subsidized borrowing rates, and marginal deposit requirements on imports. What the concept of EERs does not include, however, is any estimation of protective effects over and above these measures that are caused by quantitative restrictions on the volume of foreign exchange available for particular imports. But, if both c.i.f. and domestic prices are available, the ratio of the domestic price (net of normal distribution costs) of an imported commodity minus its c.i.f. import price (in local currency) to the c.i.f. import price, i.e., the implicit rate of protection, can be used to indicate the impact

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[43] Estimates of domestic resource costs – a concept that measures the value of domestic resources (valued at opportunity cost prices) employed in earning or saving a dollar of foreign exchange (in the value-added sense) when producing a good domestically – are not included in this study, although such estimates are made for other country studies in the series of which this study is a part. Philippine data did not seem sufficiently extensive or accurate to try to include these estimates.

[a] See Appendix 1

of either quantitative restrictions or explicitly protective measures. This section will present information on EERs, while the next section will analyze the pattern of implicit protection among exchange-control categories.

Tables 10, 11, and 12 present sets of EERs between 1949 and 1971 for various commodity groups classified according to their degree of essentiality as determined by the exchange-control authorities (the Central Bank).[44] Table 11 presents price-level-deflated effective exchange rates (PLD EERs), which are obtained by dividing the EERs in Table 10 by the Philippine wholesale price index. The purchasing-power-parity adjusted exchange rates (PPP EERs) shown in Table 12 are calculated, except for exports, by multiplying the EERs in Table 10 by the ratio of the U. S. wholesale price index to the Philippine wholesale price index. The export figures are estimated by multiplying the export EERs in Table 10 by the ratio of the index of unit values (in dollars) for Philippine exports to the Philippine wholesale price index.

Only from 1960 to November 1965 and again from February to May in 1970 were there differences in the nominal exchange rates applicable to different categories of commodities. These differences are summarized in Appendix 1 together with the unified rates that applied in the other years. Appendix 1 also specifies the tariffs and other taxes or subsidies employed in calculating the effective exchange rates shown in Table 10.

As Table 10 brings out very clearly, the Philippine Government employed exchange-rate, fiscal, and monetary policies to increase sharply the peso costs of importing so-called non-essential consumer and producer goods. In the late 1940's and early 1950's non-essential consumer goods tended to consist of items consumed only by the higher income groups, while non-essential producer goods tended to be the raw materials and capital goods needed to produce these non-essential consumer goods. As the 1950's progressed, however, these categories were used more and more to protect from import competition those commodities that government officials decided could be produced domestically without unreasonably high costs or poor quality. One exchange control category, i.e., unclassified items, consisted of commodities whose local supplies in the opinion of government officials were adequate and, therefore, whose importation was virtually banned. Many items in the non-essential groups were given even greater protection by shifting them into this unclassified group.

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[44] Since imports from the United States were so significant, especially during the years when tariff preferences were substantial, the tariff rates used in calculating effective exchange rates in these tables are those applicable to imports from the United States, i.e., they take account of the tariff preferences extended to American goods. In 1950, for example, imports from the United States amounted to 75 per cent of all Philippine imports. This percentage fell to 42 per cent by 1960 and 29 per cent by 1970.

Table 10: Effective Exchange Rates, 1949-71
(pesos per U.S. dollar)

Category	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Imports																							
Consumer goods																							
Nonessential	2.05	2.05	3.39	3.39	3.39	3.34	3.68	3.86	4.12	4.17	5.06	6.97	7.02	10.04	11.24	11.10	11.95	11.69	11.77	11.91	11.94	17.67	19.26
Semiessential	2.05	2.05	2.42	2.42	2.42	2.37	2.38	2.60	2.40	2.67	2.83	4.38	4.46	4.95	5.54	5.47	5.65	5.49	5.53	5.61	5.62	8.35	9.11
Essential	2.00	2.00	2.03	2.03	2.03	2.04	2.04	2.11	2.10	2.10	2.16	2.24	3.15	4.24	4.24	4.24	4.29	4.29	4.29	4.29	4.29	6.48	7.04
Producer goods																							
Nonessential	2.05	2.05	2.42	2.42	2.42	2.36	2.38	2.51	2.50	2.52	2.67	4.25	4.28	6.55	7.46	7.38	7.90	7.75	7.79	7.84	7.87	11.74	12.81
Semiessential	2.00	2.00	2.37	2.37	2.37	2.37	2.37	2.45	2.48	2.50	3.07	3.10	4.04	4.06	4.53	4.46	4.45	4.54	4.38	4.43	4.44	6.60	7.23
Essential	2.00	2.00	2.37	2.37	2.37	2.37	2.38	2.48	2.48	2.51	3.09	3.12	4.06	4.42	4.89	4.86	4.99	4.92	4.93	4.97	4.95	7.43	7.62
For "new and necessary" industries	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.03	2.03	2.08	2.92	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	6.30	6.40
Exports																							
Traditional	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.22	2.68	3.18	3.52	3.52	3.90	3.90	3.90	3.90	3.90	5.15	5.76
New	2.24	2.24	2.24	2.24	2.32	2.32	2.32	2.32	2.32	2.32	2.30	2.51	2.98	3.37	3.72	3.72	4.13	4.13	4.17	4.17	4.17	6.54	7.26

Source: See text and appendix 1

Table 11: Effective Exchange Rates Deflated by the Wholesale Price Index, 1949-71
(pesos per U.S. dollar; 1955 = 100 for the wholesale price index)

Category	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Imports																							
Consumer goods																							
Nonessential	1.87	1.92	2.84	3.09	3.12	3.26	3.68	3.74	3.83	3.75	4.49	5.94	5.70	7.76	7.92	7.47	7.87	7.38	7.09	6.98	6.95	8.60	8.10
Semiessential	1.87	1.92	2.02	2.21	2.23	2.31	2.38	2.52	2.24	2.40	2.51	3.73	3.62	3.22	3.90	3.68	3.72	3.46	3.33	3.29	3.27	4.06	3.83
Essential	1.82	1.88	1.[illegible]0	1.86	1.87	1.99	2.04	2.08	1.95	1.89	1.92	1.98	2.56	3.29	2.99	2.85	2.82	2.71	2.58	2.51	2.49	3.16	2.96
Producer goods																							
Nonessential	1.87	1.92	2.02	2.21	2.23	2.30	2.38	2.43	2.32	2.27	2.37	3.62	3.47	5.06	5.25	4.97	5.20	4.89	4.69	4.59	4.58	5.72	5.99
Semiessential	1.82	1.88	1.99	2.18	2.20	2.32	2.37	2.38	2.30	2.25	2.72	2.64	3.28	3.14	3.19	3.00	2.93	2.74	2.64	2.59	2.58	3.21	3.04
Essential	1.82	1.88	1.99	2.18	2.20	2.32	2.38	2.41	2.30	2.26	2.74	2.66	3.30	3.42	3.44	3.27	3.28	3.10	2.97	2.91	2.88	3.62	3.21
For "new and necessary" industries	1.81	1.87	1.67	1.82	1.84	1.95	2.00	1.93	1.83	1.83	1.80	1.77	2.37	3.01	2.75	2.62	2.57	2.45	2.34	2.27	2.26	3.07	2.69
Exports																							
Traditional	1.82	1.88	1.67	1.83	1.85	1.95	2.00	1.94	1.86	1.80	1.77	1.89	2.18	2.43	2.48	2.37	2.37	2.46	2.35	2.28	2.27	2.51	2.42
New	2.04	2.10	1.87	2.05	2.10	2.26	2.32	2.28	2.16	2.09	2.04	2.14	2.39	2.60	2.62	2.50	2.72	2.72	2.51	2.44	2.43	3.18	3.05

Source: See text

Table 12 Effective Exchange Rates Adjusted for Purchasing Power Parity, 1949-71

(pesos per U.S. dollar; 1955 = 100 for underlying price indices)

Category	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Imports																							
Consumer goods																							
Nonessential	1.67	1.79	2.94	3.12	3.12	3.25	3.68	3.87	4.07	4.04	4.85	6.42	6.13	8.37	8.52	8.05	8.65	8.39	8.07	8.15	8.43	10.81	10.51
Semiessential	1.67	1.79	2.10	2.23	2.25	2.30	2.58	2.60	2.37	2.58	2.71	4.03	3.53	4.13	4.20	3.97	4.09	3.93	3.79	3.84	3.97	5.10	4.97
Essential	1.63	1.75	1.76	1.88	1.87	1.99	2.04	2.11	2.07	2.03	2.07	2.06	2.75	3.58	3.21	3.06	3.11	3.08	2.94	2.93	3.02	3.96	3.84
Producer goods																							
Nonessential	1.67	1.79	2.10	2.23	2.25	2.29	2.58	2.61	2.47	2.44	2.56	2.91	3.73	5.46	5.64	5.35	5.72	5.56	5.54	5.36	5.56	7.18	6.99
Semiessential	1.63	1.75	2.06	2.20	2.19	2.30	2.37	2.46	2.45	2.42	2.94	2.85	3.53	3.38	3.43	3.24	3.22	3.16	3.01	3.02	3.13	4.04	3.94
Essential	1.63	1.75	2.06	2.20	2.19	2.30	2.38	2.49	2.48	2.43	2.96	2.87	3.55	3.68	3.70	3.53	3.61	3.52	3.38	3.40	3.49	4.54	4.16
For "new and necessary" industries	1.63	1.75	1.74	1.83	1.84	1.94	2.00	2.00	1.98	1.97	1.94	1.91	2.55	3.25	2.96	2.93	2.83	2.78	2.66	2.65	2.74	3.86	3.49
Exports																							
Traditional	n.a.	2.57	2.46	2.00	2.47	2.18	2.00	1.96	1.93	1.89	2.18	2.84	2.61	3.10	3.66	3.62	4.00	3.90	3.97	4.09	3.98	5.57	5.62
New	n.a.	2.88	2.76	2.24	2.86	2.53	2.32	2.28	2.24	2.32	2.47	2.65	2.88	3.32	3.86	3.82	4.24	4.13	4.24	4.37	4.26	7.08	7.08

n.a. not available

Source: See text

Table 13 clearly indicates that between 1950 and 1960 the EERs among exchange-control categories changed in such a manner that there was a strong incentive to shift resources from the production of essential items and export products to the production of non-essential and semi-essential goods. The most important point to be made about the decontrol efforts in the early 1960's and developments during the rest of the 1960's is that they did not restore EERs for the various groups of imports to their relationships prior to the exchange-control period. However, the incentives favoring the production of non-essential and semi-essential consumer goods relative to essential consumer goods and exports were generally weaker in 1970 than in 1960.

The price-level-deflated effective exchange rates (PLD EERs) in Table 11 as well as the purchasing-power-parity adjusted effective exchange rates (PPP EERs) in Table 12 also bring out the protective aspects of Philippine trade policy as well as the adverse effects of this policy on exporters.

When one takes an overview of the more than 20-year period, the main point that emerges from Table 12, for example, is the very significant increase in the real costs of importing commodities, especially non-essential goods. The PPP EER for non-essential consumer goods in 1971 was more than six times as high as in 1949, while the PPP EER for non-essential producer goods was over four times as high in 1971 as in 1949. The domestic purchasing power of traditional exports in 1971, on the other hand, was only 2.2 times as high as in 1950. The widening of the gap between the real costs of importing non-essentials and the domestic purchasing power of traditional exports occurred during the period of exchange controls in the 1950's. For example, the ratio of the PPP EER for non-essential consumer goods to the PPP EER for traditional exports rose from 0.7 in 1950 to 2.3 in 1959. Even the disparity in 1959 underestimates the ratio of the consumer costs of importing to the real rewards of exporters since importers were able to add on a scarcity windfall gain to their import costs due to the existence of exchange controls. The 1960 level of 2.7 for this ratio more accurately reflects the true differential, since the exchange rate on non-essentials was raised in that year to eliminate much of the windfall gain accruing to importers. During the rest of the 1960's and into the early 1970's, the gap between real importing costs and real export rewards narrowed. The ratio of the PPP EERs for non-essential consumer goods to traditional exports was only 2.2 in 1965 and 2.0 in 1971. However, the fact that this ratio is still much higher than its level during the immediate postwar period indicates the continued existence of a pattern of incentives strongly favoring import-substituting investments in non-essential lines relative to the expansion of traditional (and even new) exports.

Table 13: Relationships among Effective Exchange Rates for various Exchange-Control Categories,[a] 1950-1970

		1950	1955	1960	1965	1970
Ratio of:	NEC to EC	1.02	1.80	3.12	2.78	2.72
	SEC to EC	1.00	1.55	1.87	1.32	1.28
	NEC to TX	1.02	1.84	3.14	3.06	3.43
	SEC to TX	1.02	1.19	1.93	1.45	1.62
	NEC to NX	0.92	1.59	2.78	2.80	2.70
	EC to NX	0.89	0.88	0.89	1.04	0.99

[a] EC : essential consumer goods
SEC : semi-essential consumer goods
NEC : non-essential consumer goods
TX : traditional exports
NX : new exports

Source : Table 10

B. Implicit Rates of Protection

Although EERs after 1962 provide a good indication of the relative incentives provided to different types of manufacturing activity, as already noted, such rates prior to that time underestimate the levels of protection because of the existence of exchange controls. What is needed for estimating incentive effects of import controls when quantitative restrictions are binding is a comparison of domestic and import prices. Unfortunately, in the case of the Philippines unit-value import prices for individual commodities computed from the most detailed import data available from the Central Bank vary so much over time as to cast serious doubt on the validity of the quantity figures for particular items. However, adequate c.i.f. and domestic comparisons for certain commodities do exist for the years 1950 and 1951 because special studies of this relationship were made by the Government in connection with price control efforts of that time. The implicit protective rates obtained from this data can then be tied in with time-series information on price changes to indicate changes in the pattern of implicit tariffs over time.

Table 14 gives price comparisons for a selected list of items as of December 1951. As the table indicates, the range of implicit protection was very large, going from nearly 400 per cent to almost 700 per cent on

Table 14: Implicit Protection on Selected Commodities, December 1951

		Retail Price	C.I.F. Import Price	Excess of Adj. Retail Price[a] over C.I.F. Price
		(Pesos)		(Percentage)
Essential Consumer Goods				
Corned beef	(12 oz.)	0.90	0.39	111
Salmon	(1 lb.)	1.13	0.47	120
Sardines	(14 oz.)	0.53	0.31	51
Milk, evaporated	(can)	0.39	0.29	14
Milk, condensed	(can)	0.65	0.47	18
Flour, wheat	(kilo)	0.59	0.26	107
	Average[b]			72
Non-Essential Consumer Goods				
Cocoa, Peter's	(1/2 lb.)	0.96	0.40	120
Oranges	(doz.)	1.93	0.38	388
Coffee, roasted	(1 lb.)	4.00	1.01	276
Cotton cloth, dyed	(yd.)	1.65	0.54	186
Cotton cloth, printed	(yd.)	1.50	0.62	122
Cigarettes	(pkg.)	0.85	0.16	411
Apples	(doz.)	1.40	0.46	184
Salt, refined	(1 lb.)	0.65	0.08	694
	Average[b]			286
Essential Producer Goods				
G.I. sheets, con.	(sheet)	10.55	6.37	46
Kerosene	(can)	4.13	0.76	423
Diesel fuel oil	(liter)	0.19	0.08	118
Gasoline	(liter)	0.24	0.05	360
Non-Essential Producer Goods				
Cocoa seeds		6.00	2.80	93
Starch	(kilo)	0.75	0.33	107
	Average[b]			191
Unclassified Items				
Onions	(kilo)	0.55	0.20	155
Garlic	(kilo)	1.61	0.41	273
	Average[b]			214

[a] In calculating implicit rates, 20 per cent of the c.i.f. import price is subtracted from the retail price, since this was the allowable margin between retail and import prices for most items by the price control authorities.

[b] Unweighted averages.

Source: Central Bank, *Annual Report, 1951*, Manila, 1952, p. 18.

such luxury items as oranges, cigarettes, and salt to quite moderate levels on evaporated and condensed milk. On the other hand, as can be seen from Table 10 the protection afforded a given import bundle of non-essential consumer goods by explicit fiscal and monetary measures in 1951 was only 70 per cent, i.e., (3.39/2.00 - 1) x 100.[45] The comparable figure for essential consumer goods was 21 per cent.

Domestic price behavior of the imported commodities included in the wholesale price index is shown in Table 15 on the basis of "essentiality" categories. As this table indicates, after the Korean War boom the Government permitted prices of both essential consumer goods and essential producer goods to drop from their 1951 peak levels. But the less-essential consumer and producer goods were held at their high levels. In a sense the Government was able to use the temporarily high prices of the early 1950's as an umbrella under which to carry out its discrimination among commodity groups without facing consumer complaints that prices were actually being increased. After 1955, however, all prices again rose so that by 1959 prices of essential goods were again at their 1951 levels. Prices of non-essential consumer and producer goods continued to rise to new highs with the degree of discrimination between non-essential and essential consumer goods widening from 56 in 1955 to 156 in 1959. Moreover, since the Central Bank's index of c.i.f. import unit values for total imports actually declined about 2 per cent between 1951 and 1959, it seems that the increases in wholesale prices of imported goods in the Philippines between 1951 and 1959 reflect changes in the degree of implicit protection rather than increases in c.i.f. costs.[46]

It is difficult to estimate average levels of implicit protection by exchange-control groups because of the wide variations in the degree of protection among commodities and the small sample size in Table 14. However, if this sample is representative, implicit rates of 200 per cent or more in 1951 were not unusual for non-essential consumer goods. Since, as Table 15 indicates, prices of this group of items rose about 80 per cent between 1951 and 1959, levels of implicit protection of 400 per cent or more at this time apparently existed for some items.[47] Since the protection

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[45] The explicit rate of protection is taken to be the percentage by which the EER for a particular category exceeds the EER for producer goods for "new and necessary" industries.

[46] The Central Bank stopped publishing import unit-values by detailed commodity groups after 1955.

[47] Let x be the 1951 c.i.f. prices of non-essential goods, 2x the implicit protection on these goods, and 3.0x the 1951 domestic price. Since this price increased 0.8 between 1951 and 1959, the 1959 price is 5.4x. Dividing this by x, the 1959 c.i.f. price, gives 5.4 or 440 [(5.4 - 1) x 100] per cent as the rate of protection in 1959. Changes in c.i.f. import unit values are not taken into account in the calculation, since this index actually declined slightly between 1951 and 1959.

Table 15: Wholesale Price Indices[a] for Imported Commodities Classified by Degree[b] of "Essentiality", 1949-70
(1949 = 100)

	1951	1955	1959	1962	1966	1969	1970 (Sept.)
Essential Consumer Goods (EC)	128	107	125	183	208	214	322
Non-Essential Consumer Goods (NEC)	155	163	281	308	325	348	488
Unclassified Consumer Goods (UC)	134	127	188	212	211	234	312
Essential Producer Goods (EP)	160	136	156	188	197	205	257
Semi-Essential Producer Goods (SEP)	130	132	201	222	241	252	328
Unclassified Producer Goods (UP)	173	106	142	158	165	160	183

[a] The number of items used to compute the simple means in each group are as follows: EC, 11 items for 1951 and 1955 and 16 thereafter; NEC, 26 items for 1951 and 1955 and 39 items thereafter; UC, 6 items for 1951 and 1955 and 17 items thereafter; EP, 16 items for the entire period; SEP, 4 items for 1951 and 1955 and 15 items thereafter; UP, 13 items for 1951 and 1955 and 26 items thereafter. Semi-essential goods and semi-unclassified producer goods are not included because the sample size for these items was too small.

[b] The 1970 "essentiality" classification of the Central Bank was used to divide the items included in the wholesale price index into the various groups.

Source: Central Bank

from explicit fiscal measures on this category of goods was 149 per cent, this implies that windfall gains of over 200 per cent were being made on those commodities.

Another method of estimating levels of implicit protection in the 1950's is to compare wholesale prices of comparable items in the Philippines and the U. S. The results for a selected list of goods where this comparison is possible are presented in Table 16. If it is assumed that costs of shipping from U. S. wholesalers to Philippine wholesalers equals 25 per cent of the U. S. price, the protection on evaporated milks in

Table 16: Selected U. S. Wholesale Prices and Wholesale Prices of Comparable Imported Goods in the Philippines, 1949-1965 (in U. S. Dollars)[a]

	Unit	1949	1956	1959	1962	1965
Evaporated milk (EC)	case of 48					
Phil. price	14.5 oz.	7.20	7.96	9.28	7.47	8.08
U.S. price	tin	–	6.00	6.52	6.07	6.31
Canned cherries (NEC)	doz.cans					
Phil price		–	–	12.00	7.14	7.66
U.S. price		–	–	1.82	1.81	1.86
Canned peaches (NEC)	doz.cans					
Phil. price		–	–	8.75	4.97	5.26
U.S. price		–	–	2.70	2.42	3.07.
Canned asparagus (NEC)	doz.cans					
Phil. price		–	10.62	13.88	8.10	8.74
U.S. price		–	2.41	2.34	2.50	2.62
Coffee (NEC)	1 lb.tin					
Phil. price		–	2.34	2.64	1.41	1.44
U.S. price		–	1.00	0.71	0.64	0.80
Cocoa beans (NEP)	lb.					
Phil. price		0.44	0.75	1.08	0.53	0.55
U.S. price		0.21	0.27	0.31	0.21	0.21
Denim (UP)	yd.					
Phil. price		0.44	0.52	0.60	0.40	0.51
U.S. price		0.31	0.36	0.37	0.38	0.35
Standard American newsprint (EP)	ton					
Phil. price		–	171.00	194.00	136.00	168.00
U.S. price		100.00	130.00	134.00	134.00	132.00
Sodium bichromate (EP)	lb.					
Phil. price		–	0.20	0.21	0.14	0.18
U.S. price		0.10	0.13	0.13	0.13	0.13
Potash muriate, basis 58-60% K_2O (EP)	ton					
Phil. price		–	93.00	106.00	64.00	86.00
U.S. price		29.00	23.00	20.00	23.00	24.00
Blasting caps, ordinary (EP)	1000					
Phil. price		–	32.00	48.00	45.00	30.00
U.S. price		–	20.00	22.00	23.00	24.00

[a] The conversion rate was 2 pesos = $1 from 1946-1959 and 3.90 pesos = $1 for 1962 and 1965.

Source: Philippine data from Central Bank; U.S. data from Bureau of Labor Statistics.

1959 amounts to 14 per cent, a figure comparable to that in Table 14.[48] For such non-essential consumer goods as canned cherries, canned asparagus, canned peaches, and coffee, the implicit protective rates on the basis of the same kind of calculation were 429, 374, 159, and 197 per cent respectively in 1959. On the other hand, in the essential producer-goods group, the 1959 protective rate on standard American newsprint was only 16 per cent and the rates for sodium bichromate and blasting caps 31 and 77 per cent, respectively.

It is clear from these two estimates that exchange controls added greatly to the degree of protection provided by explicit fiscal and monetary measures. In 1959, for example, implicit protective rates of 400 per cent were not uncommon for non-essential consumer goods, whereas the average explicit degree of protection in 1959 for this category was around 150 per cent. For the essential consumer-goods group, average implicit and explicit protective rates in the same years were roughly 30 and 5 per cent, respectively.

C. *Effective Protection*

A time series of effective rates of protection (ERPs) by exchange-control categories, which uses tariff data and input coefficients collected by Valdepeñas[49] and also includes the effect of the other non-tariff measures included in Table 10, is shown in Table 17. In these calculations, the nominal protection on import-competing production is taken to be the percentage by which the EER in any year (Table 10) exceeds the EER for producer goods used by "new and necessary" industries in that year. The nominal subsidy on new exports is equal to the percentage by which the EER for this category exceeds the EER for traditional exports. Between 1949 and 1959, the lowest EER rate was generally the official rate of ₱2.00 = $1.[50] Since the EER equals what one must pay for a dollar's worth of goods rather than what one can sell these goods for – the latter figure exceeding the former if imports are quantitatively restricted – the nominal protection on output underestimates the actual (implicit) level of protection during the period of import controls from 1949 to 1960.

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[48] This figure would be the implicit rate in 1959 because the wholesale price of the product was the same in 1959 as in 1951.

[49] Valdepeñas, *op. cit.*

[50] In 1958 and 1959 the lowest rate for imports was ₱2.08 = $1.

Table 17: Effective Rates of Protection, 1949-1971
(per cent)

Category	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Imports																							
Consumer goods																							
Nonessential	5	5	114	114	114	110	141	154	179	178	183	549	250	285	552	526	565	554	557	563	565	524	562
Semiessential	4	4	23	23	23	19	19	34	18	37	31	149	61	36	53	50	56	50	52	54	55	41	57
Essential	0	0	-7	-7	-7	-7	-8	-5	-6	-7	-18	-15	-9	6	0	0	0	1	1	1	1	-5	5
Producer goods																							
Nonessential	5	5	24	24	24	19	7	28	26	25	5	173	36	139	174	171	198	191	193	195	197	173	203
Semiessential	0	0	15	19	19	19	21	22	24	24	51	52	40	-2	14	12	12	12	13	15	15	4	14
Essential	0	0	19	19	19	19	20	23	24	24	52	50	39	13	25	25	28	26	26	27	27	18	19
For "new and necessary" industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exports																							
Traditional	0	0	-15	-15	-15	-15	-16	-19	-19	-20	-43	-27	-45	-44	-58	-58	-22	-20	-21	-22	-21	-55	-58
New (subsidy)	23	23	23	23	31	31	31	31	31	27	25	40	2	-27	-9	-9	12	12	13	13	13	52	50

Source: See text and appendix 1

The calculation of ERPs over time highlights the biases previously pointed out against the production of export commodities and essential goods and in favor of non-essential goods. In 1961, for example, the effective protection afforded domestic producers of non-essential consumer goods was 230 per cent whereas it was 39 per cent for firms specializing on essential producer goods. Discrimination against traditional exporters and protection on inputs used by exporters caused this EER to be significantly negative. Moreover, the discrepancies in effective rates of protection remain very large even after the decontrol effort and throughout the rest of the 1960's and early 1970's.

D. Summary

All the measures of protection analyzed in this section bring out essentially the same story. Beginning in 1950 and 1951 the Philippines Government undertook a policy of sharply curtailing imports of consumption goods in order to favor the importation of the raw materials and capital goods needed for industrial development. This is very apparent from the behavior of the various EERs as well as the ERPs, all of which indicate a sharp increase in the protection of non-essential goods relative to essential goods and exports in 1951. The import-cutback program coupled with the economic prosperity associated with the Korean War caused the implicit protection on essential consumption goods to rise more than the Government wished, but by 1953 the Government seemed to have mastered the technique of highly protecting non-essential goods while still permitting liberal imports of essential consumer and producer goods.

After the Central Bank became the sole manager of the system of import and exchange controls in 1953, the protection and subsidization provided to domestic industries producing non-essential consumer and producer goods continued to widen relative to the production of essential commodities and export products for the rest of the 1950's. Protective rates for a number of non-essential consumer goods seem to have doubled during the 1950's. Of particular significance is that the domestic purchasing power of a given quantity of exports declined steadily in the 1950's.

The dismantling of the exchange-control system during the early 1960's did not represent a significant liberalization in the sense of sharply reducing the differences in production incentives among the various import sectors. For example, the real effective exchange rate (purchasing-power-parity adjusted EER) of imported non-essential consumer items in 1963 was 2.65 times as large as that for imported essential consumer goods, and that for non-essential producer goods in 1963 was 1.52 times

as large as that for essential producer goods. These figures are higher than the same ratios in 1959, although the 1959 figures do not include any scarcity premia due to exchange controls. The incentives gap between traditional exports and import-competing sectors also remained high.

From 1963 through 1969 the relative protection between essential and non-essential consumer goods as well as between essential and non-essential producer goods remained the same. However, the real cost of imports declined in absolute terms somewhat between 1963 and 1969. Nevertheless, this cost was still between 1.7 and 5.0 times larger than in 1949. One encouraging development after 1963 was the shift in incentives in favor of firms producing new exports. Between 1963 and 1969 the PPP EER for new exports increased in contrast to the general decline for import transactions. However, this rate still remained low compared to those in the import-competing sectors.

The 1970 exchange crises brought about not only further substantial increases in nominal effective exchange rates but also in real effective exchange rates. These rates declined somewhat in 1971 but still were at record heights. The cost of sustaining an economic expansion by foreign borrowing, much of it of a short-term, limited nature, was the eventual need to raise the real domestic costs of importing and to shift production incentives again in favor of exporters.

VI. RESOURCE-ALLOCATION AND GROWTH EFFECTS OF PHILIPPINE IMPORT-SUBSTITUTION AND EXPORT-PROMOTION POLICIES

This section concludes the paper by analyzing the effects of the different exchange-control regimes and other development policies on the industrial allocation of resources, the distribution of income, and the rate of growth in the economy.

A. Resource-Allocation Effects

Evidence on changes in the pattern of production within the Philippines is consistent with the hypothesis that the differential incentives associated with the exchange-control and other protective policies pursued by the Government did contribute to an acceleration of the industrailization process during the 1950's, as well as to a diversification of manufacturing activities. Export activities, on the other hand, tended to be penalized

during this period in terms of their ability to attract productive resources, thereby undermining the possibility of continuing the kind of industrialization program that had been undertaken.

Manufacturing: As is evident from Table 18, which presents calculations of output composition and growth rates from the turn of the century to 1961, the shift towards manufacturing and other non-agricultural activities during the 1950's should be regarded as the continuation of an established trend rather than as an entirely new development. Indeed, it seems reasonable that a significant share of the rapid growth in manufacturing during the 1950's was part of the kind of "catch-up" growth that one would expect in view of the stagnation and destruction during the wartime years. For example, not only was gross value added in manufacturing output in 1948 still 21 per cent below its pre-war level, but the population of the country was 20 per cent greater in 1948 than 1939. Nevertheless, the fact that the manufacturing growth rate between 1948 and 1961 was 2.3 times as great as the best decade of manufacturing growth of the 1902-1948 period does suggest that the strong economic incentives offered to most industrial sectors after World War II contributed to a quickening of industrial growth.

What is more evident than the impact of trade and payments policies on the overall growth rate in manufacturing is the effect that these policies had on increasing the degree of diversification in manufacturing. This diversification is brought out by Table 19 which presents estimates of the distribution of activities within the manufacturing sector from 1902 to 1970. From 1918 to 1948, the food, beverages, and tobacco sector accounted for between 60 and 65 per cent of all value added in the manufacturing sector. However, between 1948 and 1956, the share of this sector dropped to 44 per cent with such industries as textiles, chemicals, basic metals, machinery, transportation, and miscellaneous manufactures showing significant increases. From 1956 to 1965, the food, beverages, and tobacco share declined only moderately to 40 per cent, although there were important shifts within the rest of manufacturing. The machinery and transport equipment industries, for example, grew from 4.3 per cent of all manufacturing activity in 1956 to 7.6 per cent in 1965. Between 1965 and 1970 the food, beverages, and tobacco share again dropped significantly to 34.7 per cent, while the machinery and transport equipment share rose to 10.4 per cent.

The main means of stimulating domestic production in both new and old manufacturing lines was to protect local industries from import competition and thus shift domestic demand away from foreign goods and towards domestically produced substitutes. That import-substitution occurred on a widespread basis, especially between 1948 and 1956, is evident from

Table 18: Gross Value Added in Agriculture, Manufacturing and Other Non-Agricultural Activities, 1902-1961

PERCENTAGE DISTRIBUTION				ANNUAL GROWTH RATES (Compounded)[a]			
YEAR	AGR.	MFG.	OTHER NON-AGR.	AGR.	MFG.	OTHER NON-AGR.	TOTAL
1902	55.0	13.0	32.0	--	--	--	--
1918	60.4	12.3	27.3	5.4	3.8	3.5	4.7
1928	53.7	16.3[b]	30.0[b]	0.7	4.7	2.7	1.9
1938	46.6	21.2	32.2	0.5	4.6	2.7	1.9
1948	49.1	17.5	33.4	0	-2.3	-0.2	-0.5
1961	33.6	28.0	38.4	3.8	10.9	8.1	6.8

[a] The growth rates refer to the period between the year for which the rate listed and the previously listed year.

[b] Since for 1928 Hooley does not breakdown the share of non-agricultural activities in gross value added into its manufacturing and non-manufacturing components, the averages in 1918 and 1938 of these components are applied to the 1928 share of all non-agricultural activities in gross value added.

Source: Richard W. Hooley, "Long-Term Economic Growth in the Philippines, 1902-1961," Tables 1 & 3, in *Growth of Output in the Philippines*, Papers presented at a Conference of the International Rice Research Institute, 9-10 December 1966.

Table 20. The ratio of imports of all manufactures to the gross value of manufacturing output fell from 1.13 to 0.55 between 1948 and 1956, and then declined more slowly to 0.42 by 1968.

The Government's protection policy was guided throughout the two decades by the principle that importation of basic necessities consumed by low income groups and essential intermediate and producer goods should be as liberal as possible, provided they could not be produced domestically except at very high costs. Industries involving relatively simple processing activities that gave some promise of being able to produce on a reasonably efficient basis were given tax assistance as "new and necessary" industries and were also aided by very tight import restrictions. Many production lines that could not be regarded as "new and necessary" even under a very liberal interpretation of this phrase did, nevertheless, benefit from high levels of protection designed to free foreign exchange for imports of essential consumer and producer goods. To this extent, the regime thus tended to divert scarce resources into non-essential uses.

Table 19: Distribution of Value Added of Philippine Manufacturing by Industry Groups[a] (percentages)

ISIC Code No.	Industry	1902	1918	1938	1948	1956	1960	1965	1970
20-22	Food Manufacturing, Beverages and Tobacco Products	62.6	65.8	64.0	60.6	43.8	41.2	40.1	34.7
23	Textile Products	0.5	0.5	0.8	2.6	3.7	4.6	4.7	5.6
24	Footwear and Other Wearing Apparel	5.9	3.5	7.8	6.6	5.1	3.0	7.0	4.3
25	Wood and Cork Products	8.0	5.4	5.3	9.7	5.0	4.0	4.6	4.4
26	Furniture and Fixtures	2.3	1.5	1.9	1.8	1.3	0.9	1.4	0.9
27	Paper and Paper Products	0.0	0.0	0.0	0.0	1.7	2.3	2.1	2.9
28	Printing and Printed Products	4.9	1.7	3.6	3.7	3.1	3.2	4.1	2.7
29	Leather Products	0.7	0.3	0.1	0.0	0.2	0.3	0.3	0.3
30	Rubber Products	0.0	0.0	0.0	0.6	0.9	3.2	2.9	4.0
31	Chemical and Chemical Products	1.9	10.9	6.9	2.9	9.9	10.0	9.1	9.9
32	Products of Coal and Petroleum	...		•	•	•	•	•	•
33	Non-Metallic Mineral Products	3.9	0.7	3.3	2.1	4.7	3.7	4.4	3.7
34,35	Basic Metal and Metallic Products	0.9	0.8	0.7	1.9	4.7	8.0	6.5	8.9
36,37	Machinery	3.6	0.8	0.2	0.5	2.1	4.2	4.8	6.9
38	Transportation Equipment	...	1.3	0.4	1.0	2.2	2.2	2.8	3.5
39	Miscellaneous Manufactures	4.2	5.9	3.9	5.7	11.2	8.2	5.2	7.3
	Total Manufacturing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a] 1902-1960 at 1938 prices; 1965 and 1970 at current prices.

... Negligible.

• Included in miscellaneous manufactures.

Sources: 1902-1960: Salvador C. Umaña, "A Study of Philippine Manufacturing from 1902 to 1960," in S. C. Umaña, Growth of Output of Philippine Manufacturing: 1902-1960," in *Growth of Output in the Philippines*, Papers presented at a conference at the International Rice Research Institute, Los Banos, Laguna, December 9-10, 1966; 1965 and 1970: National Economic Council, *The Statistical Report*, XIII, No. 1 (January-March 1969) and XV, No. 2 (April-June, 1971).

Table 20: Import Substitution in Manufacturing

ISIC No.	Industry	Gross Domestic by Sector (per cent)				Imports (f.o.b.) by Sector (per cent)				Ratio of Value of Imports to Value of Production			
		1948	1956	1960	1968	1949[a]	1956	1960	1968	1948-1949[a]	1956	1960	1968
20	Food, Manufactured	68.1	26.4	26.5	25.7	25.3	17.4	14.0	11.5	0.47	0.24	0.16	0.15
21	Beverages		7.8	6.5	5.8	3.4	1.4	0.1	0.8				
22	Tobacco Products		8.0	5.5	5.5								
23	Textiles	3.4	5.9	8.0	7.1	19.2	11.8	5.0	3.8	6.32	1.11	0.27	0.22
24	Footwear and Other Wearing Apparel	5.9[b]	6.5	3.3	1.7	2.4	0.3	0.2	0.1	0.45	0.02[d]	0.02[d]	0.02[d]
25	Wood and Cork Products	13.3	5.6	4.5	5.1	0.3	.04	0.1	0.04	0.03	0.01	0.01	0.01
26	Furniture and Fixtures		0.9	0.6	0.4	0.03	0.02	0.01	0.1				
27	Paper and Paper Products	0.1	2.0	3.3	2.9	3.0	3.6	2.8	2.4	43.79	0.98	0.35	0.35
28	Printed Materials	2.6	2.8	2.3	1.9	0.9	n.a.	n.a.	n.a.	0.53	n.a.	n.a.	n.a.
29	Leather and Leather Products	0.1	0.3	0.4	0.3	0.9	0.7	0.4	0.05	11.60	1.22	0.35	0.07
30	Rubber Products	c	0.9	3.3	2.4	2.0	2.9	0.6	0.6	n.a.	1.65	0.07	0.11
31-32	Chemicals and Petroleum Products	1.5	12.3	12.4	14.4	11.9	7.7	9.0	9.5	8.76	0.34	0.31	0.28
33	Non-metallic Mineral Product	1.4	3.9	3.1	3.6	2.2	3.0	1.1	1.0	1.73	0.22	0.15	0.12
34	Basic Metal Products	n.a.	0.8	1.6	2.9	n.a.	15.2	2.3	2.8	n.a.	10.26	2.12	0.61
35	Fabricated Metal Products	2.8	3.9	5.8	4.9	4.7	3.0	2.3	3.7	6.98	0.41	0.17	0.32
36	Machinery, except Electrical		0.8	0.8	1.3	5.0	15.2	14.3	20.7		10.26	7.65	6.76
37	Electrical Machinery		0.8	2.7	3.1	2.9	5.8	3.5	5.3		2.65	0.56	0.71
38	Transportation Equipment		2.8	2.9	5.2	4.9	5.7	18.2	12.5		1.12	2.66	1.01
39	Miscellaneous Manufactures	1.4	7.7	6.6	7.9	5.5	3.1	3.1	3.7	4.38	0.22	0.19	0.20
	All Industries: Total (per cent)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.13	0.55	0.42	0.42
	Total Value (current ₱ mn)	1,040	1,842	3,244	10,723	1,172	1,012	1,371	4,486				

[a] 1949 trade data are used with 1948 production data, since the Central Bank's series on imports does not begin until 1949. Since imports in 1949 were almost the same as in 1948, i.e., 8586 million versus 8593 million, and the import control program was not effective until 1950, this should not bias the import-substitution results.

[b] Includes industries 24 and 30.

[c] Included in industry 24.

[d] The ratio of imports to gross value of production for industries 24 and 30 combined was 0.23 in 1956, 0.32 in 1960 and 0.07 in 1968.

n.a.: Not available.

Sources: Central Bank, *Statistical Bulletin*, December, 1969; United Nations, *Yearbook of International Trade Statistics*; Bureau of Census and Statistics, *Annual Survey of Manufactures: 1956*. Vol. I (Manila: Bureau of Printing, 1958); *Annual Survey of Manufactures: 1960*, Vol. V (1962); *Annual Survey of Manufactures: 1963*, Preliminary Report. United Nations, *The Growth of World Industry, 1938-1961: National Tables* (1963).

Two other important features of the industrial structure developed in the 1950's are that manufacturing production became both increasingly capital-intensive and more dependent on imports of producer goods. The upward trend in the capital/labor ratio is evident from the figures in Table 21. Between 1950 and 1959 both the output/capital and output/labor ratios rose. However, the latter ratio increased considerably faster than the former, so that the capital/labor ratio rose 74 per cent between these years. After 1959 the output/labor ratio continued to rise, though much less rapidly, but the output/capital ratio fell. Thus, both of these changes operated to increase the capital/labor ratio. Since by 1968 the output/capital ratio had declined to its 1950 level, the more-than-doubling of the capital/labor ratio in manufacturing between these years can be attributed entirely to the increase in the output/labor ratio, i.e., to the failure of employment in manufacturing to rise commensurately with production.

The increase in the degree of import dependence of the industrial sector during the 1950's is shown in Table 22 by the fact that both the ratio of imported intermediates to industrial value added and that of imported investment goods to industrial value added rose between 1949 and 1960. However, by 1964 the ratio of imported investment goods to value added had declined to its former level, presumably because of the slowdown in growth of industrial capacity that was associated with the decontrol period.[51]

These resource shifts during the period of exchange control are consistent with what one would predict based on a knowledge of the protective pattern of the exchange regime. The economic subsidies granted on imports of raw materials and capital goods coupled with the protection given to the final output of previously imported, non-essential goods pulled resources into capital-using and import-dependent industries. The use of capital-intensive methods of production was also thereby encouraged in any given industry.

Employment: In countries with a high rate of population growth such as the Philippines, an especially important economic goal is to create enough new jobs to match the increase in the labor force. Fortunately, although the labor force growth rate has averaged 3 per cent between 1956 and 1970, employment has increased at a 3.3 per cent

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[51] The decline from 0.25 to 0.16 between 1960 and 1964 makes one view this figure with some suspicion, however. Table 23, for example, indicates that the capital-goods share of imports declined only from 19.7 per cent in the 1959-1961 period to 17.4 per cent in the 1963-1965 period.

Table 21: Manufacturing Sector Indices, 1950-1968[a]
(1955 = 100)

	CAPITAL/ LABOR	OUTPUT/ CAPITAL	OUTPUT/ LABOR
1950	61	106	65
1951	76	103	78
1952	87	100	88
1953	96	97	92
1954	99	100	99
1955	100	100	100
1956	97	108	105
1957	92	117	108
1958	103	120	123
1959	106	124	131
1960	118	114	136
1961	121	113	137
1962	118	117	139
1963	124	119	147
1964	127	112	142
1965	126	109	138
1966	132	108	142
1967	139	106	147
1968	142	107	151

[a] Data refer to manufacturing establishments employing five or more persons. Output is measured in value-added terms at constant prices. Capital consists of fixed assets and inventories and is also measured in constant prices.

Source: George L. Hicks and Geoffrey McNicoll, *Trade and Growth in the Philippines* (Ithaca: Cornell University Press, 1971) p. 68.

rate.[52] Unemployment, however, has been significant over this entire period. Between 1956 and 1971 it averaged 7.7 per cent of the labor force in May and 6.8 per cent in October and exhibited no clear-cut trend. On an urban-rural breakdown (available only since 1965) the data

[52] Mahar Mangahas, "A Broad View of the Philippine Employment Problem," Paper presented at SEADAG Seminar in "Employment Creation Strategies for Southeast Asian Economies," Atlanta, 7-10 December 1972. The data in the rest of the paragraph are from the paper.

Table 22: Imported Industrial Inputs Relative to Industrial Value Added, 1949-1964
(in constant prices)

Year	Ratio of Imported Intermediate goods to Industrial Value Added[a]	Ratio of Imported Investment Goods to Industrial Value Added[a]	Ratio of Imported Intermediate and Investment Goods to Industrial Value Added[a]
1949	0.36	0.13	0.49
1953	0.46	0.16	0.61
1960	0.60	0.25	0.85
1964	0.59	0.15	0.74

[a] Industrial value added equals the sum of value added in the manufacturing, mining, construction and transportation sectors.

Source: D. S. Paauw and J. L. Tryon, "Agriculture-Industry Interrelationships in an Open Dualistic Economy: The Philippines, 1949-1964," in *Growth of Output in the Philippines*, Papers presented at a Conference of the International Rice Research Institute, 9-10 December 1966.

show a rate of around 9 or 10 per cent in urban areas in contrast with 4 to 7 per cent in rural areas. Needless to say, these figures do not begin to tell the story of the extent of underemployment.[53]

The various trade, monetary, and fiscal policies designed to increase the relative importance of the manufacturing sector have not been the most desirable policies in terms of increasing employment. The elasticity of employment with respect to value added in manufacturing is the lowest of all the productive sectors. For example, studies by Mangahas, Meyers, and Barker and by Oshima place this elasticity at 0.5 in manufacturing in contrast to 2.5 for mining, 1.2 for transportation, 1.3 for commerce, 1.1 for services, 0.7 for agriculture, and 1.0 for construction.[54] The

[53] Mangahas, *Ibid.*, p. 7.

[54] Mahar Mangahas, William H. Meyer and R. Barker, *Labor Absorption In Philippine Agriculture* (Paris: Organization for Economic Cooperation and Development, 1972) and Harry T. Oshima, "Labor Absorption in East and Southeast Asia," *Malayan Economic Review*, 16: (October, 1972), as reported by Mangahas, *Op. cit.*, p. 9.

comparatively low employment-creating nature of the industrialization process can also be brought out by noting that, although the real stock of capital utilized in manufacturing increased 428 per cent and real output in manufacturing rose 430 per cent between 1950 and 1968, employment in this sector increased only 128 per cent.[55]

Export: As industrial production in the Philippines has become highly import-dependent, the ability to earn foreign exchange through exporting has become increasingly important for continued growth of the economy. The average annual increase in the volume of exports over the entire 1950-1970 period was 5.5 per cent. This can be demarcated into an annual rate of 5.9 per cent from 1950 to 1960 and a 5.0 per cent rate between 1960 and 1970.

Although one usually thinks of the Philippines as a primary-product exporter, actually six of the ten leading exports as of 1969 were classified as manufactured products in the Census of Manufactures: namely, sugar, coconut oil, desiccated coconut, canned pineapples, veneer and plywood. These six items accounted for 36 per cent of total exports in 1949 and 32 per cent in 1970. The other four major exports products, accounting for around 50 per cent of the value of exports in both 1949 and 1950, are copra (dried coconut meal from which coconut oil is extracted), abaca (the source of Manila hemp), logs and lumber, and copper concentrates. Although the total export contribution of these four primary products has remained roughly the same between 1949 and 1970, there has been a sharp shift within the group. The two agricultural goods, copra and abaca, constituted 48 per cent of the total export value in 1949, whereas logs and lumber and copper concentrates amounted to only 2 per cent. By 1970 copra and abaca had dropped to 9 per cent and logs and lumber and copper concentrates had risen to 41 per cent. Minor exports accounted for 24 per cent of all exports in 1949 and 17 per cent in 1970.

Exports of sugar have been almost entirely a function of the U. S. quota, since the U. S. has been an extremely profitable market for foreign producers. Except for a few short periods, the U. S. price has always been above the world price in postwar years. In early 1970, for example, the U. S. price for raw sugar was 6.88 cents per pound, whereas the world price was only 3.27 cents per pound. A quota of 980,000 short tons (raw value) was first granted to the Philippines in 1934.[56]

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[55] George L. Hicks and Geoffrey McNicoll, *Trade and Growth in the Philippines* (Ithaca: Cornell University Press, 1971), p. 68.

[56] *Philippine Sugar Handbook*, 1970, pp. 13-14. The following data on the quota system are also from this source.

(The Virgin Islands, Cuban and Puerto Rican as well as U. S. producers also were allocated quotas.) This was not changed until 1960 when the quota was increased by 70,000 short tons. Shortly thereafter, an embargo was placed on Cuban sugar and additional imports from other foreign producers were permitted. Between 1960 and 1962 the Philippines was able to sell to the U. S. almost 800,000 tons more than its regular quota. Although the supplementary allocations due to the Cuban embargo were gradually reduced, a further 76,000 short tons of sugar imports were allowed each year under the Sugar Act of 1965, bringing the quota to 1,126,000 tons. Subsequently, 47 per cent of any short-fall in the quota exports of Puerto Rico and the Virgin Islands was added to the permissible imports from the Philippines. Except for the drought year of 1957 as well as in 1961 and 1963, the U. S. quota has in effect been filled since 1954, when the industry first regained its prewar capacity.

The other major food export of the Philippines, namely, coconut products (mainly in the form of copra, desiccated coconut, copra meal and coconut oil) has declined significantly in relative importance since the early 1950's. In 1950, for example, the export value of these four products amounted to 54 per cent of the value of all exports; by 1970 this had fallen to 20 per cent. However, despite this decline in coconut products as a whole, the export share of coconut oil actually rose from about 4 per cent in 1950 to 9 per cent in 1970. A major reason for this seems to have been the fall in ocean freight rates for coconut oil due to the introduction of bulk tankers.[57] The export share attributable to copra meal or cake also increased slightly.

The coconut oil and desiccated coconut industries have been helped by tax preferences in the U. S. market. A study of the effect of preferential treatment on the Philippine economy between 1900 and 1940 indicates that the degress of processing in the coconut industry as well as the sugar and abaca industries was increased significantly as a result of the preferences granted by the U. S.[58] Until 1974, imports of Philippine coconut oil into the U. S. will pay only a one cent per pound duty, whereas imports from other foreign producers will pay 3 or 4 cents, depending upon whether or not they are members of GATT.[59] Similarly, imports of desiccated coconut from the Philippines are subject to only 60 per cent of the 1.75 cents per pound tariff. In 1974, when U. S. – Philippine preferential arrangements end, coconut oil from the

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[57] George L. Hicks and Geoffrey McNicoll, *Op. cit.*, pp. 194-195.

[58] Lee Douglas Badgett, *The Response of Processing Activity to Preferential Tariff Reductions: The Philippine Case, 1900 to 1940*, Yale Ph.D. Dissertation, 1971, p. 182.

[59] National Economic Council, *Four-Year Development Plan*, FY 1971-74, p. 58.

Philippines will be subject to the full 4 cents per pound and the desiccated coconut to the full 1.75 cents per pound. The view seems to be that the elimination of preferential treatment will not significantly affect these two industries.[60]

The slow growth of exports during the latter part of the 1950's and again in the latter part of the 1960's (periods when industrialization was vigorously pursued) and the rapid export growth of the early 1960's and 1970's (periods when the exchange rate was permitted to seek its market level) demonstrate clearly the sensitivity of the export sector to price incentives. This sensitivity is confirmed in more detail in a study of export supply equations by Bautista and Encarnación.[61] If one hypothesizes that the Philippines had followed an equilibrium exchange-rate policy between 1950 and 1967 and, furthermore, that this resulted in a rate equal to the effective exchange rate applicable to essential producer goods (a seemingly reasonable assumption), then on the basis of their supply elasticities annual exports in this period would have been 20 per cent above their actual levels.

B. Growth Effects

There seems no doubt that the Philippine exchange-control system played a significant part in the industrialization activities of the country during the early 1950's. The emergence of exchange controls as a significant allocating device was related generally to the immediate postwar consumption boom, but more specifically to the election year exchange crisis of 1949. By greatly restricting imports of non-essential consumption goods and non-essential producer goods while adopting a liberal import policy with respect to intermediate inputs and capital goods, the Government's actions led to high profit rates in many import-competing manufacturing lines and, as pointed out earlier, thereby brought about a major shift of resources into the manufacturing sector. Various other fiscal and monetary policies re-enforced this pattern of development, but the scarcity-creating effects of restricting imports of so-called "non-essential" manufactures through exchange controls was the major means of promoting industrialization.

From the beginning of the exchange control period in 1950 to 1956, growth in the manufacturing sector proceeded at an average

[60] National Economic Council, *Op. cit.*, pp. 58-59; also based on conversations with officials of the Development Bank of the Philippines.

[61] Romer M. Bautista and José Encarnación, Jr., "A Foreign Trade Submodel of the Philippine Economy, 1950-1969," Discussion Paper, No. 71-28, Institute of Development and Research, School of Economics, University of the Philippines.

annual rate of 13.5 per cent, whereas growth in the agricultural sector took place at an average annual rate of about 6.4 per cent. Real net domestic product rose on the average 8.0 per cent per year. By most standards, all of these growth rates would be judged to be highly satisfactory. Moreover, these growth rates were achieved with a ratio of gross domestic capital formation to GNP that averaged only about 13 per cent. After 1956, however, growth rates in the Philippine economy slackened, especially in the manufacturing sector. The real growth rate in this sector dropped to an annual average of 6.3 per cent from 1957 to 1960 and to only 4.0 per cent from 1961 to 1965. Net domestic product rose at an average annual rate of 4.6 per cent from 1957 to 1960 and at 5.0 per cent from 1961 to 1965. Thereafter, growth rates accelerated somewhat to 5.2 per cent for manufacturing and to 5.6 per cent for net domestic product from 1966 to 1969. In 1970, manufacturing growth fell to only 2.0 per cent but increased to 7.4 per cent in 1971. Net domestic product increased at rates of 4.5 per cent and 3.3 per cent, respectively, in 1970 and 1971.

As many countries have discovered, during the early period of an import-substitution program it is relatively easy to maintain a high growth rate in the manufacturing sector by diverting consumer demands for simple manufactures from foreign to domestic producers. But, it becomes increasingly difficult to maintain growth rates in this sector above those in the rest of the economy as the ability to capture established market-demands narrows and local manufacturers are forced to enter more technologically complex or capital-intensive product lines. Since import-substituting production relies heavily on imports of raw materials and capital goods, the growth rate may also be constrained by a shortage of foreign exchange.

The narrowing of import-substitution opportunities for simple consumer goods appears to have been the most important factor in accounting for the slow-down in manufacturing growth after the mid-1950's. As Table 23 indicates, the extent to which consumption demand was diverted from the foreign sector to domestic producers was very impressive in the early 1950's. The share of consumption goods in imports was reduced from 37 per cent in 1949 to 18 per cent for 1955-1957. The capital-goods' share rose somewhat between these years but the greatest increase occurred in the intermediate-goods sector. As already pointed with respect to Table 20, the extent of import substitution in these early years was very significant in many industries.

The Government had no wish to limit industrialization to the easily captured markets for very simply processed manufactures. It continued to tighten controls over the importation of those consumers

Table 23: Distribution of Imports: 1949-1968
(Per cent)

	1949	1951-53	1955-57	1959-61	1963-65	1967-69[a]
Producer Goods	62.7	76.8	81.7	86.1	83.9	87.9
Machinery and equipment	9.9	9.1	11.0	19.7	17.4	19.9
Unprocessed raw materials	1.0	1.6	4.2	10.4	15.4	13.1
Semi-processed raw materials	41.6	48.0	51.3	45.8	45.9	50.2
Supplies	10.1	18.0	15.2	10.2	5.1	4.5
Consumer Goods	37.3	23.2	18.3	13.9	16.4	12.1
Durable goods	2.5	1.6	1.3	0.8	1.0	1.1
Non-durable goods	34.8	21.6	17.0	13.1	15.4	11.1

[a] First half of 1969 only.

Source: John H. Power and Gerardo P. Sicat, *The Philippines: Industrialization and Trade Policies* (London, Oxford University Press, 1971), p. 39.

and producer goods that seemed capable of being produced at not "unreasonable" costs within the Philippines. By 1959, non-essential consumer and producer goods constituted only 1.1 per cent and 3.7 per cent respectively of total imports, while essential producer goods reached 61.3 per cent.

One of the most interesting aspects of Philippine growth that first becomes noticeable during the mid-1950's and continued until the mid-1960's is the general increase in the ratio of gross domestic capital formation to gross national product. This was not due to a relative increase in the inflow of foreign funds, but rather to a sharp increase in personal and corporate savings (especially the former). In 1953-1954 these two categories of savings constituted 80 per cent of total net savings (general government and net borrowing from abroad making up the rest), whereas in 1958-1959 they amounted to 91 per cent of net savings. It is tempting to argue that the import-substitution program helped to increase domestic savings by creating very attractive profit opportunities in manu-

facturing, thereby encouraging own-savings. Sicat and Hooley in a study of investment demand for 200 firms found, for example, that profits were by far the major determinant of gross investment.[62] However, since the investment ratio continued to rise during and after the liberalization period and there was no significant change in the rate of this increase, it does not seem possible to say that the exchange-control system (or the liberalization program) had any significant effect on the investment ratio. A detailed study of savings patterns in the country is very much needed and perhaps, after this is made, some relationship between the nature of the exchange-control regime and savings propensities may be found.

The rise in the ratio of gross domestic capital formation to GNP implies that given increments in the capital stock of the Philippines resulted in successively smaller increments in output, i.e., the incremental capital-output ratio increased. This trend can be observed from the behavior of the ratio of the annual volume of gross domestic capital formation to the yearly change in gross domestic product (GDP). The average yearly level of this ratio during various sub-periods from 1946 to 1971 is as follows: 1946-1950, 1.03; 1951-1955; 1.62; 1956-1960, 3.08; 1961-1965, 3.67; 1966-1971, 3.8.[63] The rise in this figure after 1955 is especially remarkable and confirms that the system of incentives established by the Government increasingly shifted production into highly capital-using forms after this date. The upward trend also occurred in the manufacturing sector. In this sector the ratio of the change in the real value of fixed assets to the change in real value added is as follows: 1958, 0.55; 1960, 0.63; 1962, 0.99; 1964, 0.99; 1966 and 1968 (average), 0.85.[64]

An important complement to the increased savings response has been the emergence of an active entrepreneurial group within the

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[62] Richard W. Hooley and Gerardo P. Sicat, "Investment Demand In Philippine Manufacturing," Institute of Economic Development and Research, School of Economics, University of the Philippines, Discussion Paper 67-2 (1967).

[63] The yearly figures are obtained by dividing the difference in GDP between two successive years into the volume of gross domestic formation in the latter year. Because of abnormally high figures, the ratios for 1948-1949, 1951-1952, and 1966-1967 are combined with those for one year later. The source of the data, which are in real terms, is the national accounts of the Philippines as given by the Office of Statistical Coordination and Standards in the National Economic Council and reported in various issues of the *Statistical Reporter*.

[64] The ratios refer to the changes in the real value of fixed assets and real value added between the given date and two years prior to the given date. The years 1966 and 1968 are combined because of unusually high and low ratios, i.e., 3.27 and 0.50, respectively. The source of the data is: Bureau of Census and Statistics, *Preliminary Report on the BCS Annual Survey of Manufactures, 1968* (Manila: 1970). The earliest survey in manufacturing is 1956.

Philippines. As has been documented by others,[65] a vigorous and economically bold group quickly moved into manufacturing from such activities as commerce, finance, and traditional exports. Thus, in terms of helping to create an entrepreneurial group, the industrialization program was successful, even though this accomplishment might have been achieved at lower resource costs.

As noted in discussions of several economic variables, e.g., growth rates and incremental capital-output ratios, the nature of post-World War II economic growth in the Philippines prior to around 1955 or 1956 seems quite different than after these years. A study of the sources of economic growth between 1947 and 1965 by Jeffrey Williamson analyzes this difference in some detail.[66] In the 1947-1955 period he finds that the sources of the average annual aggregate growth rate of 7.3 per cent can be attributed to the following factors: increase in the labor force, 1.93 per cent; increase in the stock of land, 0.30 per cent; increase in the capital stock 0.99 per cent; and technical improvements, 4.08 per cent.[67] The average annual growth rate for 1955-1965 was only 4.5 per cent and can be broken down as follows: labor, 1.93 per cent; land, 0.36 per cent; capital 1.68 per cent; and technical change, 0.53 per cent. The sharp increase in the relative importance of capital's growth contribution in the second period and the significant decline in the contribution made by technical change in this period underscore the basic differences in the nature of growth prior and after the mid-1950's.

Williamson suggests that the high contribution of technological improvements in the first period is related to the fact that this period is one of revival following war-time destruction.[68] He notes, however, that in the 1955-1965 period increasing the productivity of traditional inputs has been unimpressive, not only with respect to the earlier period, but also in comparison with such countries as Taiwan or Japan. The analysis here seems to indicate that the rapid growth rate for 1947-1955 also was partly due to an initially successful import-substitution program that diverted purchases of simple manufactured goods from abroad to the Philippine's domestic sector. After the mid-1950's it became much more

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[65] See John J. Carrol, *The Filipino Manufacturing Entrepreneur* (Ithaca: Cornell University Press, 1965), and Golay, *Op. cit.*, pp. 408-409.

[66] Jeffrey G. Williamson, "Economic Growth in the Philippines, 1947-65: The Role of Traditional Inputs, Education and Technical Change" (Institute of Economic Development and Research, School of Economics, University of the Philippines, Discussion Paper No. 67-8, 1967).

[67] These figures and the following figures are from Williamson, *Ibid.*, p. 25. His assumption B data are reported.

[68] Williamson, *Op. cit.*, p. 21.

difficult to raise growth rates by import-substitution. However, the pattern of protection and subsidization still made investment in capital-intensive industries and the use of capital-intensive methods in general appear to be potentially profitable. Thus, the rate of growth in the capital stock increased, even though the overall growth rate declined.

Another aspect of the difference in the nature of growth after the mid-1950's is the creation of excess capacity in manufacturing. Unfortunately, no comprehensive time series on the degree of capacity utilization exists, but the fact that there is a little discussion of the problem during the first part of the 1950's suggests that excess capacity did not become a significant problem until the last part of the decade. In a 1959 questionnaire sent out by the American Chamber of Commerce of the Philippines, 28 of the 50 responding manufacturing firms stated that they were operating below capacity.[69] The median level of capacity utilization was 50 per cent. More recent surveys indicate that the problem still exists.

Another factor that, in addition to the constraints imposed by the size of domestic markets, increasingly acted to limit the Philippine growth rate after the liberalization episode was the low growth rate of export earnings. During the first part of the 1950's insufficient foreign exchange with which to purchase producer goods from abroad was not a significant problem. The sharp rise in exports at the time of the Korean War boom in 1950-1951, the considerable room that then existed for cutting back on non-essential consumption goods, the large reserves built up from U. S. aid, and the comparatively low import-requiring nature of the early industrialization all prevented this. In the last half of the 1950's the problem was also not serious, largely because the value of exports rose at an average annual rate of about 10 per cent, due in part to an increase in export prices. An expansion of foreign borrowing also helped the foreign exchange problem.

Even though non-agricultural production had become highly import-dependent by the early 1960's, severe pressures on the supplies of foreign exchange needed for intermediate and investment goods still continued to be offset in the first part of the 1960's by the favorable effects of the decontrol program on exports. However, with the expansion of manufacturing and infrastructure activities after this period and the consequent growing overvaluation of the exchange rate, the constraint imposed on growth by the need to import producer goods became more and more obvious. The significant rise in imports that was associated with economic growth after 1966 was not financed by growing exports, but instead

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[69] As reported in A.V.H. Hartendorp, *History of Industry and Trade in the Philippines* (Manila: Philippine Education Company, 1961), pp. 444-445.

by short-term foreign borrowing. When sources of this type of borrowing became exhausted and exports continued to stagnate, the foreign exchange crisis of 1969-1970 brought about a dramatic end to the expansion phase and again forced a devaluation in order to generate additional foreign exchange.

C. *Distributional Effects*

A useful way of gaining insights into the pattern of economic development in countries such as the Philippines is to analyze the economic interrelationships between the agricultural and industrial sectors during the growth process.[70] The focus of this analysis is the manner in which the agricultural surplus required both to feed a growing labor force in the industrial sector and to purchase additional producer goods from abroad is made available to the industrial sector in exchange for manufactured goods, and then how this two-way exchange behaves over time in response to various development policies and such basic factors as population growth and technical progress.

The Philippines is fortunate in possessing an agricultural sector that has long been capable of producing a sizable surplus over and above the basic needs of the rural population. This rural population is divided into two main groups: (i) those who grow food crops (principally rice and corn) for domestic consumption and have a surplus above their own needs, and (ii) those who produce traditional export commodities. Prior to the deliberate industrialization efforts of the postwar period, foreign exchange earned by the latter group provided the economy with its machinery and equipment needs, certain essential intermediate-goods requirements such as mineral fuels and lubricants, plus a wide variety of manufactured consumption goods, many of which would be considered non-essential in terms of basic needs. However, the agricultural surplus was not entirely used in importing manufactured goods. A portion was used not only to provide the urban services needed to undertake the export and import activities but also to purchase some domestically manufactured goods. Before World War II these local manufacturing activities, which had developed as a result of agricultural growth, mainly involved processing food, making cigarettes and cigars, and distilling or blending liquors.[71]

In the early 1950's the Government effectively re-channeled a significant part of the agricultural surplus by introducing exchange controls and

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[70] For an application of this framework to the Philippines, see George L. Hicks and Geoffrey McNicoll, *Op. cit.*

[71] Marvin C. Goodstein, *The Pace and Pattern of Philippine Economic Growth* (Cornell University, Department of Asian Studies: Data Paper No. 48), July, 1962.

greatly limiting imports of so-called non-essential goods. This turned the market demand for these products inward and imposed greater demands on the uses of the surplus for importing capital goods and intermediate production inputs.

There are several potential obstacles to continued growth under these import-substituting conditions. One of the most important of these is a failure of the agricultural surplus to grow at a rate sufficient to sustain the high import requirements of the industrialization process. Producers of traditional export commodities tend to decrease their output levels because of the adverse income effects brought about by the higher prices for manufactured goods as well as the increasing extent of currency over-valuation that is used to subsidize the industrialization process. As already pointed out, a failure of this sort halted the growth efforts of the Marcos Administration from 1966-1969. The Government shaped a development strategy that not only imposed import demands far above reasonable expectations of export earnings, but also produced repercussions which halted the growth of the surplus.

A second form in which a decline of the agricultural surplus may take place is through a shortage of basic domestic foodstuffs that causes food prices to rise. During the period of vigorous Philippine industrialization efforts in the 1950's, this does not seem to have been a problem. In part, the lack of any significant rise in food prices was due to the fact that, at least until recently, the country had displayed features of a land-surplus economy.[72] Adequate new land and technical knowledge were available for the growing rural population to expand food production sufficiently to prevent any major pressures on food prices during the 1950's. The wholesale price index for domestically produced food (1955=100) was 104 in 1950 and 108 in 1960. However, the Government also used a part of the surplus for importing basic foodstuffs, especially rice, in order to assure adequate food supplies to the industrialization efforts. Actually, as previously noted, the period in which rising food prices threatened the industrialization process through a rise in money wages and a cut in manufacturers' profits was during the decontrol period in the early 1960's.

In terms of the effects of relative price changes in products sold versus products bought, the agricultural sector was penalized during the early period of industrialization. Between the periods 1949-1959, average prices of agricultural products for home consumption fell over by 9 per cent and average export prices of agricultural goods by nearly 6 per cent. On the other hand, between these same periods, domestic

[72] See Hicks and McNicoll, *Op. cit.*, pp. 76-87.

prices of imported goods rose nearly 10 per cent and prices of domestically produced non-agricultural goods remained unchanged.

The liberalization episode from 1960 to 1965 brought a marked improvement in the terms of trade to agricultural producers. Between 1960 and 1965, prices of agricultural goods for home consumption and those for export both increased 38 and 50 per cent, respectively, whereas prices of imported goods and non-agricultural domestic goods rose only 25 per cent and 18 per cent, respectively. The terms of trade continued to improve somewhat between 1966 and 1969 as the Government's borrowing policy was able to hold down the prices of imports. The 1970 devaluation temporarily worsened the trading terms for agricultural producers of domestically consumed items, but by 1971 they had essentially regained their 1969 relative position. Traditional exporters, however, gained moderately as a result of the peso depreciation.

As a consequence of the country's ability throughout most of the industrialization episode to provide the foodstuffs to feed the expanding urban population without encountering significant increasing real costs in agriculture, it has been possible to attract labor to the cities without bidding up real wages. Indeed, one of the remarkable facts about the postwar development period is that real wages have not improved for the industrial labor force. The behavior of money and real wages for industrial workers together with employment changes is shown in Table 24. During the phase of rapid growth between 1949 and 1956 labor held its own, or as in the case of unskilled workers, improved its real wage position somewhat. The inflation of 1950-1951 reduced real wages sharply, but the Government at this time was much concerned about the real income position of lower income groups. Consequently, special efforts were made to keep the prices of "essentials" from rising in 1950-1951, and liberal foreign exchange allotments continued for this category of commodities after the Korean War period. However, in the last half of the decade, real wages fell, as they continued to do throughout the decontrol period. Near the end of the 1960's when the country engaged in the experience of living-beyond-its-means, real wages began to rise, but this upward movement was sharply reversed with the currency depreciation of 1970.

It should not be concluded from the absence of an increase in real wages that labor has not benefitted at all from the country's industrialization. Real wages in industry have remained about twice[73] as high in agriculture throughout the entire period, and the transference of labor from agriculture to industry has thus resulted in an increase in labor's absolute income share. The share of the labor force employed

[73] Hicks and McNicoll, *Op. cit.*, p. 91.

Table 24: Wages and Employment in the Non-Agricultural Sector, 1949-71 (1955 = 100)

	Money Wages		Real Wages		Employment				
	Skilled	Un-skilled	Skilled	Un-skilled	Mfr.	Constr.	Com-merce	Transp. & Comm.	Govt.
1949	102.3	94.6	100.7	93.1	86.2	251.1	97.9	101.4	76.3
1950	102.2	82.8	97.6	79.1	84.4	175.1	91.5	99.6	78.4
1951	95.8	89.4	84.5	78.8	85.3	110.3	88.6	94.9	82.8
1952	97.4	95.6	91.8	90.1	85.4	127.9	93.1	98.0	87.7
1953	99.5	98.3	97.1	95.9	94.0	116.8	91.7	99.6	92.0
1954	100.0	97.1	99.0	96.1	99.6	138.9	95.1	100.1	92.0
1955	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1956	100.3	101.5	97.7	98.8	100.5	114.9	106.8	106.5	111.4
1957	100.0	100.4	95.7	96.1	106.2	135.8	119.1	112.1	117.8
1958	103.5	101.0	95.8	93.5	106.5	151.1	122.3	116.2	121.8
1959	105.3	101.8	98.4	95.1	111.6	157.5	121.2	115.5	130.7
1960	105.1	101.9	94.3	91.4	115.3	167.4	119.7	123.4	133.0
1961	104.8	104.4	92.6	92.2	117.0	177.3	119.8	135.0	138.3
1962	106.1	107.5	88.6	89.7	118.8	161.2	125.8	143.8	145.0
1963	109.3	113.4	86.4	89.6	121.3	161.5	131.1	143.4	152.8
1964	111.2	114.4	81.2	83.6	123.3	165.2	135.9	143.5	160.3
1965	114.4	122.5	81.5	87.3	127.0	173.7	145.0	141.2	164.3
1966	120.1	131.4	80.6	88.2	125.6	191.4	141.3	139.6	163.3
1967	125.7	137.6	79.8	87.3	127.2	185.3	137.9	141.5	164.4
1968	135.8	153.1	86.0	96.9	130.6	199.9	141.8	146.6	166.6
1969	143.0	160.3	89.2	100.0	132.5	193.3	140.8	149.7	170.7
1970	151.9	177.9	80.9	94.5	132.4	191.8	140.1	157.8	172.1
1971	159.9	189.9	71.5	85.1	132.6	193.5	142.6	161.1	174.5

Source: Central Bank of the Philippines, *Statistical Bulletin*, December 1971.

in agriculture declined from 72 per cent in 1952 to 57 per cent by 1967.[74] Furthermore, within the urban labor force many have benefitted from the relatively greater use of skilled and technical labor as manufacturing and tertiary (especially government services) have expanded.

[74] Valdepeñas, *Op. cit.*, p. 14.

The major beneficiaries of the Government's development policies have been those who own or control businesses in the industrial sector. Exchange-control as well as related import-substitution policies created enormous windfall gains and profit opportunities in the industrial sector which were then exploited by a vigorous Philippine entrepreneurial group. In response to the incentives devised by the Government, a large share of these profits was, of course, plowed back into the economy in the form of additional capital, much of which unfortunately merely added to excess capacity in the economy. Purchases of such equipment provided jobs for foreign workers but ended up in the Philippines as industrial monuments.

D. An Evaluation of Philippine Development Policies

In judging a country's development performance, four economic criteria are relevant. How well did the country succeed in raising its growth rate? To what extent was the country successful in solving the problems of open unemployment and underemployment? Did the development effort help to distribute income more equitably? Were resources allocated more efficiently because of the development programs? When these criteria are applied to the Philippines, it would appear that the country does not receive very high marks.

The main objective of trade, fiscal and monetary policies in the 1950's was to accelerate the rate of industrial growth. As already mentioned, while it is not easy to separate the type of "catch-up" growth that would be expected after World War II from development that occurred in response to deliverate policies, a reasonable conclusion is that industrial growth was significantly accelerated during this decade by the import-substitution policies of the Government. However, once the relatively easy type of import-substitution was completed by the latter part of the 1950's, the development rate in the manufacturing sector as well as for the economy as a whole declined quite sharply. During the decontrol period from 1960 to 1965 that followed this slow-down, the growth rates for manufacturing and real gross national product fell even lower. Not until the 1966-1969 period did these development rates return to the level of the late 1950's. But even the growth rates in this period could not be maintained for long. Thus the question arises as to whether different sorts of development policies would have brought about higher rates of growth.

One study throwing some light on this subject is the investigation by Gonzalo Jurado into the production cost of exchange controls in 1961.[75]

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[75] Gonzalo M. Jurado, "The Production Cost of Exchange Control in the Philippines, 1961" (Institute of Development and Research, School of Economics, University of the Philippines, Discussion Paper No. 71-16, 1971). Also Gonzalo M. Jurado, *A Linear Programming Analysis of the Economic Cost of Exchange Control: The Philippine Case, unpublished* Ph.D. dissertation, University of Wisconsin, 1970.

Using linear programming techniques and comparing actual production levels with those that would exist under free trade, Jurado estimated the production cost of exchange controls in 1961 to be between 0.18 per cent and 1.65 per cent of gross national product. Presumably one would wish to balance the dynamic benefits from import-substitution, especially in the early 1950's, against this static allocation loss, which became relatively more important after the reduction in growth rates in the latter part of the 1950's. While any assessment of the net balance of these factors can be no more than an educated guess, the present author's opinion is that it is not obvious that the Government's development policies, as compared with free trade, increased the growth rate over the entire 1949-1971 period.

A more relevant assessment, however, would involve a comparison of the Government's import-substitution policies with a set of policies designed to stimulate more export growth, particularly in the manufacturing area. In other words, the Government might have tried to adopt at least some of the export-oriented policies of Korea and Taiwan. This does not mean that no import-substitution should have occurred. Undoubtedly, the Government's action of protecting and subsidizing some industries did help to overcome various market imperfections and correct for various technological externalities in ways that improved the dynamic allocation of resources. Yet these policies were pushed too far, and it is now difficult politically and economically to dismantle the inefficient parts of the industrial system. These parts of the industrial system also retard potential export growth in manufacturing by being able to bid away scarce resources from this sector. A more selective use of import-substituting and export-promoting policies might have resulted in faster growth in the past and almost certainly would have set the basis for a higher development rate in the future than the inward-looking policy of import substitution. Fortunately, within recent years more emphasis has been placed on stimulating exports, though probably not yet enough to establish a firm foundation for future growth.

While one's judgement of the Philippine economy between 1949 and 1971 on the basis of the growth criterion is likely to be uncertain, an assessment of the country's performance according to the other three criteria seems quite straightforward. The economy has not done well on the basis of any of these criteria. The distortions in resource allocation were examined in detail earlier. The bias produced by the trading regimes toward capital-intensive production and thus the low employment creation associated with the country's growth has also been discussed in this section. Finally, the failure of the real wages of labor to be any higher currently than at the beginning of the development efforts and the high profits fostered by import controls have been analyzed in the preceding section

and in this section. Consequently, considering all the criteria and viewing the 1949-1971 period as a whole, it seems necessary to conclude that the economic policies pursued by the Government were not very successful.

Appendix I

Data Used in Calculating Effective Exchange Rates, by Exchange-Control Category, 1949-1971

Exchange Rates

The EER for a particular exchange-control category and year is obtained by increasing (decreasing) the applicable official exchange rate by the various trade taxes (subsidies) that must be paid on transactions of this type. The exchange rates (in terms of number of pesos per U.S. dollar) used in the calculations are as follows: **1949-1959**, ₱2.00 for all groups; **1960**, essential consumer goods and essential producer goods, including those for "new and necessary" industries, ₱2.08; semi-essential producer goods, ₱2.10; traditional and new exports, ₱2.22; non-essential consumer goods, semi-essential consumer goods, and non-essential producer goods, ₱2.83; **1961**, essential consumer goods and essential producer goods, including those for "new and necessary" industries, ₱2.92; semi-essential producer goods, ₱2.93; non-essential consumer goods, semi-essential consumer goods, and non-essential producer goods, ₱3.0; traditional and new exports, ₱2.68; **1962**, all groups except traditional and new exports, ₱3.44; traditional and new exports, ₱3.15; **1963-1969**, all groups except traditional exports and new exports, ₱3.90; **1963-1964**, traditional and new exports, ₱3.52; **1965-1969**, traditional and new exports, ₱3.90; **1970**, all groups except traditional exports, ₱5.89; traditional exports (taking account of the 80-20 split between the old and new exchange rate), ₱5.57; **1971**, all groups ₱6.40.

Tariffs

Because of the free trade arrangement between the U. S. and the Philippines from 1946 through 1955, no duty is included in the EERs during this period. From 1956-1971, the nominal duty levels in the Philippines were multiplied by the following percentages in order to reflect the increasing proportion of the nominal duty that was applicable against U.S. goods: 1956-1958, 25 per cent; 1959-1961, 50 per cent; 1962-1964, 75 per cent; 1965-1973, 90 per cent. The nominal tariff rates used for the various categories are as follows. Non-essential consumer

goods: 1956, 18 per cent; 1957-1971, 51 per cent; 1962-1971, 83 per cent; semi-essential consumer goods: 1956, 35 per cent; 1957-1971, 40 per cent; essential consumer goods: 1956, 15 per cent; 1957-1961, 12 per cent; 1962-1971, 9 per cent; non-essential producer goods: 1956, 20 per cent; 1957-1961, 25 per cent; 1962-1971, 100 per cent; semi-essential producer goods: 1956, 15 per cent; 1957-1961, 22 per cent; 1962-1971, 25 per cent; essential producer goods: 1956, 1957-1961, 22 per cent; 1962-1971, 25 per cent; producer goods for "new and necessary industries: same rates as for essential producer goods.

Excise Tax and Margin Fee on Sale of Foreign Exchange

For all groups except essential consumer goods and producer goods for new industries (both of which were exempted from these charges): 1951-1954, 17 per cent; 1955-1958, 0 per cent; 1959 25 per cent, 1960, 24 per cent, 1961, 16 per cent; 1962-1971, 0 per cent.

Special Import Tax

1949-1954, 0 per cent; 1955-1956, 17 per cent; 1957, 15.3 per cent; 1958, 13.6 per cent; 1959, 11.9 per cent; 1960, 10.2 per cent, 1961, 8.5 per cent; 1962, 6.8 per cent; 1963, 5.1 per cent; 1964, 3.4 per 1965, 1.7 per cent; 1966-1971, 0 per cent.

Protective Effect of Sales or Compensating Tax

The discriminatory aspect of the sales tax on imports arises because the base on which the tax is levied is greater than that for domestically produced commodities and also because the sales tax was levied not only on the import duty, but also on the special import tax in effect from 1955-1965. The protective effect of the sales tax was determined by multiplying the sales tax rate by one plus the special import tax rate and the tariff rate on U.S. imports, and then multiplying this product by one plus the rate by which the import valuation base exceeded that for comparable domestic goods. The sales tax rate was then deducted from this result to obtain the net discriminatory effect.

The sales tax rates for the various commodity groups are as follows: Non-essential consumer goods: 1949, 30 per cent; 1950-1971, 50%; semi-essential consumer goods, essential consumer goods, non-essential producer goods, semi-essential producer goods, and essential producer goods: 1949-1950, 0 per cent; 1951-1971, 7 per cent. The special import tax rate and the relevant tariff rates have already been given in this appendix. The size of the valuation base for imports as compared to domestically produced goods is as follows. Non-essential consumer goods: 1949-1950, 1; 1951-1971, 2; semi-essential consumer goods: 1949-1950 1; 1951-1971, 1.24; essential consumer goods: 1949-1971, 1; non-essential producer goods: 1949-1950, 1; 1951-1971, 1.25; essential producer goods:

1949-1950, 1; 1951-1971, 1.25; essential producer goods for "new and necessary" industries: 1949-1971, 1.

Marginal Deposit Requirements

The protective effect of the various margin requirements for importing was estimated to be as follows. Non-essential consumer goods: 1949-1953, 2.4 per cent; 1954-1957, 0 per cent; 1958, 3 per cent; 1960-1961, 0 per cent; 1962-1965, 4 per cent; 1966, 0 per cent; 1967, 2.25 per cent; 1968, 5.7 per cent; 1969, 6.5 per cent; 1970, 6 per cent; 1971, 1.5 per cent; semi-essential consumer goods: 1949-1953, 2.4 per cent; 1954-1957, 0 per cent; 1958, 6 per cent; 1959, 3 per cent; 1960-1961, 0 per cent; 1962-1965, 2.25 per cent; 1966, 0 per cent; 1967, 1.1 per cent; 1968, 3.1 per cent; 1969, 3.25 per cent; 1970, 6 per cent; 1971, 1.5 per cent; essential consumer goods: 1949-1971, 0 per cent; non-essential producer goods: 1959-1953, 2.4 per cent; 1954-1957, 0 per cent; 1958-1959, 3 per cent; 1960-1961, 0 per cent; 1962-1965, 2.25 per cent; 1966, 0 per cent; 1967, 1.12 per cent; 1968, 2.25 per cent; 1969, 3.25 per cent; 1970, 0.6 per cent; 1971, 1.5 per cent; semi-essential producer goods: 1949-1957, 0 per cent; 1958-1959, 3 per cent; 1960-1965, 0.75 per cent; 1968, 2.25 per cent; 1969, 2.44 per cent; 1970, 0.6 per cent; 1971, 1.5 per cent; essential producer goods: 1959-1957, 0 per cent; 1958-1959, 3 per cent; 1960-1966, 0 per cent; 1967, 0.37 per cent; 1968, 1.32 per cent; 1969, 0.78 per cent; 1970-1971, 0 per cent; producer goods for "new and necessary" industries: 1949-1957, 0 per cent; 1958-1959, 1.5 per cent; 1960-1971, 0 per cent.

Subsidy on New Exports

In estimating the net subsidy for producing new export commodities, it was assumed that such industries could borrow from government organizations such as the Development Bank of the Philippines at 2 per cent below the market rate. Assuming an incremental capital/output ratio of 2, this implies a 4 per cent subsidy on output. The subsidy effect of the various tax-exemptions for these industries was taken for the 1949-1962 period from a study by the Philippine Chamber of Commerce reported in *Official Proceedings*, 5th Annual Convention of Manufacturers and Producers, Volume VIII, 1958, and for the period thereafter was estimated from a sample of firms analyzed by the Board of Investment. The percentages used are as follows: 1949-1952, 8.2 per cent; 1953-1958, 12.1 per cent; 1959, 10.9 per cent; 1960, 9.1 per cent; 1962, 3 per cent; 1963-1966, 2 per cent; 1967-1969, 3 per cent; 1970-1971, 7 per cent.

Tax on Traditional Exports

An export tax of 10 per cent was levied on traditional exports in May, 1970. The tax was continued in 1971.

PHILIPPINES

Introduction: **Robert E. Baldwin**

In terms of the Phases outlined in the Project, Phase I began in the Philippines in December 1949 when exchange controls had been imposed in reaction to a balance of payments crisis which had arisen from a sharp fall in export earnings, a significant decline in US assistance and overly liberal monetary and fiscal policies during the 1949 Presidential election. Although the need for reform had been evident before the election, the controls were imposed only after the election.

The exchange controls provided liberal allocations for essential consumer and producer goods; dissuaded most non-essential imports and provided significant incentive for import substitution of those items. Domestic production was further encouraged by fiscal and monetary measures including tax exemptions, import tax relief and concessionary loans for "new and necessary" industries.

While some incentive measures had been enacted prior to the imposition of controls, industrial growth resulted only after the introduction of the exchange controls.

Phase II was more difficult to date – it was probably around 1955 that measures were taken to rectify some of the misallocations that had arisen. The disincentive effect on exports of the over-valued exchange rate was, then, lessened by permitting exporters to barter part of exports for imports.

Concurrently, too, exchange controls were further tightened and rates of protection continued to increase. Import allocations were also adjusted to encourage more complex manufacturing industry. The 1957 Tariff Act also attempted to replace most quantitative restrictions with appropriate tariff rates.

Phase III liberalization began around 1960 with a multiple exchange rate system that gradually depreciated with more imports being moved into the higher exchange rates. In 1962 imports came under a unified exchange rate of ₱3.9 to a $ while export earnings received ₱3.52: the unified exchange rate had remained at ₱2 per $ throughout the 1950s.

Phase IV began about 1965 when the exchange rate was unified at ₱3.9 and exchange controls were progressively removed. The purpose of those reforms was not "to reduce the degree of bias in the system" but rather to substitute quantitative restrictions with a system of tariffs. The degree of bias was reduced somewhat and there was an immediate increase in exports and export earnings and in the production of some foodstuffs for domestic consumption.

1965 to mid-1967 was a period of almost complete liberalization – Phase V. The industrial sector revived with increased demand which followed easier credit policies and rapid increases in government expenditures. Industrial expansion stimulated imports and the import surplus was sustained till 1967 – along with liberal policies – by recourse, for the first time to a significant extent, to foreign borrowings.

The controls introduced in 1967 were not as severe as in the 1950s and relied mainly on credit ceilings and marginal deposit requirements. With external debt service estimated to reach 50 per cent of export earnings by 1970, IMF assistance was sought and foreign debts renegotiated. With the floating of the Peso in early 1970 and the retention of controls particularly over non-essential imports the trade and exchange regime moved back almost to Phase III again.

The Peso immediately depreciated from 3.9 to 5.5 and has since progressively depreciated to around 7.0. Exports, which had fallen in real terms during the late 1960s, increased substantially since the floating (and progressive depreciation) of the Peso while the terms of trade also improved greatly.

The effects of these policies on growth had been reasonably satisfactory. From 1950 to 1970, gross domestic product grew at an annual rate of about 6 per cent while manufacturing output increased at an annual rate of about 7 per cent: there had been considerable variations in the annual rates of growth particularly in manufacturing. During the early 1950s import substitution in simple manufactured goods made for growth rates in manufacturing of around 12 per cent annually. The growth rate in manufacturing slowed to around an annual 7 per cent during the late 1950s; fell further to about 4 per cent during the period of liberalization in the early 1960s and increased to around 6 per cent during the latter half of the 1960s.

The policies adopted had provided significant incentives for industrialization which had increasingly become capital-intensive and import-dependent. The experience of the late 1960s, in particular, had demon-

strated the need for continued expansion of export earnings in order to sustain that type of industrialization. However, when exports were discouraged and the payments deficit increased, borrowing limits were exhausted and further depreciation of the currency became necessary. It was noted that both traditional and non-traditional exports had responded very quickly to depreciation.

The analyses of effective exchange rates and effective rates of protection indicated that there had been a substantial and deliberate distortion in order to encourage industrialization based largely on the production of non-essential consumer goods. Concurrently, liberal import policies for essential capital and consumer goods discouraged domestic production of these items while traditional exports were also discouraged during periods of over-valued exchange rates.

The policies followed had not been too successful in providing greater urban employment opportunities. After the period of simple import substitution in the early 1950s, the capital: labor ratio appeared to have increased. Between 1950 and 1968 the capital stock and output in manufacturing had increased by about 430 per cent while employment had increased by about 130 per cent.

That had been partly due to the ready availability of artificially cheap imported raw materials and capital goods. In addition, there had been the conscious encouragement of greater capital-intensive production which had increased the ratio of imported intermediate inputs without increasing employment significantly.

The income distribution effects of the policies had not been significant. Real wages of skilled and unskilled workers were in 1970 the same as in 1949 and had declined by 1972. While the real wages of the urban worker had remained the same, there had been a marked improvement in the real incomes of the migrants from the rural areas. Additional evidence had been provided in other studies that the process of industrialization had made income distribution more unequal.

Industrial development through import substitution seemed, politically, to have been a more attractive policy as the real costs of the process appeared only indirectly in the form of increased prices. The burden could also be shifted on to particular groups or sectors through foreign exchange policies. The traditional exporter, for example, paid much of the price of the industrial import-substitution policies followed. While the problems in following those policies had been even vaguely apparent at that time, the expectation that benefits would be better distributed had not been realized. On the other hand, a broader-based policy of

industrialization or an export-promotion policy would have required a monetary and fiscal discipline that was not only more difficult but also less politically acceptable.

Recent moves towards export promotion faced real difficulties with an inefficient import-substitution system entrenched in the political and economic spheres. With the available natural and human resources, the outlook for the future was bright provided policies of selective import-substitution and greater export promotion were implemented.

COMMENTS

by

Amado A. Castro

The Study had provided original analyses of the effects of economic policies in the Philippines in terms of effective rates of protection and effective exchange rates.

The implicit protection on imports in 1951 as calculated in the Study had to be interpreted with caution. Since distribution costs were generally about 50 per cent of the retail price, an apparent protection ratio of 100 per cent was not unusual. The very low rates of implicit protection for some essential consumer goods arose from governmental importation and sale at a subsidy while the very large implicit protection noted for some items were on clearly non-essential or unnecessary imports like salt and oranges.

The contention of the Study that exporters had suffered an important decline in domestic purchasing power during the 1950s was not valid. Export prices had been, during the 1950s, significantly higher than in the pre-war periods and had increased faster than increases in the consumer price index.

While the problems of the sugar exporters had been greatly publicized, it was noted that the 1955 Barter Trade (no-dollar) import facility was contrary to the economic policy-mix of that period and was piloted through Congress by the sugar interests. That facility was also administered by the Department of Commerce and Industry rather than by the Central Bank.

The decontrol of 1962 was not, as suggested, purely to eliminate corruption. Domestic industry was deliberately exposed to competition and some industries had suffered considerably as a result.

The Study had concluded that easy credit policies had been responsible for the price inflation of the 1960s. However, price increases after 1964/65 had been due mainly to the slow rise in food production and the consequent increase in the food component of the price index.

The rapid growth in industrial output after the War was due to a basic and dramatic shift in the scope of the industrial sector rather than purely to post-war rehabilitation or the continuation of the pre-war long-term trend. The slowdown in industrial growth noted in the late 1950s was not due only, as concluded by the Study, to the exhaustion of the easier phase of industrialization but also to the constraint of the complete exhaustion of foreign exchange reserves following the 1957 elections.

The Study had concluded that the economic policies followed by the government had not been too successful from the point of view of the classical criteria of growth, employment, equity and resource allocation. The Study had not considered the fact that there were other equally legitimate national objectives which also changed over time. Such objectives included the modernization of the economy; the creation of an indigenous entrepreneurial class; economic nationalism and increased productivity. While the time period was relatively short, the Study could have usefully investigated the impact of policies on such individual goals within the given time period. Thus, for example, while industrialization might not have significantly increased employment opportunities, other important objectives such as the modernization of the economy and the development of a large indigenous entrepreneurial class had been achieved. Due consideration had not also been given to the constraints imposed by a political democracy on the effectiveness of governmental actions.

The Study had not examined the role of foreign investment and the related attitudes and policies. Foreign domination of manufacturing and commerce had steadily declined during the period under review and was, at present, at a considerably lower level than even in many developed countries.

The Study had analyzed events only up to 1971. Since then there have been significant changes which had also resulted in marked improvements in the classical objectives of growth of income and employment as well: it appeared that the results of the policies followed for

20 years were being realized. There had been a real growth in national product of 10 per cent during 1973 and the real growth of 6 per cent during 1974 contrasted vividly with the negative growth recorded during that year by many other countries.

Exports had, during the post-War years, grown at an annual rate of 5.4 per cent – i.e., at double the pre-War rate of increase. In recent years, the annual growth rate of exports had risen to an annual 30-50 per cent although there had not been any appreciable improvement in the terms of trade. Also, manufactured exports (excluding sugar) had grown to 30 per cent of total exports.

Industrialization itself could not be expected to solve all the unemployment problems of the country. Apart from the employment opportunities which had been provided by industrialization, development and modernization of the agricultural sector had to be a much greater factor in that respect. Open unemployment was, anyway, estimated at 4.3 per cent in early 1974: that was significantly below the rate in the U.S. and much below the former rate of 7 per cent.

The Study had noted that, in the pattern of income distribution, the shares of both the lowest 20 per cent as well as that of the top 20 per cent had declined over time. The significant fact that should have been noted was that the incomes of the middle 60 per cent had increased.

COMMENTS

by

Suhadi Mangkusuwondo

The basic issue in the Philippine country study was whether the pattern and rate of growth of industrial and total output had been significantly affected by the incentives provided by the trade and exchange regimes of the 1950s and 1960s. The Study had indicated that the share of manufacturing in GNP had been increasing even before the War. Consequently, the rapid growth in manufacturing output after the War could be mainly the recovery to the longer-term trend. The Study had noted that the growth of manufacturing output from 1948 to 1961 had been 2.3 times greater than the highest rate recorded in any decade between 1902 and 1948. The extent to which the incentives offered had contributed

to that growth could have been better illustrated by comparing the actual performance with a projection of the long-term trend.

The Study had concluded that the policy of import substitution had led to a greater import-dependence as the ratio of imported intermediate and investment goods to industrial value-added had increased. However, since the intermediate and capital goods required were not available from domestic production, rapid increases in investment would have, even in the absence of quantitative restrictions, made for a greater initial import-dependence. The increase in the ratio was, then, an indicator of accelerated investment and growth rather than an increased import-dependence that followed from policies of import substitution.

The Study had concluded that policies of import substitution had affected the ability of the export sectors to attract productive resources, However, it was noted that exports had grown at the relatively satisfactory rate of 5.9 per cent from 1950 to 1960 and at 5 per cent from 1960 to 1970.

There was no evidence in the Study to support the conclusion that the import restrictions on non-essential producer and consumer goods had led to higher profits in many import-competing manufacturing sectors. If industrial growth had occurred largely in the production of non-essential commodities, it would be difficult to sustain the conclusion that manufacturing output slowed down after the mid-1950s due to a narrowing of import substituting opportunities for simple consumer goods.

The Study had not given sufficient emphasis to the very important long-term effect of the economic policies followed during the 1950s and 1960s in the development of a large and vigorous entrepreneurial class.

General Discussion

Capital-intensity in the industrial sector would tend to increase with changes in industrial structure and was not the result only of exchange controls and quantitative restrictions. More capital-intensive methods were also deliberately resorted to in some industries and in some industrial processes for reasons of efficiency and for technical factors. The analysis in the Study, however, suggested that the compositional shift to more capital-intensive industry had not been significant. The restrictive regime had clearly encouraged greater capital-intensity and it was also likely that the remarkable increase noted in the savings ratio might have been due also to the increased capital-intensity of production.

Increased exports did not, by itself, indicate that there had been no penalization of exports as exporters could have been penalized relative to other groups. The analyses of EERs and ERPs, however, demonstrated that traditional exporters had been penalized by the exchange rate and tariff policies adopted. It was noted that, apart from domestic factors, trade policies in the Philippines were also influenced by international factors such as the Sugar Agreement with the U.S. and the important trade relationships with the U.S. and Japan.

Exports had definitely responded to more liberal policies but, in spite of large export promotion schemes, there had been no significant change in the structure of exports. While the quantity of exports had increased after the liberalizations of 1962 and 1970, it was noted that exports also benefitted from increased world market prices for the main export commodities and from larger outputs from newer investments in the mining sector.

Such periodic liberalization had also been of importance to the import-substituting sector as the additional export earnings enabled the continuance and expansion of import-substituting industry as well. It was suggested that import-substituting activities had led to inefficiencies in resource allocation and to inappropriate factor use by the very fact of producing identical substitutes for imported products. Liberalization, consequently, could be expected to lead to a better allocation of resources and to a lower capital:labor ratio by encouraging export-oriented industry.

Industrial growth in the Philippines was not the continuation of the long-term trend from before the War. The pattern of industrial production had significantly changed and many new types of industries had been established. It was noted that tax incentives, subsidized loans and other such concessions had failed to stimulate investment in industry. The imposition of exchange control and quantitative restrictions (basically for balance of payments reasons) had provided the most significant stimulus to industrial investment by the promise of large windfall profits through access to scarce foreign resources.

Industrial investment had, at the outset, been largely in the simpler manufactures of non-essential consumer goods; thereafter, investment had expanded into the more complex industrial activities. It was noted that the classification of "non-essential" industrial activities had been derived from the Central Bank classification of imports; the classification was, thus, not indicative of the social essentiality of the products but only of import priorities.

It was noted that the Philippines had reverted back to Phase II regimes after episodes of devaluation and liberalization rather than maintain Phase III policies with further devaluation. That had been due not to the failure of, or dissatisfaction with, the liberal policies followed but rather to the political need to provide immediate relief against rising prices.

Liberal policies had also led to a shift in land-use from food crops to export crops. That had, in turn, led to increased food prices and demands for higher wages just at the stage when the industrial sector was adjusting to the loss of most of the protection that it had earlier enjoyed.

It was suggested that the era of import-substituting industry had developed a financial infrastructure and a large and vigorous entrepreneurial class which could be distinct assets in export expansion as well. It was, however, also noted that the type of entrepreneurs normally produced in import-substituting regimes tended to be inward-looking through catering to sheltered markets and had developed expertise largely in handling politicians and bureaucrats within restrictive regimes.

The era of import-substituting industrialization had also led to greater corruption, increased social discontent and wider inequalities in incomes: these factors had also contributed to the change in political institutions in the country.

Country Study: Synopsis

Foreign Trade Regimes and Economic Development

REPUBLIC OF KOREA

by Charles R. Frank, Jr.

I. INTRODUCTION

The GNP of the Republic of Korea grew at an average annual rate of 10.3 per cent between 1963 and 1973, a rather impressive economic performance. Over that same period, exports in current dollar terms grew at 43.7 percent per annum, reaching $3.25 billion in 1973. Between 1963 and 1970, domestic savings increased from 4.3 to 16.5 per cent of GNP, declining somewhat to 13.9 per cent of GNP in 1972. During the decade from 1963 to 1973, labor was absorbed rapidly into urban sector industrial and service activities. The unemployment rate dropped almost steadily, and there is evidence of not only a relative but an absolute decline in the rural population in the early seventies. Although there exists an obviously very affluent and conspicuous class of industrial entrepreneurs, the overall distribution of income in Korea is among the most equal for less developed countries and compares favorably with that of many advanced industrialized nations.[1] Extreme poverty and starvation, prevalent in the fifties, hardly exist any more. The adult population is now 95 per cent literate.

Unfortunately, these important economic gains have been accompanied by a great deal of political repression. Labor unions have been strongly discouraged, and there exist many cases of employer abuse of unskilled workers, reminiscent of 19th century sweatshops in Western nations. On the whole, however, employer-employee relations are tempered by a tradition of paternalism on the part of employers, very similar to the Japanese approach. This tradition has given many workers a high degree of economic security and social welfare benefits normally provided by the government in modern welfare states.

The purpose of this paper is to examine the role of economic policies, particularly trade and foreign exchange policies, in promoting Korea's rapid development. Korea has made two attempts to liberalize trade and exchange rate policies, the first in 1961-62 and the second in 1964-65.

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[1] Hollis Chenery, John Duloy and Richard Jolly, *Redistribution with Growth: An Approach to Policy*, Mimeographed, Washington, D.C.: International Bank for Reconstruction and Development, Chapter 2.

These two periods can be characterized as Bhagwati-Krueger Phase III episodes. Prior to the 1961-62 liberalization attempt, the Korean economy went through a fairly standard Phase I period from the end of World War II to the end of the Korean War and a Phase II episode from 1953 to 1960. The first liberalization attempt was abortive and led to a relapse to Phase II in 1963. The second liberalization effort followed shortly and was much more successful, leading to a Phase IV period from 1966 to 1972, with various attempts to move into a Phase V, completely liberal regime. In late 1972, another set of reforms were announced. This paper, however, does not contain a detailed analysis of this final liberalization episode.

In the first section of this paper, we give a brief economic history from World War II until 1960. In section II we discuss the 1961-62 liberalization episode, the policies that led up to it, and its immediate economic effects. In sections III and IV, we analyze the 1964-65 liberalization efforts and the period of rapid economic growth and fairly liberal trade policy which followed.

In section V we analyze growth and employment, and in section VI, income distribution. In section VII we discuss the various factors responsible for rapid growth in Korea, emphasizing the high level of investment demand. In the four following sections, we examine some of the key factors in detail – the various sources of savings; the components of foreign exchange earnings, particularly exports and foreign capital; the demand for foreign exchange; and the efficiency of resource allocation. In section XII we assess the role of the liberalization efforts and exchange rate policies in Korea's growth. We follow this with a brief concluding section.

II. A BRIEF ECONOMIC HISTORY: 1945 TO 1960

The Japanese occupation of Korea ended on August 15, 1945, when a U.S. military government was established. The immediate postwar period was characterized by extreme economic disorganization and stagnation caused by the sudden separation of the Korean economy from the Japanese economic bloc, and by the partition of the country along the 38th parallel.

After the initial economic chaos following the Second World War, recovery was rapid, although marked by a high rate of inflation. In August 1948, the United States military government gave way to an indigenously controlled government. The Korean War, begun in June 1950, brought a sharp drop in industrial production. In 1952 economic activity picked up again after the fighting stabilized along the present demilitarized zone.

Although hostilities did not cease until 1953, by that time the recovery of industrial production was virtually complete, although production in some sectors, particularly coal and cotton cloth, lagged behind 1949 levels.

After the Korean War, real GNP grew rapidly from 1953 to 1957, averaging about 5 per cent per annum. The only relatively bad year was 1956 when agricultural production declined almost 6 per cent (see Table 1). Mining and manufacturing output grew by about 15 per cent per annum. By contrast, the period 1958 to 1960 was one of declining GNP growth, averaging less than 4 per cent. Since population increased about 2.9 per cent per annum, per capita income barely changed. The growth of mining and manufacturing averaged only about 9 per cent per annum from 1958 to 1960, less than two-thirds of the rate in the preceding four-year period. One of the causes in the slowdown from 1958 to 1960 was a financial stabilization program that was forcefully applied in 1957 and 1958.

The bulk of Korea's import requirements during the period 1953 to 1960 was financed by foreign aid grants from two sources: the United Nations Korea Reconstruction Agency (UNKRA), which had bee providing war relief goods through the United Nations Civil Assistance Command in Korea (UNCACK) during the war, and the United States bilateral assistance program. Total UNKRA assistance from 1953 to 1960 was approximately $120 million, and official U.S. aid received during the same period amounted to $1,745 million, including $158 million of PL 480 goods. Foreign aid from both UNKRA and the U.S. was used for importing foods and essential industrial raw materials as well as capital goods. Between 1954 and 1960, foreign assistance, excluding donations by foreign voluntary organizations, financed more than 70 per cent of total imports. In the period 1956-58, United States aid-financed imports exceeded 80 per cent of total imports. About 74 per cent of Korean investment was financed by foreign aid from 1953 to 1960.

The rapid economic growth from 1953 to 1957, largely induced by substantial injections of foreign assistance, was accompanied by rapid inflation (see Table 2). The wholesale price index increased more than three and one-half times between 1953 and 1957, an average annual rate of inflation of almost 40 per cent. Concern with inflation led to an agreement between the Korean government and the Office of the Economic Coordinator (the U.S. ICA Mission to Korea) on a financial stabilization program which was implemented from 1957. The annual rate of domestic inflation started to decline from that year. Price stabilization was achieved in 1958-59 (wholesale prices even declined slightly in 1958). After the Student Revolution in April, 1960, the new government abandoned the stabilization program in its first months in office. Wholesale prices rose by about 11 per cent in 1960.

Table 1: Annual Growth of GNP and Major Sectors, 1954-1972
(per cent change in terms of 1970 constant prices)

Year	GNP	Agriculture, Forestry & Fishery	Mining & Manufacturing	Social Overhead & Services
1954	5.5	7.6	11.2	2.5
1955	5.4	2.6	21.6	5.7
1956	0.4	-5.9	16.2	4.0
1957	7.7	9.1	9.7	5.8
1958	5.2	6.2	8.2	3.5
1959	3.9	-1.2	9.7	7.5
1960	1.9	-1.3	10.4	2.8
1961	4.8	11.9	3.6	-1.1
1962	3.1	-5.8	14.1	8.9
1963	8.8	8.1	15.7	7.4
1964	8.6	15.5	6.9	3.0
1965	6.1	-1.9	18.7	9.9
1966	12.4	10.8	15.6	12.6
1967	7.8	-5.0	21.6	13.8
1968	12.6	2.4	24.8	15.4
1969	15.0	12.5	19.9	14.6
1970	7.9	-0.9	18.2	8.9
1971	9.2	3.3	16.9	8.9
1972	7.0	1.7	15.0	5.8

Source: Bank of Korea, *Economic Statistics Yearbook, 1973*, pp. 298-99.

Exports declined substantially during the period of rapid economic growth in the fifties. By 1957 they were less than one-half the 1953 level. During the stabilization period, exports began to recover but did not reach the 1953 level until 1961. In any case, during the whole period 1953-60, exports were negligible, ranging from 1.1 to 2.4 per cent of GNP (see Table 3). Exports continued to be primarily mining, agricultural, and fishing products. Imports, however, were substantial, ranging from 8.8 to 14.3 per cent of GNP, or on the average, almost seven times export earnings. Food grains and manufactured goods were the most important imports.

Table 2: Major Price Indices: 1953-1972[a]
(1970 = 100)

Year	GNP Deflator	Wholesale Price Index	Wholesale Price Index of Foods[b]	Wholesale Price Index excluding Foods[c]	Seoul Consumer Price Index
1953	5.7	8.2	8.1	8.3	7.5
1954	7.5	10.5	6.5	13.9	10.2
1955	12.4	19.1	15.4	21.5	17.3
1956	16.2	25.1	24.7	26.2	21.2
1957	19.5	29.2	28.4	30.6	26.1
1958	19.4	27.3	23.3	30.3	25.3
1959	19.9	28.0	20.4	32.5	26.4
1960	21.8	31.0	24.4	35.2	28.6
1961	25.1	35.1	28.9	39.0	30.9
1962	28.6	38.4	32.6	41.9	32.9
1963	36.8	46.3	44.8	46.3	39.7
1964	48.6	62.3	61.4	61.5	51.4
1965	52.6	68.5	60.4	73.0	58.4
1966	60.1	74.6	65.3	79.8	65.4
1967	68.5	79.4	70.9	84.1	72.5
1968	76.6	85.8	79.7	89.3	80.6
1969	86.7	91.6	89.3	93.0	88.7
1970	100.0	100.0	100.0	100.0	100.0
1971	111.5	108.6	115.0	105.7	112.3
1972	127.7	123.8	137.5	117.5	125.6

a Middle of year

b From 1953 to 1959 the wholesale price index of grains on a 1965 base converted to a 1970 base.

c From 1953 to 1959, the wholesale price index excluding grains on a 1965 base converted to a 1970 base.

Sources: Bank of Korea, *Economic Statistics Yearbook, 1973*, pp. 4, 262-265 and *Economic Statistics Yearbook, 1970*, pp. 328-329.

Table 3: GNP, Exports and Imports: 1953-1972
(1970 constant Won billion)

Year	GNP	Exports[a]	Exports as per cent of GNP	Imports[a]	Imports as per cent of GNP	Exports less Imports
1953	844	17.0	2.0	109.4	12.9	-92.4
1954	890	10.3	1.1	78.1	8.8	-67.8
1955	938	12.9	1.4	104.8	11.2	-91.9
1956	942	11.5	1.2	122.4	13.0	-110.9
1957	1014	15.6	1.5	144.8	14.3	-129.2
1958	1067	19.7	1.9	125.3	11.7	-105.6
1959	1108	22.9	2.1	102.6	9.3	-79.7
1960	1130	27.4	2.4	117.5	10.4	-90.1
1961	1184	38.2	3.2	106.6	9.0	-68.4
1962	1221	43.0	3.5	141.2	11.6	-98.2
1963	1328	46.2	3.5	179.2	13.5	-133.0
1964	1442	57.1	4.0	133.3	9.2	-76.2
1965	1530	80.3	5.2	149.6	9.8	-69.3
1966	1719	122.3	7.1	237.9	13.8	-115.6
1967	1853	166.0	8.9	320.7	17.3	-154.7
1968	2087	235.0	11.3	468.0	22.4	-233.0
1969	2400	310.1	12.9	583.8	24.3	-273.7
1970	2589	381.2	14.7	642.4	24.8	-261.2
1971	2827	459.4	16.3	773.6	27.4	-314.2
1972	3024	643.3	21.3	801.2	26.5	-157.9

a Export and import figures are taken from Korea's national accounts data at 1970 constant prices. Both exports and imports include goods and services.

Source: Bank of Korea, *Economic Statistics Yearbook, 1973*, pp. 260-61.

III. THE 1961-62 LIBERALIZATION EFFORT

In the Phase I episode from World War II to the end of the Korean War, private foreign trade was almost non-existent. A limited amount of private barter trade existed. The government was the major exporter

of a limited range of primary product exports, and imports were strictly controlled. Nearly all imports were financed by grant assistance or won redemption by the United Nations Command during the Korean War, and the government itself was the major importer both before and during the war. As Table 4 indicates, a multiplicity of exchange rates applied to a variety of transactions, and there was a flourishing black market in United States currency and military payment certificates. From Table 5, we can see that by the end of the Korean War, the official exchange rate represented a serious over-valuation of the won despite six major devaluations between 1945 and the end of the Korean War. The official rate applied to a very limited range of transactions and was less than one-quarter of the free market rate on export dollars.

The Phase II period began after the war when multiplicity of exchange rates increased. Rates on foreign exchange loans varied by type of commodity imported. Foreign exchange certificates issued for earning exchange through exports were traded on the free market and resulted in separate rates for a variety of types of export, the most important distinction being drawn between Japanese export dollars and other export dollars. Foreign exchange was allocated by various auction and bidding procedures, by lottery, and by an exchange tax system. Advance deposits were required for certain imports.

A number of different export promotion schemes was used during this period: a deposit system to avoid exchange risk, an export-import link system, direct export subsidies, a variety of preferential loans for exporters and export producers, and tariff exemptions. An increasingly complex system for import quotas evolved and tariffs were raised in 1957.

By 1960, foreign trade and economic institutions had developed substantially from the complete state of disarray of the early fifties. The foreign exchange regime, however, had become increasingly complex and cumbersome. The Korean economy had fully recovered from the Korean War. The economy had begun to stagnate, however. Political repression led to increasing disenchantment with the Rhee regime. The stage was set for the April 1960 student revolution and the economic changes which followed.

Both the Chang Myon Civilian Government that came into power after the student revolution of April 1960 and the Military Government brought into power by the May 1961 military coup were basically reform oriented. Just prior to the military coup, the Civilian Government attempted to unify the exchange rate system and devalued the won very substantially in both January 1961 from won 65 to 100 to the dollar and in February

Table 4: Nominal Exchange Rates of Won to U.S. Dollar: 1945-1970
(In current Won to one U.S. dollar)

Effective Date	Agreed Rates			Free Market Rates[b]					Wholesale Price Index[e] (1955=100)
	Official Exchange Rate	Counter-part Deposit Rate	UN Finance Office[a]	Japan Export Dollars[c]	Other Export Dollars[c]	Other Dollars on Import A/C[d]	US Green-backs	MPC	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
Oct. 1, 1945	0.015	–	–	–	–	–			0.016
July 15, 1947	0.05	–	–	–	–	–			0.171
Oct. 1, 1948	0.44	–	–	–	–	–	0.74	0.5	0.297
Dec. 15, 1948	0.45	0.45	–	–	–	–	na	na	0.327
June 14, 1949	0.9	0.45	–	–	–	–	2.17	1.64	0.357
Nov. 1, 1949	0.9	0.5	–	–	–	–	2.55	1.93	0.475
Dec. 1, 1949	0.9	0.6	–	–	–	–	2.83	2.31	0.511
Jan. 1, 1950	0.9	0.8	–	–	–	–	3.48	2.57	0.565
Apr. 1, 1950	0.9	0.9	–	–	–	–	2.98	2.35	0.597
May 1, 1950	1.8	1.1	–	–	–	–	2.28	2.03	0.592
May 15, 1950	1.6	1.1	–	–	–	–	2.28	2.03	0.592
June 10, 1950	1.6	1.4	–	–	–	–	2.42	1.79	0.615
June 15, 1950	1.8	1.4	–	–	–	–	2.42	1.79	0.615
June 25, 1950	1.8	1.8	–	–	–	–	2.42	1.79	0.615
Oct. 1, 1950	1.6	2.5	2.5	–	–	–	2.58	2.27	1.11
Nov. 1, 1950	2.5	2.5	2.5	–	–	–	3.43	3.32	1.27
Dec. 1, 1950	2.5	4.0	2.5	–	–	–	6.12	4.32	1.47
Mar. 11, 1951	2.5	4.0	6.0	–	–	–	na	na	2.77
May 1, 1951	2.5	6.0	6.0	–	–	–	9.83	6.38	2.74
Nov. 10, 1951	6.0	6.0	6.0	–	–	–	18.21	12.85	4.52
Average 1952	6.0	6.0	6.0	–	–	–	na	na	5.41
Aug. 28, 1952	6.0	18.0	18.0	–	–	–	26.4	17.6	10.8
Dec. 15, 1953	18.0	18.0	18.0	–	–	–	38.7	29.3	11.8
Nov. 10, 1954	18.0	18.0	18.0	77.7	74.0	51.5	65.6	53.0	17.3
Dec. 13, 1954	18.0	18.0	31.0	80.9	78.0	65.4	71.1	57.6	17.8
Jan. 10, 1955	18.0	35.0	42.0	92.3	83.5	59.8	77.2	62.9	23.6
Apr. 18, 1955	18.0	35.0	50.0	75.6	46.6	46.6	74.8	60.5	24.1
June 27, 1955	18.0	35.0	48.0	80.2	56.3	59.0	75.3	57.7	27.7
Aug. 8, 1955	18.0	35.0	51.0	95.0	82.0	75.0	80.2	66.2	32.3
Aug. 15, 1955	50.0	50.0	50.0	95.0	82.0	75.0	80.2	66.2	32.3
Average 1956	50.0	50.0	–	107.0	100.8	84.7	96.6	81.0	36.6
Average 1957	50.0	50.0	–	112.3	105.7	84.5	103.3	84.5	42.5
Average 1958	50.0	50.0	–	122.5	101.5	89.3	118.1	102.9	39.9
Average 1959	50.0	50.0	–	139.9	124.7	113.5	125.5	114.9	40.6
Jan. 20, 1960	50.0	65.0	–	164.1	132.0	119.0	132.0	122.3	42.4
Feb. 23, 1960	65.0	65.0	–	171.8	138.7	129.3	144.9	129.2	43.2
Jan. 1, 1961	100.0	100.0	–	156.3	141.6	132.0	139.8	120.6	48.2
Feb. 2, 1961	130.0	130.0	–	147.9	145.4	–	148.3	128.9	50.6
Average 1962	130.0	130.0	–	NT	NT	–	134.0	126.5	56.0
Average 1963	130.0	130.0	–	169.8		–	174.5	147.8	67.5
May 3, 1964	256.5	256.5	–	314.0		–	285.6	236.2	95.0
Mar. 22, 1965	256.5	256.5	–	279.0		–	316.0	263.0	97.0
Average 1966	271.3	271.3	–	–		–	302.7	277.3	108.6
Average 1967	270.7	270.7	–	–		–	301.8	276.3	115.8
Average 1968	276.6	276.6	–	–		–	304.1	278.1	125.2
Average 1969	288.2	288.2	–	–		–	323.6	302.1	133.7
Average 1970	316.7	310.7	–	–		–	342.8	333.2	145.9

a This exchange rate was applied only from Oct. 1, 1950 to Aug. 15, 1955. On November 10, 1954, the rate paid to U.N. soldiers was raised to 50 won to the dollar and on December 13, 1954, the rate for other transactions was raised to 31 won to the dollar. On January 10, 1955, the rate to U.N. soldiers and the rate for all other U.N. transactions were again made synonymous.

b Free market rates represent the average rates for the month indicated, except where inuication is made as an annual average..

c Indicates non-preferential export dollar rate up to 1955, export dollar rate on L/C base between Dec. 1955 and January 1961; and the rates on export dollar certificates between Feb. 1961 and May 1961. The export dollar rate from 1963 represents the effective free market rate (i.e. official rate plus export premium). The export premium market existed until the exchange rate reform in March 1965.

d Indicates the rate on missionary and service dollars. The separate rate existed from Sept. 1954 to Jan. 1961.

e Seoul wholesale price index for the period 1945-1954 and thereafter the national wholesale price index. The price index represents the average index for the month indicated, except where indication is made as an annual average. (n.a. = not available; NT = no transactions).

Source: Bank of Korea, Korean Traders Association, and United States Agency for International Development Mission to Korea.

from won 100 to 130 to the dollar. The Military Government continued to pursue the exchange rate reform and was successful in completely unifying the exchange rate by June 1961. Other elements of reform included the institution in 1961 of a system of special tariffs to help soak up margins on restricted imports, a currency reform in 1961 and an easing of import restrictions in 1962.

Table 5: Price-Level-Deflated Exchange Rates of Won to U.S. Dollar: 1945-1970[a]

(In 1965 constant Won to one U.S. dollar)

Effective Date	Agreed Rates			Free Market Rates				
	Official Exchange Rate	Counterpart Deposit Rate	UN Finance Office	Japan Export Dollars	Other Export Dollars	Other Dollars on Import A/C	U.S. Greenbacks	MPC
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Oct. 1, 1945	93.8	–	–	–	–	–	–	–
July 15, 1947	29.2	–	–	–	–	–	–	–
Oct. 1, 1948	148.1	–	–	–	–	–	249.2	168.4
Dec. 15, 1948	137.6	137.6	–	–	–	–	na	na
June 14, 1949	252.1	126.1	–	–	–	–	607.8	459.4
Nov. 1, 1949	189.4	105.3	–	–	–	–	536.8	406.3
Dec. 1, 1949	176.1	117.4	–	–	–	–	553.8	452.1
Jan. 1, 1950	159.3	141.6	–	–	–	–	615.9	454.9
April 1, 1950	150.8	150.8	–	–	–	–	499.2	393.6
May 1, 1950	304.1	185.8	–	–	–	–	385.1	342.9
May 15, 1950	270.3	185.8	–	–	–	–	385.1	342.9
June 10, 1950	260.2	227.6	–	–	–	–	393.5	391.1
June 15, 1950	292.7	227.6	–	–	–	–	393.5	391.1
June 25, 1950	292.7	292.7	–	–	–	–	393.5	391.1
Oct. 1, 1950	162.2	225.2	225.2	–	–	–	232.4	204.5
Nov. 1, 1950	196.9	196.9	196.9	–	–	–	269.3	261.4
Dec. 1, 1950	170.1	272.1	170.1	–	–	–	416.3	293.9
Mar. 11, 1951	90.3	144.4	216.6	–	–	–	na	na
May 1, 1951	91.2	219.0	219.0	–	–	–	358.8	232.0
Nov. 10, 1951	132.7	132.7	132.7	–	–	–	402.9	264.3
Average 1952	71.3	71.3	71.3	–	–	–	na	na
Aug. 28, 1953	55.6	166.7	166.7	–	–	–	244.4	163.0
Dec. 15, 1953	152.5	152.5	152.5	–	–	–	328.0	248.3
Nov. 10, 1954	104.0	104.0	104.0	449.1	427.7	297.7	379.2	308.4
Dec. 13, 1954	101.1	101.1	174.2	484.4	438.2	367.4	299.4	323.6
Jan. 10, 1955	76.3	148.3	182.2	391.1	353.5	353.4	327.1	266.5
April 18, 1955	74.6	145.2	207.5	313.7	193.4	193.4	310.4	251.0
June 27, 1955	65.0	126.4	173.3	289.5	203.2	213.0	271.8	208.3
Aug. 8, 1955	55.7	108.4	157.9	294.1	253.9	232.2	248.3	205.0
Aug. 15, 1955	154.8	154.8	154.8	294.1	253.9	232.2	248.3	205.0
Average 1956	136.6	136.6	–	292.3	275.4	231.4	263.9	221.3
Average 1957	117.6	117.6	–	264.2	248.7	198.8	243.1	188.8
Average 1958	125.3	125.3	–	307.1	254.4	233.8	296.0	257.9
Average 1959	122.5	122.5	–	342.9	305.6	278.2	307.6	281.6
Jan. 20, 1960	117.9	153.3	–	387.0	311.3	280.7	311.3	288.4
Feb. 23, 1960	150.5	150.5	–	397.6	321.1	299.3	335.4	299.1
Jan. 1, 1961	207.5	207.5	–	324.3	293.8	273.9	290.0	250.2
Feb. 2, 1961	256.9	256.9	–	292.3	287.4	–	293.1	254.7
Average 1962	232.1	232.1	–	NT	NT	–	239.3	225.9
Average 1963	192.6	192.6	–	251.6		–	258.5	219.0
May 3, 1964	270.0	270.0	–	330.8		–	300.6	248.6
Mar. 22, 1965	264.5	264.5	–	287.6		–	325.8	271.1
Average 1966	249.4	249.4	–	–		–	278.2	254.9
Average 1967	233.8	233.8	–	–		–	260.6	238.6
Average 1968	220.9	220.9	–	–		–	243.9	222.1
Average 1969	215.6	215.6	–	–		–	242.0	226.0
Average 1970	213.0	213.0	–	–		–	235.0	228.4

a Nominal exchange rates deflated by the wholesale price index (1965=100), see Table 4.

In line with the liberalization efforts, the Military Government made a number of attempts to increase export incentives. A system of export subsidies was introduced in September 1961. The preferential interest on export credits was gradually lowered and a number of tax breaks was given to exporters beginning in 1961. Full-scale export targets were instituted in 1962. The Ministry of Commerce and Industry used moral suasion on both individual firms and industrial associations to meet annual export targets set at the beginning of the year.

The Military Government also initiated a number of domestic reforms. The budgetary process was revised, the system for collection of taxes was overhauled to increase revenues, and the currency system was reformed.

The 1961-62 reforms, however, were not successfully implemented. The currency reform was a largely unsuccessful attempt to sterilize what were thought to be currency hoards. Each family was permitted to exchange old currency for new only up to a limited amount. The reform was expensive, caused massive confusion and did not accomplish the stated objectives.

A major factor in the demise of the 1961-62 reforms was the economic stagnation that developed in the Korean economy from the spring of 1960 to the early part of 1962, due mainly to the political and social instability caused by two revolutions in a little over a year's time. The Military Government, anxious to reactivate the economy after the takeover, began in early 1962 to follow expansionary fiscal and monetary policies which increased imports and began to put pressure on the balance of payments.

Another element causing pressure on the balance of payments was the decline in United States grant aid from 1960 (see Table 6). At this point in time, there was no easy supply of foreign loans, either official or private, which could compensate for the loss in grant aid.

The *coup de grace* to the reforms was the bad agricultural harvest in the fall of 1962 which promised to put further strain on the balance of payments in 1963 because of the need to import large quantities of grain.

The Military Government became increasingly concerned about the deteriorating balance of payments situation. Foreign exchange reserves, which had been increasing until 1960, declined precipitously in 1961. Although export growth in percentage terms was rapid, exports were far outweighed by other items in the balance of payments (see Table 6).

The concern with a deteriorating balance of payments system brought a return to a multiple exchange rate system in 1963 through the institution of a full-scale export-import link and the emergence of an import-right premium market. The trade program for imports was made greatly more restrictive in the first half of 1963 as automatic approval items were nearly eliminated, restricted items increased eightfold, and total importable items were reduced by 50 per cent.

Under the link system, exporters were given the right to use 100 per cent of their export earnings for imports. The free market premium

Table 6: Balance of Payments: 1953-1972
($ million)

Year	Commodity[a] Exports	Commodity Imports	Net Services	Net Goods & Services	Official Grant Aid	Net Capital Inflows	Gold & Foreign Exchange Holdings[b]
1953	40	347	28	-279	193	112	109
1954	24	241	37	-180	139	28	108
1955	18	327	43	-266	240	-3	96
1956	25	380	24	-331	298	14	99
1957	19	390	-17	-388	355	18	116
1958	17	344	16	-311	319	-7	146
1959	20	273	25	-228	229	-17	147
1960	33	305	10	-262	256	-1	157
1961	41	283	44	-198	207	19	207
1962	55	390	43	-292	200	19	169
1963	87	497	7	-403	208	108	131
1964	119	365	25	-221	141	27	136
1965	175	420	46	-199	135	-17	146
1966	250	680	107	-323	122	196	245
1967	335	909	157	-417	135	293	356
1968	486	1,322	170	-666	121	476	391
1969	658	1,650	198	-794	98	717	553
1970	882	1,804	119	-803	82	626	610
1971	1,132	2,178	28	-1,018	64	834	568
1972	1,676	2,250	33	-541	52	330	740

a Custom clearance data on f.o.b. basis. Includes export to Vietnam through U.S. procurement.

b End of year figures.

Source: Bank of Korea, *Economic Statistics Yearbook, 1971*, pp. 266-267 and p. 271, and *Economic Statistics Yearbook, 1973*, pp. 222-223 and p. 219.

rate on import-rights gradually rose from won 32 per dollar in January 1963 to won 65 in April 1964. The effective exchange rates on both exports and imports became much higher than the official exchange rate.

The return to restrictive trade and exchange rate policies arrested the rate of decline in foreign exchange reserve holdings in 1963 (see Table 6), despite a rapid increase in imports due largely to the rapid rate of industrial growth in 1963. Increased exports and capital inflows helped finance the surge in imports.

IV. THE 1964-65 LIBERALIZATION EPISODE

The motivation for many of the 1961-62 reforms was a concern that Korea would have to begin to be more self-sufficient. Reliance on United States economic and military assistance would have to come to an end. Yet export revenues covered only a tiny fraction of import needs (see Table 6). Domestic savings averaged only about 4 per cent of GNP in the period 1961 to 1963 (see Table 7). Yet investment, financed largely by service earnings resulting from the presence of U.N. (mostly U.S.) troops and foreign aid, was almost 12 per cent of GNP over the same period.

After the general election in early 1964, the nominally elected Civilian Government instituted a substantial set of reforms. In May 1964, the Won was devalued by almost 50 per cent from Won 130 to Won 257 to the dollar. This move was a prelude to the adoption of a unitary fluctuating exchange rate system. The system was actually implemented in March of 1965. The exchange rate gradually stabilized at about Won 270 per dollar in August, the same year as the Exchange Bank intervened in the market. Quantitative restrictions were also eased. Between the last half of 1964 and the first half of 1965, the number of importable items were increased from about 500 to 1500, and the number of prohibited items was reduced. The special tariffs were increased to help soak up margins on restricted imports and import pre-deposit requirements were strengthened.

A second major reform instituted during the period was the interest rate reform of September 1965. The ceiling on commercial bank lending rates was raised from 16 to 26 per cent. This had a number of effects on the balance of payments. The interest rate subsidies for exports became increasingly valuable. The domestic supply of loanable funds available through the banking system increased rapidly. Additional investment demand spilled over into demand for foreign loans, resulting in a great increase in private capital imports.

A third element of the liberalization package was a substantial stabilization program beginning in late 1964. Collection of direct taxes was improved and rates were adjusted upward. The expansion of the money supply was strictly limited. Beginning in 1964, the Government eliminated all deficits from the general budget. The Government constrained itself to limited and sporadic short-term borrowing.

A fourth element of the reform was an intensification of the degree and number of subsidization programs for exports. Subsidized credit for

Table 7: GNP, Domestic Savings, and Gross Investment: 1953-1972

Year	GNP (1970 constant Won billion)	Domestic Savings[a] (1970 constant Won billion)	Domestic Savings[a] (Per Cent of GNP)	Gross Investment[b] (1970 constant Won billion)	Gross Investment[b] (Per Cent of GNP)
1953	843.5	4.2	0.5	49.2	5.8
1954	890.2	54.0	6.1	83.2	9.3
1955	938.2	45.3	4.8	92.0	9.8
1956	942.2	15.0	1.6	98.4	10.4
1957	1,014.4	18.9	1.9	103.9	10.2
1958	1,067.2	34.7	3.3	101.1	9.5
1959	1,108.3	49.1	4.4	96.9	8.7
1960	1,129.7	30.3	2.7	100.5	8.5
1961	1,184.5	40.0	3.4	108.5	9.2
1962	1,221.0	55.2	4.5	149.2	12.2
1963	1,328.3	57.3	4.3	181.0	13.6
1964	1,442.0	60.4	4.2	151.2	10.5
1965	1,529.7	134.0	8.8	199.5	13.0
1966	1,719.2	213.6	12.4	302.1	17.6
1967	1,853.0	268.7	14.5	387.1	20.9
1968	2,087.1	341.4	16.4	533.2	25.5
1969	2,400.5	392.5	16.4	655.6	27.3
1970	2,589.3	427.9	16.5	677.2	26.2
1971	2,826.8	378.4	13.4	721.6	25.5
1972	3,023.6	421.4	13.9	775.0	25.6

a Domestic savings exclude transfers from abroad, and changes in grain inventories which are more a function of the level of the fall harvest than of desired savings in the form of inventories, but include statistical discrepancy.

b Excluding grain inventory changes.

Source: Bank of Korea.

exports became particularly attractive in contrast to the new and higher interest rates which were part of the interest rate reform.

The period of the reforms and immediately thereafter was one of rapid growth, averaging about 9 per cent from 1964 to 1966. The rate of inflation in the wholesale price index increased to almost 35 per cent in 1964, the steepest increase since 1956, but declined to 10 per cent in 1965 and to 9 per cent in 1966. The rate of growth of industrial production slowed considerably in 1964 (see Table 1), but overall growth in GNP was aided by a boom in agriculture. Industrial growth dropped off in 1964 partly because of the devaluation and partly due to the stabilization program.

The interest rate reform caused bank time and savings deposits to increase rapidly, thus stimulating the supply of loanable funds from banking institutions. The government tax reforms caused government tax revenues to expand gradually from 7.3 per cent of GNP in 1964 to 10.8 per cent in 1966. Domestic revenues, which had been less than half of total central government revenues until 1958 and about 65 per cent in 1964, financed about 75 per cent of total central government expenditures in 1966 while counterpart funds originating from U.S. assistance financed the balance.

The ratio of domestic savings to GNP increased rapidly from 4.2 per cent in 1964 to 12.4 per cent in 1966. Both private and government savings expanded, the one because of the interest rate reform of 1965 and the other because of the tax drive in 1965 and 1966. The proportion of gross domestic investment financed by domestic saving expanded from 32 per cent in 1963 to 70 per cent in 1966. The trade balance was greatly improved since exports increased continuously by more than 40 per cent a year while the rate of increase in imports substantially declined after the devaluation in 1964. The improvement in the trade balance together with the increased inflow of foreign capital brought about a gradual increase in foreign exchange holdings over the period.

The 1964/65 reforms were accompanied by very successful economic performance across the board, but it would be a mistake to attribute all of the good performance directly to the liberalization efforts. Industrial growth was actually very rapid in 1962 and 1963, before the liberalization efforts. In 1964, in fact, growth of manufacturing and mining slowed to 5.4 per cent, down from 16.5 per cent the year before (see Table 1). GNP growth in 1964 was a healthy 8.3 per cent, only because of a particularly good agricultural harvest.

The impressive part of the liberalization episode was that it was accompanied by such a rapid decline in the rate of inflation. The May 1964 devaluation of about 50 per cent (from Won 130 to Won 257 to the dollar) was not inflationary largely because of the monetary and fiscal stabilization program. Another fact is important here also: the devaluation was more *de jure* than *de facto*, at least with respect to exports. The multiple exchange rate system and the various taxes and subsidies on exports resulted in an effective exchange rate for exports which was little changed after the 1964-65 devaluation. Consolidation of exchange rates since the 1964-65 liberalization eliminated the multiple exchange rate premia and was accompanied by suspension of payments of direct export subsidies. Since the devaluation was not really a *de facto* one, there was relatively little upward pressure on prices of export goods.

The sharp rise in the bank deposit rate in 1965 also helped to curb inflationary pressures. The great rise in savings and bank deposits substantially reduced the velocity of circulation of the money supply.

V. THE PERIOD FOLLOWING LIBERALIZATION

Rapid growth of the economy was maintained from 1967 to 1971 with considerably more price stability than throughout most of the period since World War II. Basic economic policy was guided by the second five-year plan and the Overall Resources Budget for annual implementation of the plan.

A follow-up trade liberalization program launched in 1967 switched the positive-list approach to trade controls to a negative-list approach. The tariff system was also revised in 1967 to eliminate some of the very high tariff rates. The exchange rate which had been stabilized at Won 270 to the dollar in August 1965 was allowed to float gradually. The rate reached Won 326 to the dollar by June 1971, an annual rate of increase close to 9 per cent when an abrupt devaluation of 13 per cent brought the rate to 370. Export incentives were intensified from 1966 until 1972. Table 8 gives a list of the major export incentives instituted prior to 1971. The restrictiveness of the trade program waxed and waned, depending on the balance of payments situation.

The actual performance of the economy from 1967 to 1971 far exceeded the original plan targets in almost all major sectors. The government revised the original targets almost every year through the annual Overall Resources Budget on the basis of actual performance in earlier years and new forecasts.

Korean real GNP attained an average annual growth rate of more than 10 per cent in the period 1967 to 1971, exceeding the planned growth rate by a wide margin. Exports of goods and services overshot the original plan target by 1968, since both commodity and service exports expanded rapidly owing to an intensified government export drive and an increase in service earnings from construction workers and troops in Vietnam. The commodity export target which had been set at $500 million for 1971 was actually exceeded by 1969. Commodity exports in 1971 reached $1,132 million or about 21 per cent of GNP. By 1971, exports of manufactures reached 86.0 per cent of total commodity exports. Plywood,

Table 8: Major Export Incentives

Description of Incentives	Dates Applicable[e]
1. Tariff exemptions on imports of raw materials and spare parts	1959-1971
2. Domestic indirect and direct tax exemptions	1961-1971
3. Accelerated depreciation	1966-1971
4. Tariff and tax exemptions granted to domestic suppliers of exporting firms	1965-1971
5. Wastage allowance subsidies	1965-1971
6. Import entitlement linked to exports	1951-1955, 1963-1965, and 1966-1971
7. Reduced rates on public utilities	1967-1971
8. Registration as an importer conditional on export performance[a]	1957-1971
9. Dollar-denominated deposits held in Bank of Korea by private traders[b]	1950-1961
10. Korean Trade Promotion Corporation	1964-1971
11. Monopoly rights granted in new export markets[c]	1967-1971
12. Direct export subsidies	1955-1956 and 1961-1964
13. Export targets by industry	1962-1971
14. Credit subsidies	
a) export credits[d]	1950-1971
b) foreign exchange loans	1950-1954
c) production loans	1959-1971
d) Bank of Korea discount of export bills	1950-1971
e) import credits	1964-1971
f) capital loans by medium industry bank	1964-1971
g) offshore procurement loans	1964-1971
h) credits for overseas marketing activities	1965-1971

a Minimum export by trader wishing to register as an importer increased from $10,000 in 1958 to $300,000 in 1970.

b From December 1957 to 1961, these deposits could be sold legally. Black markets, however, were well developed long before 1957.

c Authority existed from 1962, but was not widely used until 1967.

d The rate on export credits was gradually lowered over the whole period.

e Many of the incentives applied after 1971, but this table is up to date only to 1971.

woven cotton fabrics, iron and steel, and clothing continued to be major export items. In addition, electrical machinery, footwear, and wigs became important.

Despite the rapid increase in commodity exports, the trade balance was not significantly improved in the period due to an expansion in imports. The growth of imports reflected the gradual over-valuation of the won as domestic prices rose, enlarged inflows of foreign loans, trade liberalization,

and increased imports of raw materials for exports. However, Korea's foreign exchange holdings continued to accumulate rapidly after 1966, because of inflows of both short-term and long-term foreign loans including cash loans beginning in 1965. The rapid accumulation of foreign exchange holdings generated a large expansion in the money supply. A major problem in the annual stabilization programs during this period was the neutralization of the additions in bank reserves brought about by the inflow of foreign exchange. The major instruments used to sterilize reserves were increases in bank reserve requirements, compulsory deposits into the Bank of Korea Stabilization Account, and sales of Bank of Korea stabilization bonds.

In the latter half of 1971 and the first half of 1972, industrial production and construction activity slowed considerably. The growth of GNP in 1972 was reduced to 7.0 per cent compared to 9.2 per cent in 1971, despite a recovery in the latter part of 1972. Gross domestic investment declined from 26.5 per cent of GNP in 1971 to 22 per cent in 1972 and fell by an absolute amount of about 11 per cent.

The 1972 slowdown can be attributed, in part, to a financial squeeze on a number of Korean firms. Many who produced primarily for domestic markets had borrowed heavily abroad to finance imported capital goods for expansion of capacity. As the official rate for the Won went from Won 317 to the dollar in December 1970 to about 400 won by June 1972 and as the Japanese yen and other key currencies devalued in relation to the dollar in late 1971 and early 1972, the won value of foreign debts held by domestic firms increased substantially by much more than any inflation in profits between the end of 1970 and the middle of 1972. Also, many domestic firms had borrowed heavily in the unorganized money markets in which rates of interest approached 50 to 60 per cent per annum. Much of the unorganized money-market borrowing was on a very short-term basis.

The Government responded to the economic slowdown with a set of reforms, announced in August 1972. These reforms marked the beginning of a radically different approach to economic policy-making in Korea. From 1964 until 1972, wholesale price inflation averaged more than 10 per cent a year. In the face of this inflation, a number of measures were taken to stimulate savings and use of the banking systems and to maintain the international competitiveness of the economy. Most significant of these measures was the maintenance of very high bank deposit rates and frequent devaluations. The new philosophy stressed price stabilization, low interest rates and a stable exchange rate. It was recognized, however, that to switch from a regime of rapid inflation, high interest rates and frequent devaluations to a more stable regime could only be accomplished at the cost of financial disaster for most industrial firms in Korea, which

were heavily indebted, unless special measures were taken. Thus the Government sponsored a massive debt rollover, not only of loans in the nationalized banking sector but of private, unorganized money-market loans.

The basic plan was to concentrate as much of foreseen price increases in 1972 and pursue a rigid stabilization program in 1973. In 1972 utility prices and fuel prices were raised substantially so that government monopolies in these areas would not require future subsidy. As of August 1972, however, the Government announced that utility prices would be frozen indefinitely. The money supply increased sharply in the last half of 1972 as credit was expanded to accommodate the internal debt rollover, but the Government announced a price stabilization plan for 1973 which included limited increases in the money supply and a reduction in the rate of growth of government expenditures. The Government pledged its efforts to maintain the rate of inflation of wholesale prices to 3 per cent or less. Many of the Government pronouncements were aimed at cutting expectations of future price increases which, if successful, were expected to help in the stabilization efforts.

Changes were also initiated in the foreign exchange regime. Another tariff reform discussed through much of 1972 was instituted in early 1973. The exchange rate, which had been allowed to devalue gradually from Won 370 in the beginning of 1972 was stabilized at Won 400 to the dollar in June 1972. Some export incentives were reduced and import controls were liberalized.

Although 1972 was one of relatively slow growth in GNP, exports increased sharply, by 48 per cent, from $1,132 million in 1971 to $1,676 million in 1972. Imports, however, grew only 3.5 per cent in 1972, compared to a 21 per cent increase in the previous year. Since service receipts also expanded rapidly due to increased tourism, the overall balance of payments deficit on current account (net goods and services) was reduced significantly from $1,018 million in 1971 to $541 million in 1972. Gold and foreign exchange reserves reached $740 million at the end of the year, an increase of about $170 million over 1971.

This improvement in the balance of payments was made possible by the combination of two factors: (i) the improvement in the international competitiveness of Korean industries due to the gradual devaluation of Won from Won 317 to the dollar to about Won 400 between December 1970 and June 1972, and the relative appreciation of the Japanese yen and other key currencies based on Smithsonian Agreement; and (ii) the slowdown in domestic economic activities which not only reduced the demand for imports but also induced domestic industries to expand into foreign markets.

In 1973, the growth of GNP reached a high 16.9 per cent. The mining and manufacturing sectors grew by about 24 per cent during the year. Commodity exports almost doubled the level of the previous year, mainly due to the effective devaluation of won and favorable international economic conditions. The price stabilization plan, however, was endangered by very high prices for imported fuels, grains, and industrial raw materials.

VI. GROWTH AND EMPLOYMENT

The rapid rate of growth of output in the sixties was accompanied by a steady decline in the rate of unemployment, particularly in the non-farm sector (see Table 9). In addition, the non-farm population was a steadily rising proportion of total population. By 1970 it had exceeded 50 per cent. At the same time, farm population underwent not only a relative but an absolute decline between 1967, when farm population reached a peak of 16.1 million, and 1970, when it attained a low of 14.4 million.

The decline in unemployment was due to a rapid increase in employment opportunities in the non-agricultural sectors. As indicated in Table 10, the rate of growth of population declined steadily throughout the sixties. From a high 3.2 per cent per annum in 1961, it declined to 1.8 per cent by 1970. The growth of the labor force, however, showed a steady increase, particularly during the latter half of the decade, although there were variations up and down due to moderate changes in participation rates. The farm labor force has declined since 1965, decreasing at a rate of 2.1 per cent in 1971.

Job opportunities expanded rapidly, particularly in the manufacturing sector, the leading sector of the economy (see Table 11). Growth in manufacturing, however, stimulated rapid increases in output and employment in other non-agricultural sectors.

The rapid growth in employment opportunities in manufacturing was due mainly to large increases in investment and output, creating a demand for workers. The growth in output occurred using relatively labor intensive methods. Unlike trends in many other countries, where rapid growth in manufacturing output is accompanied by a rapid increase in labor productivity because of a trend toward more capital intensive methods, in Korea manufacturing employment grew very rapidly between 1957 and 1967, at 9.6 per cent per annum, while labor productivity increased at about 2.6 per cent per annum. From 1967 to 1972, however, productivity increased

Table 9: Farm and Non-Farm Population and Unemployment: 1957-1972

Year	Farm Population (millions)	Non-Farm Population (millions)	Non-Farm Population as per cent of Total Population	Unemployment Rate (per cent)	Non-Farm Household Unemployment Rate (per cent)
1957	13.6	9.4	40.8	5.9	n.a.
1958	13.8	9.9	41.8	6.2	n.a.
1959	14.1	10.2	41.8	5.8	n.a.
1960	14.6	10.5	42.0	7.5	n.a.
1961	14.5	11.4	43.9	7.9	n.a.
1962	15.1	11.5	43.3	8.3	n.a.
1963	15.3	12.0	44.1	8.2	16.4
1964	15.6	12.4	44.5	7.7	14.4
1965	15.8	12.8	44.8	7.4	13.5
1966	15.8	13.5	46.0	7.1	12.8
1967	16.1	13.8	46.1	6.2	11.1
1968	15.9	14.5	47.8	5.1	8.9
1969	15.6	15.4	49.7	4.8	7.8
1970	14.4	17.1	54.3	4.5	7.4
1971	14.7	17.4	54.2	4.5	7.4
1972	14.7	18.0	55.1	4.5	7.5

Note: Since the coverage and method of labor force survey changed in 1963, the labor force statistics available for the period prior to 1963 were not consistent with those for the later period. All data other than total population given in this table for 1960-62 were therefore estimated by linking the old survey data with the new data (two different survey results were available for 1963).

Source: Bank of Korea, *Economic Statistics Yearbook, 1973*, p. 6; Economic Planning Board, *Major Economic Indicators*, July 1973, p. 96; Economic Planning Board, *Korea Statistical Yearbook*, various issues prior to 1964.

much more, at an average of 11.9 per cent per annum. The changes in productivity were a function of variations in the growth in real wages. In 1959, real monthly earnings of manufacturing workers reached a peak of Won 8,902 in terms of 1970 prices (see Table 11). By 1964 real monthly earnings began to grow beginning in 1965, and, after surpassing the 1959 level in 1967, showed spectacular growth until 1970 and continued to grow substantially until 1972. By 1971 the 1964 level of earnings had doubled. The rapid growth in real wages since 1967 was the result of growing tightness in the labor market and shortages in certain skill categories and was correlated with much more rapid increases in labor productivity and slower growth in employment compared to the period 1957 to 1967. Between 1967 and 1972, the growth rate of employment dropped to 7.2 per cent a year.

Table 10: Population and Labor Force Growth: 1960-1972

Year	Total Population (millions)	Growth Rate of Total Population (percent)	Population 14 Yrs. & Older (millions)	Growth Rate of Population 14 Yrs. & Older (percent)	Total Labor Force (millions)	Growth Rate of Total Labor Force (percent)	Farm Labor Force (millions)	Growth Rate of Farm Labor Force (percent)	Non-Farm Labor Force (millions)	Growth Rate of Non-Farm Labor Force (percent)
1960	24.70	2.9	14.16	—	7.74	—	4.93	—	2.82	—
1961	25.50	3.2	14.50	2.4	7.94	2.6	4.85	-1.6	3.11	10.3
1962	26.23	2.9	14.85	2.4	8.15	2.7	5.06	4.4	3.10	-0.3
1963	26.99	2.9	15.09	1.6	8.34	2.3	5.09	0.6	3.25	5.0
1964	27.68	2.6	15.50	2.7	8.45	1.3	5.17	1.6	3.28	0.9
1965	28.33	2.4	15.94	2.8	8.86	4.9	5.23	1.2	3.63	10.7
1966	28.96	2.2	16.37	2.7	9.07	2.4	5.28	0.1	3.79	4.4
1967	29.54	2.0	16.76	2.4	9.30	2.5	5.20	-1.5	4.10	8.2
1968	30.17	2.1	17.17	2.5	9.65	3.8	5.26	1.2	4.39	7.1
1969	30.74	1.9	17.64	2.7	9.88	2.4	5.26	0.0	4.63	5.5
1970	31.30	1.8	18.25	3.5	10.20	3.2	5.20	-1.1	5.00	8.0
1971	31.85	1.8	18.98	4.0	10.54	3.3	5.09	-2.1	5.45	9.0
1972	32.42	1.8	19.72	3.9	11.06	4.9	5.41	6.3	5.65	3.7

Sources: Economic Planning Board, *Annual Report on the Economically Active Population, 1972; Major Economic Indicators*, July 1973, p. 96; and *Korea Statistical Yearbook*, various issues.

Table 11: Employment, Earnings and Output in Non-Agricultural Sectors: 1957-1972

Year	Monthly Earnings of Production Workers in Manufacturing (won)	Seoul Consumer Price Index (1970 = 100)	Price Deflated Earnings (1970 prices)	Rate of Growth of Price Deflated Earnings (percent)	Employment[a] in Manufacturing (thousands of persons)	Rate of[a] Growth of Employment in Manufacturing (percent)	Value Added in Manufacturing (billions of won) (constant 1970 prices)	Growth of Value Added in Manufacturing	Non-[a] Agricultural Employment	Rate of[a] Growth of Non-Agricultural Employment	Non-Agricultural Value Added (billions of won) (constant) 1970 prices)	Rate of Growth of Non-Agricultural Value Added (percent)
1957	2,030	26.1	7,778	—	409	—	94.65	—	2,086	—	564.29	—
1958	2,170	25.3	8,577	10.3	413	0.9	103.25	9.1	1,946	-6.7	589.03	4.4
1959	2,350	26.4	8,902	3.8	456	10.5	112.78	9.2	1,938	-0.4	635.80	7.9
1960	2,330	28.6	8,147	8.5	438	-4.0	122.00	8.2	2,149	10.9	663.15	4.3
1961	2,610	30.9	8,447	3.7	446	1.8	125.79	3.1	2,547	18.5	662.28	-0.1
1962	2,780	32.9	8,450	0	511	14.5	142.34	13.2	2,580	1.3	728.81	10.1
1963	3,180	39.7	8,010	-5.2	610	19.3	166.96	17.3	2,825	9.5	796.26	9.3
1964	3,880	51.4	7,549	-5.8	637	4.4	177.86	6.5	2,974	5.3	827.40	3.9
1965	4,600	58.4	7,877	4.3	772	21.2	213.35	20.0	3,396	14.2	927.05	12.0
1966	5,420	65.4	8,287	5.2	833	7.9	249.87	17.1	3,547	4.5	1,051.27	13.4
1967	6,640	72.5	9,159	10.5	1,021	22.6	306.77	22.8	3,906	10.1	1,218.23	15.9
1968	8,400	80.6	10,422	13.8	1,170	14.6	389.67	27.0	4,354	11.5	1,437.04	18.0
1969	11,270	88.7	12,706	21.9	1,232	5.3	473.03	21.4	4,589	5.4	1,669.01	16.1
1970	14,561	100.0	14,561	14.6	1,284	4.2	560.01	18.4	4,829	5.2	1,864.67	11.7
1971	17,349	112.3	15,449	6.1	1,336	4.1	659.21	17.7	5,190	7.5	2,078.36	11.5
1972	20,104	125.6	16,006	3.6	1,445	8.2	762.79	15.7	5,213	0.4	2,262.70	8.9

a See note to Table 9.

Source: Bank of Korea, *Economic Statistics Yearbook*, various issues, and Economic Planning Board, *Korea Statistical Yearbook*, various issues.

Even though employment in manufacturing grew at a less rapid rate from 1967, the rate of growth was still substantial. Overall from 1957 to 1972, manufacturing employment grew on the average of 8.8 per cent per annum and total non-agricultural employment at 6.3 per cent per annum. One of the reasons for this performance was the willingness of the Government to allow wage rates to be set by competitive forces. Labor was not well organized into unions and the Government did not press for minimum wage legislation. Wages in the non-agricultural sector more accurately reflected the opportunity cost of labor in the traditional agricultural sector than in the typical less developed country in which wages in the modern sector are kept at artificially high levels by a combination of government policies and pressures from organized labor. Furthermore, as we have shown above, government policies did not substantially distort the Korean price structure away from world prices, so that incentives were provided to concentrate production in labor-intensive exports and home goods and to import capital-intensive goods rather than to substitute for imports. Labor absorption was rapid, at least until the very late sixties when labor shortages began to appear and wages started to grow very rapidly.

VII. GROWTH AND INCOME DISTRIBUTION

It is difficult to determine the effect of rapid growth on income distribution in Korea. There are only bits and pieces of evidence which indicate that income in Korea has been relatively evenly distributed.

Surveys of consumption expenditure reveal a distribution of consumption expenditure among Korean households which is among the most equal in the world. Furthermore, the distribution of consumption expenditure between 1964 and 1970 seems to be getting somewhat better rather than worse.[2]

Farm incomes seem to be relatively evenly distributed. After World War II, the United States Military Government took possession of large Japanese land holdings. The land was redistributed to Korean smallholders in 1947. Further redistribution of lands from larger farms to smaller farmers occurred in 1949. The net result was a very equal distribution of land and a relatively even distribution of farm income.

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[2] Chenery, *Redistribution with Growth: An Approach to Policy*, op. cit

Furthermore, there is very little disparity between farm and non-farm income. Wage levels in agriculture and manufacturing are not far apart. The following table provides a comparison:[3]

	Average Monthly Wage for Farm Workers (Won)	Average Monthly Wage for Manufacturing Production Workers (Won)
1961	1,978	2,610
1964	3,657	3,880
1968	7,383	8,400
1971	13,432	17,349

Manufacturing wages have generally been higher than farm wages, but the cost of living is probably considerably less in rural areas and farm workers also often have access to income in kind from their own vegetable gardens. On the other hand, farm work is usually seasonal. In 1964, a particularly good year for agriculture, the two wage levels were especially close. All things considered, there do not seem to be the large differences between rural and urban income levels typical of other less developed countries.

This impression is reinforced by data which are available concerning average farm household income.[4] Farm income and manufacturing wages can be compared as follows:[5]

	Average Total Farm Household Income	Farm Household Income per Worker	Annual Manufacturing Wage Income
1961	125,692	56,618	45,560
1968	178,959	87,297	100,800
1971	356,382	179,990	208,128

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3 Economic Planning Board, *Major Economic Indicators*, May 1972, pp. 88-89. Farm wages are reported in terms of a daily wage rate. To get monthly earnings, the daily wage rate was multiplied by 23.

4 Bank of Korea. *Economic Statistics Yearbook*, various issues.

5 Average total farm household income as from Ministry of Agriculture and Forestry, *Report on the Results of Farm Economy Survey and Production Cost Survey of Agricultural Products (1972)*. Average total farm household income is divided by 2.22 workers per household in 1964, 2.05 workers per household in 1968, and 1.98 workers in 1971. These figures were estimated from the farm labor force estimates given in Table 10 and the total number of farm households given in Bank of Korea, *Economic Statistics Yearbook, 1973*, p. 104. Manufacturing wages are from p. 254 of the same publication.

Total farm income including income in kind, substantially exceeds annual wage income of production workers in manufacturing, but farm income per worker was somewhat greater than non-farm income per worker in 1964, a good agricultural year. In 1968 and 1971 farm income per worker was probably a bit less than the average manufacturing wage. These calculations are only very rough indicators, but they also lead to the conclusion of no great rural-urban disparities.

Wage levels in other non-agricultural sectors have tended to move very closely with manufacturing wages. The evidence is preponderant that wage rates are set largely by market forces and that there are no great market imperfections which allow sectoral disparities to arise. There have been in Korea no massive pools of unemployed and underemployed workers. Among the working class, both urban and rural, which forms the great bulk of the population in Korea, the distribution of income has probably been relatively equal. On the other hand, even the casual observer of the Korean scene is impressed with the vast wealth of a number of top urban entrepreneurs. As a percentage of the population, they are relatively small, but concentrated in the city of Seoul they are relatively conspicuous. If data on income distribution were available they would probably show relatively little overall variance in income distribution, but very great skewness caused by a small number of wealthy industrialists.

VIII. FACTORS IN THE RAPID GROWTH

The Korean economy has not suffered from any chronic deficiency in effective demand. Except for 1958-1961 and 1964 when effective demand was restrained by either deflationary monetary and fiscal policy or political turmoil, investment demand has tended to be excessive relative to the supply of savings since the Korean War, and there has been a chronic tendency toward inflation. The rate of return on investment has tended to be high. The high rate of return on investment may be inferred from the high level of demand for loanable funds even though commercial bank interest rates were very high after the 1965 interest rate reform, and rates of interest in the unorganized money market were probably twice the commercial bank rates. Borrowing at these high interest rates increased continually throughout most of the period from 1963 to 1971 and finder's fees for high interest loans were common. Although many bank loans were subsidized in one way or another and the average interest paid on bank loans was probably only about two-thirds the official bank lending rate, marginal borrowing had to be done at the high rates which indicates that the rate

of return on marginal investments was at least as great. The inference concerning high rates of return is corroborated by direct measurements of rates of return. For example, Gilbert Brown has estimated from national accounts data that the average rate of return on new investment was between 20 and 30 per cent. Brown also cites direct estimates based on data from eleven individual firms that the average rate of return was about 28 per cent in late 1965.[6]

The Korean economy has exhibited the characteristics that economic theory would predict for an underdeveloped, relatively labor-abundant, and capital poor economy – a high rate of return to capital, a high level of investment demand, and a limited supply of investable resources. The main constraints on growth are limited savings and foreign exchange availability. The factors responsible for growth in the case of Korea can be characterized as: (1) those which sustain and complement the high level of investment demand, (2) those which increase the supply of savings to meet investment demand, (3) those which increase the availability of foreign exchange to satisfy the derived demand for foreign exchange which arises from the high level of effective demand, and (4) those that foster efficient resource allocation as evidenced by a very low capital-output ratio. What, then, were some of these factors which were responsible for the rapid growth of the Korean economy throughout much of the 20 years since the Korean War?

One thing to keep in mind is that rapid growth breeds rapid growth. Rapid and sustained growth stimulates demand in nearly all sectors of the economy and contributes to the profitability of investment. A type of accelerator effect tends to operate. Rapid economic growth generates high rates of return, high levels of investment, and consequently more rapid growth. In this type of economy, recovery from temporary reductions in the rate of growth can be rapid because of the belief among entrepreneurs that rapid growth would be resumed.

There was also a number of factors specific to Korea which we have not analyzed in any detail but which clearly ought to be mentioned. These factors provided a favorable environment for investors and helped sustain high levels of investment demand. The work force in Korea is highly educated compared to most less developed countries. In 1970 the adult literacy rate was 88 per cent.[7] The proportion of primary school age children

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6 Gilbert T. Brown, *Korean Pricing Policies and Economic Development in the 1960's*, Baltimore: Johns Hopkins Press, 1973, p. 205.

7 Literacy rate for population aged 13 and over from Economic Planning Board, "Briefing Materials to the President," June 11, 1973.

attending primary school was 97 per cent.[8] The highly educated work force, it might be argued, made training much easier and was a factor in achieving high levels of efficiency and productivity.

Korea seems to have an abundant supply of entrepreneurial and managerial expertise. Although there were very few Korean managers during the Japanese occupation, it did not take long for a Korean managerial class to develop after the liberation. A large proportion of the Republic of Korea's entrepreneurs are immigrants from North Korea, but many of the most successful entrepreneurs are of southern origin. There are no significant numbers of foreign managers and entrepreneurs. The level of foreign direct investment has been exceedingly low, only about 7.4 per cent of total foreign investments and loans between 1959 and 1971.[9]

Korean economic development has also been aided by relative political stability during the most rapid period of economic growth. The government of Park Chung Hee has made economic development the symbol of its political legitimacy.[10] Maintenance of a stable political regime has been aided by a high degree of cultural homogeneity in Korea. Disputes over language and political cleavages among ethnic groups have not been important factors in the South Korean political scene.

Another factor in Korean development has been the weakness of the labor movement. There are few powerful, organized labor unions. The Korean system of industrial organization is similar in many ways to that of the Japanese. Employees tend to remain with firms for very long periods and employers are paternalistic in their attitudes towards their workers. There is an absence of labor strife and little upward pressure on wages except for that due to labor shortages rather than union bargaining power. The tendency for real wage rates to remain stable through most of the sixtees helped keep profits high and stimulated investment demands.

Finally, ties with Japan were an important element in the growth process. Although the Japanese occupation before and during World War II was extremely unpopular, the Japanese did manage to build a strong industrial base in Korea before the war. Much of this industrial base disappeared during and after the war, due both to war damages and to the

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8 Ministry of Education, *Statistical Yearbook of Education, 1970*, pp. 138-39.

9 *Major Economic Indicators 1961-1971*, Seoul, Economic Planning Board, May 1972, p. 81

10 See David Cole and Princeton Lyman, *Korean Development: The Interplay of Politics*, Cambridge: Harvard University Press, 1971.

departure of the Japanese managers and entrepreneurs. The Japanese showed, nevertheless, that industrialization was possible in Korea and provided an example which could be imitated by the Koreans. Further, Korean entrepreneurs followed the example provided by Japan in its post-war growth. Technology was transferred from Japan. The system of labor relation in South Korea, as noted above, closely resembles the Japanese pattern. Korean entrepreneurs are affected by the same expansionary psychology demonstrated by the Japanese. Government economic policies in Japan are often emulated in Korea. Policy choices are often evaluated in terms of the degree of similarity with successful Japanese economic policies. The emphasis on export promotion, the system of trade and foreign exchange controls, and the high degree of cooperation between the Government and the private sectors are characteristic of both Korea and Japan.

High levels of investment demand, however, are not enough. The rate of savings must be sufficiently high to finance desired levels of investment. Shortages of foreign exchange can restrict realized investment by limiting the availability of imports of raw materials and capital goods. An economy can also bog down because of increasingly debilitating inefficiencies in production.

IX. THE SUPPLY OF SAVINGS

The supply of savings, both domestic and foreign, was substantial in the sixties although not enough to satisfy total investment demand as there has been a persistent inflationary gap throughout most of the period since 1963.

A. Foreign Savings

Foreign savings have been about 10 per cent of GNP since 1960. The nature of the foreign savings, however, changed substantially over the sixties. In the post-Korean War period, the bulk of foreign savings was provided by foreign aid grants, either through the United Nations or through United States bilateral assistance programs. In the early sixties, foreign aid loans became more important relative to grants. Beginning about 1966, however, commercial loans from a variety of countries became the dominant factor.

We estimate that foreign savings could have been responsible for about four percentage points of growth, using the average capital-output

ratio between 1960 and 1970 of about 2.5. That is, instead of 10 per cent growth per year, growth might have averaged about 6 per cent per year.

The role of foreign savings declined in the late sixties and early seventies for two reasons. First, domestic sources of savings became relatively more important. Second, the capital-output ratio has tended to increase, resulting apparently in less growth per dollar of imported capital.

The large importation of foreign capital began to cause a heavy debt service burden in 1970 and 1971. Since then, however, the debt service ratio has become more reasonable.

Foreign commercial borrowing probably was a bit excessive in the late sixties. There was a divergence between social opportunity costs and private costs of foreign capital which made foreign borrowing more attractive than was justified. The Government originally encouraged all forms of foreign borrowing, but had to discourage short-term foreign borrowing as of 1970 as part of an IMF standby agreement.

There is little evidence that foreign aid was relied upon unduly. Much of the aid was on a grant basis, especially in the early sixties. Thus the cost to Korea is low and rates of return on investment were high. It is true that much of the grant aid may have discouraged domestic savings, but at the time grant aid was received in large quantities, Korea was desperately poor and needed additional resources for both consumption and investment.

B. Domestic Private Savings

Although foreign capital was an important factor in the growth performance of the Korean economy, domestic savings played an increasingly important role. In 1960 domestic savings financed only about 20 per cent of total gross investment. By 1972 this proportion had risen to about 75 per cent.

Business savings (in constant 1970 prices) grew rather slowly after the Korean War, but since 1957, they increased quite rapidly, at an average rate of 11.8 per cent per year between 1957 and 1972 (see Table 12). As Table 12 shows, household savings have been very erratic. Household savings were substantial during the period of relative price stability in the late fifties and even more so in the last half of the sixties after the interest rate reform of September 1965 which substantially raised interest rates. During periods of low interest rates and high inflation, such as the first half of the sixties, household savings were very low and at times substantially negative.

Table 12: Sources of Domestic Savings: 1953-1972
(Won billion, constant 1970 prices)

Year	Government Savings	Business Savings	Household Savings	Total
1953	19.47	39.30	-15.09	43.68
1954	4.67	44.13	36.93	85.73
1955	10.65	40.32	30.40	81.37
1956	52.47	40.56	8.77	101.80
1957	41.95	45.38	12.05	99.38
1958	39.43	52.58	22.42	114.43
1959	36.08	62.06	21.16	119.30
1960	54.63	59.91	0.55	115.09
1961	66.33	68.69	5.18	140.20
1962	67.03	88.29	0.59	155.91
1963	66.41	96.77	-17.50	145.68
1964	71.50	96.07	-18.02	149.55
1965	94.38	119.24	22.62	236.24
1966	103.48	128.57	80.65	312.70
1967	128.83	145.39	83.37	357.59
1968	174.90	161.81	86.24	422.95
1969	183.98	174.89	115.34	474.21
1970	206.43	182.85	92.67	481.95
1971	190.45	191.82	49.36	431.63
1972	132.69	241.24	99.73	473.66

Note: The estimates of savings include savings from transfers from abroad. Household savings include errors and omissions and exclude grain inventory changes.

Source: Charles Frank, Kwang Suk Kim, and Larry Westphal. *Foreign Trade Regimes and Economic Development: South Korea*, National Bureau of Economic Research, Chapter VIII, Table 8.11-A.

The responsiveness of domestic savings to rates of interest, rates of inflation, and economic aggregates can be determined by regression analysis.[11] Household savings *SH* is expected to be a function of the

[11] For a description of data and methodology see Charles Frank, Kwang Suk Kim, and Larry Westphal, *Foreign Trade Regimes and Economic Development: South Korea*, National Bureau of Economic Research.

expected real rate of interest on local savings deposits RRD* and disposable income of households YDP. The basic specification is:

(1) $SH = a_0 + a_1 YDP + a_2 RRD^*$.

Of course, the expected real rate of interest RRD* is not an observable variable. We assume, however, that the expected real rate of interest is a function of the current *nominal* rate of interest RD less the expected rate of inflation. The expected rate of inflation RRD* is assumed to be a function of current and past rates of inflation RINF.

(2) $RRD^* = RD - b_0 RINF - b_1 RINF_{-1}$.

If (2) is substituted back into (1), we obtain the following result:

(3) $SH = a_0 + a_1 YDP + a_2 RD - b_0 a_2 RINF - b_1 a_2 RINF_{-1}$.

This is the equation which was estimated with the following result:

(4) $$SH = \underset{(-4.47)}{-71.5504} + \underset{(4.23)}{0.08578} YDP + \underset{(2.94)}{193.0218} RD - \underset{(-2.48)}{44.7071} RINF$$

$$\underset{(-2.87)}{-35.0608} RINF_{-1}.$$

Estimation Technique: Cochrane-Orcutt Iterative Technique

Sample Period: 1955 to 1970

$R^2 = 0.9550$

$d = 3.0033$

where d is the Durbin-Watson statistic.

The results were only somewhat different for other sample periods, but all sample periods reveal a high degree of significance for the real interest rate. The average interest rate elasticity over the sample period is 1.82, a very high interest rate elasticity.

Business savings SC, which forms the bulk of private savings in Korea, was assumed to be a function of non-agricultural value added,

the expected real rate of interest on savings deposits,[12] the average rate of protection on imports and the average rate of subsidy on exports. The rationale for including rates of protection or subsidy was that high levels of protection and subsidy should increase profits and lead to higher savings. The level of tariffs and tariff equivalents and subsidies per dollar of export did not seem to affect savings in any consistent or significant fashion. Furthermore, rates of inflation did not seem to possess much explanatory power and frequently carried the wrong sign in the regression. The best results were obtained using only two variables, non-agricultural value added YNA and the rate of interest on savings deposits RD.

$$(5) \qquad SC = \underset{(-0.16)}{-0.5689} + \underset{(10.51)}{0.0730YNA} + \underset{(4.13)}{115.2640RD}$$

Regression Technique: Ordinary Least Squares

Sample: 1960 to 1970

$R^2 = 0.9827$

$d = 1.6131$.

Both non-agricultural value added and the rate of interest were highly significant for all sample periods and various specifications. For corporate savings, the average interest rate elasticity is 0.34 over the same period. Household savings seem to be substantially more interest rate elastic, but the significance of deposit rates for corporate savings is nonetheless substantial (a t-ratio of 4.13). The rate of inflation was not a significant explanatory variable. Thus it seems that in Korea, business savings depend on the nominal rate of interest rather than on the expected real rate of interest (in contrast to household savings). The reason may be that although inflation reduces real interest costs, it also may be associated with increased profit rates which have a positive effect on corporate savings and investment. The two effects tend to cancel each other so that corporate savings show little sensitivity to the rate of inflation.

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[12] One could argue that given that corporations save only to invest in productive capacity, marginal efficiency of investment is the relevant variable. This is a common fallacy and represents a failure to understand the concept of reservation demand. Self-financed investment by a tightly controlled corporation, typical in Korea, represents a decision not to distribute profits for the purpose of increased consumption and a decision not to seek outside financing, but rather to retain profits for financing investment. As for the substitution effect, a higher interest rate makes self-financing more attractive than outside financing for both working and fixed capital and saving a better choice than consumption. Of course the income effect works in the opposite direction so that the coefficient of the interest rate has no *a priori* sign and must be determined empirically.

C. Government Savings

Government savings and business savings have been about equally important in total savings since the Korean War (see Table 12). Between 1953 and 1970, government savings grew quite rapidly, at an average annual rate of 15.7 per cent. The growth was most substantial, however, after the 1964 tax reforms. From 1964 to 1970 government savings increased at a rate of 20.6 per cent per annum.

Government savings grew both because of rapid growth in tax revenues and because of a slow rate of increase in current expenditures. Tax revenues increased sharply during the Korean War recovery, from about 5 per cent of GNP in 1953 to more than 10 per cent in 1959. By 1964, however, they had declined to 7.3 per cent. After the 1964 tax reforms, revenues reached a peak of more than 16 per cent of GNP in 1971 before declining slightly in 1972.[13] In addition, government-owned monopoly enterprises contributed rapidly growing net surpluses which constituted almost 11 per cent of central government revenues in 1972.[14]

Government current expenditures grew less rapidly than total government revenues from 1962 to 1970, when current expenditures declined from 78 per cent of current revenues to about 62 per cent. Between 1970 and 1972, current expenditures rose more rapidly than revenues. Much of the government non-recurrent expenditures was on directly productive assets. Between 1963 and 1971, about 14 per cent of total government loans and investments went into mining and manufacturing, 39 per cent into electricity, transport, and communications, and 25 per cent into agriculture, forestry, and fisheries.[15] The remainder was invested in housing, education, and other services. Some Government savings were channeled to the private sector through government-financed loan funds of development banking institutions such as the Korea Development Bank and the Medium Industry Bank. In 1963, government funds accounted for more than one-half of all outstanding loans of the banking sector. After the interest rate reform of 1965 the commercial banks greatly expanded their loan portfolios, but even in 1970, government funds

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[13] Bank of Korea, *Economic Statistics Yearbook 1973*, pp. 258-59 and 288-89.

[14] Bank of Korea, *Economic Statistics Yearbook 1973*, pp. 290-91.

[15] Economic Planning Board, *Major Economic Indicators, 1961-1971*, p. 33.

accounted for more than one-quarter of total outstanding loans by banking institutions.[16] In 1972, about one-sixth of total government savings were allocated to capital transfers of this type.[17]

X. THE SUPPLY OF FOREIGN EXCHANGE

One of the most striking features of the performance of the Korean economy has been the rapid growth of foreign exchange earnings. Foreign exchange receipts on current account grew at an average annual rate of 26.2 per cent between 1963 and 1972 (see Table 13).

A. Invisible Earnings

In the early sixties, a high proportion of total foreign exchange receipts were invisibles and derived directly from the presence of a large contingent of U.N. (mostly U.S.) forces stationed in Korea. Sales of local currency to U.N. forces, military procurement, and provision of electricity, transport, water and other public utilities to U.N. installations accounted for almost one-half and total invisibles about three-quarters of all foreign exchange earnings in 1961. Receipts from U.N. forces and other invisibles were relatively stagnant between 1961 and 1965, however, so that by 1965 invisibles accounted for about one-third of total earnings. The escalation of the U.S. effort in Viet-Nam after 1965 brought more troops to Korea and an increase in military procurement, both for troops in Korea and for those in Viet-Nam. Korean goods were exported to Viet-Nam under military procurement contracts beginning in 1967 and a number of Korean construction firms became involved in military projects in South Viet-Nam. Receipts from U.N. forces increased rapidly between 1965 and 1969, but other foreign exchange receipts grew even more quickly. After 1969, receipts from U.N. forces declined, and by 1971, only 36 per cent of invisible earnings and 11 per cent of total foreign exchange receipts could be attributed to U.N. military procurement and other earnings generated by the presence of U.N. forces in Korea.

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[16] Ibid., p. 35.

[17] Bank of Korea, *Economic Statistics Yearbook 1973*, pp. 288-89.

Table 13: Foreign Exchange Receipts on Current Account: 1961-1972
(millions of dollars)

	Foreign Exchange Receipts [a]			Receipts from U.N. Forces and U.S. Procurement [b]			
Year	Total	Merchandise Exports	Other Current Receipts	Total	Won Sales	Procurement	Utilities
1961	166.2	42.6	123.6	79.7	35.7	38.4	5.6
1962	179.0	56.7	122.3	86.1	47.2	34.1	4.8
1963	177.2	85.2	91.8	58.3	30.5	22.1	5.7
1964	212.2	115.1	97.1	63.7	26.4	33.2	4.1
1965	298.0	172.2	125.8	74.0	34.1	35.7	4.2
1966	486.8	248.4	238.4	100.9	30.4	65.5	5.0
1967	695.4	320.2	375.2	147.1	35.3	106.7	5.1
1968	889.4	464.9	424.5	177.6	49.3	122.3	6.0
1969	1,102.0	604.9	497.1	207.0	43.1	155.7	8.2
1970	1,306.7	816.0	490.7	190.8	52.3	131.4	7.1
1971	1,523.4	1,036.8	486.6	173.5	61.3	106.0	6.2
1972	2,159.2	1,580.0	579.2	192.8	97.6	90.6	4.6

a These include only foreign exchange transactions conducted through banking channels. Thus, they are an underestimate of total receipts. For example, total export receipts in 1971 were $1,132 million on a customs clearance basis.

b Includes receipts from U.S. procurement and construction contracts for Vietnam.

Sources: Bank of Korea, *Economic Statistics Yearbook 1973*, p. 216, *Economic Statistics Yearbook 1970*, p. 282; and Economic Planning Board, *Korea Statistical Yearbook 1972*, p. 406.

B. Exports

The major reason for the very rapid growth in foreign exchange earnings was the growth performance of exports. In the fifties, exports were negligible and followed an erratic pattern, ranging from a high of $40 million in 1953 to a low of $17 million in 1958 (see Table 14). After 1958 exports began a pattern of uninterrupted growth, exceeding the 1953 level by 1961. From 1962 until 1973, the growth rate of exports averaged 44.8 per cent per annum every year and reached a high of 98 per cent in 1973. Exports increased from less than a third of total current foreign exchange receipts, about one-eighth of the total value of imports in 1962, to three-quarters of all current foreign exchange receipts and almost 65 per cent of the value of imports in 1972.

Table 14: Export Growth: 1953-1972

Year	Total Exports ($ millions)	Growth Rate (per cent)	Year	Total Exports ($ millions)	Growth Rate (per cent)	Exports Net of Sales to Viet-Nam ($ millions)	Growth Rate (per cent)
1953	40	–	1963	87	58	87	58
1954	24	-40	1964	119	37	119	37
1955	18	-25	1965	175	47	175	47
1956	25	39	1966	250	43	250	43
1957	19	-24	1967	335	34	320	28
1958	17	-11	1968	486	45	455	42
1959	20	18	1969	658	35	622	37
1960	33	65	1970	882	34	835	34
1961	41	24	1971	1,132	28	1,068	28
1962	55	34	1972	1,676	48	1,624	52

Source: Bank of Korea, *Economics Statistics Yearbook*, various issues.

Exports of Korea are relatively import intensive so that the *net* foreign exchange earnings are substantially less than the gross earnings. Even if a correction is made for this fact, the ratio of exports to GNP and the rate of growth of exports are exceptionally high by international standards. Furthermore, the import intensity of Korean exports has been declining; the direct import content was 43.9 per cent in 1969 and 36.8 per cent in 1972.

The data in Table 14 demonstrate the relative unimportance of U.S. procurement exports to Viet-Nam which began only in 1967. The growth rate of exports exclusive of exports to South Viet-Nam was even more rapid than growth in total exports, except in 1967 and 1968. Nevertheless exports – net of sales to Viet-Nam – grew at rates of 28 and 42 per cent, respectively in 1967 and 1968 – a very creditable performance by any standard. In 1972, exports to Viet-Nam accounted for less than 3 per cent of total exports.

As shown in Table 15, in 1961, 78 per cent of Korean exports were primary products – mainly tungsten, coal, dried laver (seaweed) and fish. By 1971, 86 per cent were manufactured products and only 14 per cent were primary products. Total exports expanded more than 40 times between 1961 and 1972. Manufactured exports, however, expanded almost 170 times between those two years, a rate of growth averaging more than 60 per cent per annum. Although the growth started from a very small base, it continued even after exports reached a substantial percentage of GNP. From 1967 – when exports were almost 9 per cent of GNP – to 1972, the growth rate of total exports averaged 38.2 per cent and manufactured exports 44.5 per cent.

In 1961, the major manufactured exports were plywood, cotton fabrics, and plates and sheets of iron and steel. The growth of exports of these products was rapid over the next decade and they remained important in 1972. Electrical machinery and apparatus, clothing, footwear, and wigs were not exported at all in 1961. By 1972 they were major exports, together accounting for 39 per cent of total exports and 45 per cent of manufactured exports.

The largest market for Korean exports in the early sixties was Japan, but since 1965, the United States has been the most important. In the fifties and very early sixties, the United States was of very little significance as an export market. The U.S. was responsible for more than 50 per cent of Korea's exports in 1968, but since then has declined somewhat in importance. Since 1965, Japan has taken about one-quarter, with about

Table 15: Structure and Growth Rates of Exports: 1961-1972

	Total Export Transactions[a]		Primary Product Exports			Manufactured Exports		
Year	Amount ($ million)	Annual Growth Rate (per cent)	Amount ($ million)	Per Cent of Total	Annual Growth Rate (per cent)	Amount ($ million)	Per Cent of Total	Annual Growth Rate (per cent)
1961	42.9	32.5	33.5	78.0	–	9.4	22.0	60.8
1962	56.7	32.2	41.4	73.0	23.6	15.3	27.0	62.2
1963	84.4	48.8	40.8	48.3	- 1.4	43.6	51.7	184.8
1964	120.9	43.2	58.6	48.4	43.6	62.3	51.6	42.9
1965	180.5	49.3	68.1	37.7	16.2	112.4	62.3	80.3
1966	225.8	41.7	96.1	37.6	26.4	159.7	62.4	42.1
1967	358.6	40.2	107.4	29.9	11.8	251.2	70.1	55.4
1968	500.4	39.5	113.5	22.7	5.7	386.9	77.3	54.1
1969	702.8	40.4	147.7	21.0	30.1	555.1	79.0	43.4
1970	1,003.8	42.8	164.4	16.4	11.3	839.4	83.6	51.2
1971	1,352.0	34.7	189.1	14.0	15.0	1,162.9	86.0	38.5
1972	1,807.0	33.7	222.7	12.3	14.1	1,584.3	87.7	36.2

a These export figures are based on records of settlements of export transactions kept by the Ministry of Commerce and Industry. They usually exceed other export figures cited in this volume (e.g., see Table 2.7) which are determined on a customs clearance basis. Export figures for 1970 through 1972 in this table are much larger than customs clearance figures because of the particularly rapid growth of exports in absolute terms in those years.

Source: Economic Planning Board, *Major Economic Indicators*, Seoul, Korea, various issues.

another one-quarter split between other Asian countries and Europe. In 1973, exports to Japan increased substantially. The several revaluations of the yen vis-a-vis the dollar and the gradual devaluation of the won with respect to the dollar from December 1970 to June 1972 left the won in a very favorable position with respect to the yen and stimulated exports from Korea to Japan.

The rapid growth of exports explains a considerable amount of Korea's growth. For the period 1955 to 1968, we decomposed the growth of the Korean economy into three factors: growth in domestic demand, import substitutions, and export expansion. The most striking result of this analysis is the predominance of export expansion over import substitution. Over the period 1955 to 1968, 20.2 per cent of total growth was attributable directly and indirectly to export expansion while -0.6 per cent was due to import substitution. Thus, on balance, there was negative import substitution but substantial export expansion. As is to be expected, expansion of domestic demand was the most important factor, accounting for more than 80 per cent of total growth. During the period 1960 to 1968, export expansion was even relatively more important, accounting for 22.4 per cent of growth compared to -1.4 per cent for import substitution.

Another striking conclusion which may be drawn from the analysis s that export expansion generated considerable domestic backward linkages vhile import substitution did not. The average contribution of export :xpansion for either the 1955-1968 or 1960-1968 period is almost double vhen indirect effects are taken into account. That is, growth of exports ;enerates substantial demand for domestically produced intermediate goods.

We attempted to explain the growth in exports by estimating the ensitivity of exports to exchange rates and export subsidies. Statistically, here were a number of problems. The main difficulty stems from the fact hat over the entire period 1955 to 1970, the effective exchange rate for xports has exhibited remarkably little variation (see Table 16). This is articularly true since 1964. Although the effective official exchange rate as varied dramatically from year to year, subsidies and export premia ave changed also in such a way as to keep the effective exchange rate or exports relatively constant.

Another factor has been the very low level of exports after the orean War for a country of Korea's size and GNP per capita. Much of orea's export growth in the late fifties and early sixties can be regarded catching up after the devastation of two major wars in a little more than decade. The extraordinarily rapid rate of growth of exports indicates at exporting was extremely profitable at existing exchange rates. A ausible hypothesis is that Korean exports were more constrained by

Table 16: Effective Exchange Rate on Exports, Purchasing-Power-Parity Basis: 1955-1970
(Won per dollar)

Year	Official Exchange Rate	Premia Due to Multiple Exchange Rates	Export Subsidies per Dollar of Exports	Effective Exchange Rate on Exports
1955	99.7	159.9	0.0	259.6
1956	132.1	139.8	0.0	271.9
1957	118.1	139.1	0.0	257.2
1958	121.8	155.9	2.3	280.0
1959	119.7	202.8	3.0	325.5
1960	135.4	181.7	2.4	319.5
1961	244.8	28.0	15.0	287.8
1962	226.6	0.0	35.3	261.9
1963	189.3	58.0	27.6	274.9
1964	232.2	43.0	28.8	304.0
1965	265.4	0.0	38.1	303.5
1966	256.3	0.0	46.9	303.2
1967	243.1	0.0	54.3	297.4
1968	233.3	0.0	63.2	296.5
1969	234.5	0.0	58.4	292.9
1970	240.2	0.0	64.1	304.3

Sources: Ministry of Finance, Korea; Bank of Korea; U.S. Agency for International Development, Korea; and Charles R. Frank, Kwang Suk Kim, and Larry Westphal, *Foreign Trade Regimes and Economic Development, South Korea*; National Bureau of Economic Research, Tables 5-3 and 5-9.

capacity to produce export goods than by the relative profitability of producing for export markets as opposed to domestic markets.

The sensitivity of exports was tested using exports of manufactured goods (XGM) as the dependent variable, and non-agricultural output (YNA), the official exchange rate on a purchasing-power-parity basis (ORD), and all other export incentives (i.e., a combination of multiple exchange rate premia and subsidies denoted by SUBX) as explanatory variables. If the whole period 1955 to 1970 is used, the results are very poor. Using the period 1957 to 1970, we obtain the following result:

(6) $$XGM = -241.4847 + 0.3323YNA + 0.26290RD + 0.147SUBX$$
$$(-3.92) \quad (11.29) \quad (1.70) \quad (1.27)$$

Estimation Technique: Cochrane-Orcutt Iterative Technique

$R^2 = 0.9900$

$d = 1.3742$

The coefficient of YNA is highly significant, indicating that general capacity in non-agriculture was the most significant factor explaining exports. That is, the general capacity of the economy to produce was probably an important determinant of exports. The elasticity of manufactured exports with respect to changes in the exchange rate (ORD) is 2.14 and with respect to export subsidies is 0.95. The coefficients of the official exchange rate ORD and the subsidy level for exports SUBX, however, are not significant.

This result can be greatly modified, however, if the time period is changed from 1957-1970 to 1963-1970. The results for the latter period are:

(7) $$XGM = -651.5 + 0.3357YNA + 1.7130RD + 1.305SUBX$$
$$(-17.0) \quad (61.7) \quad (13.8) \quad (10.9)$$

Estimation Technique: Cochrane-Orcutt

$R^2 = 0.9997$

The implied elasticities for the exchange rate and subsidy variables for the period 1963-1970 are enormous, equal to 6.16 for ORD and 4.69 for SUBX. With such a short time period, however, the degrees of freedom are limited. The exchange rate variable ORD and the subsidy variable SUBX are almost constant and show fairly limited variation in the period 1963 to 1970, further making the results suspect.

It seems reasonable to infer that the responsiveness of exports changed sharply after about 1963, but the period is too short to allow for accurate estimation of parameters. We may infer that prior to 1963, the lack of sensitivity to exchange rate policy occurred because exports, particularly manufactured exports, were insignificant, and the system of multiple exchange rates used in that period was very inefficient. After 1963, the system of multiple exchange rates gave way to a system which relied more heavily on high official exchange rates combined with export subsidies, particularly in the form of tax and tariff relief. Exports became very much more sensitive to exchange rate policies. The effective exchange rate on

exports was maintained at a high level after the exchange rate reforms of 1964, despite rapid inflation, by a combination of official devaluations and growing export subsidies.

Another factor which may have been responsible for the increased responsiveness of exports after 1963, was the reduction of the risk and uncertainty associated with exporting since the price-level-deflated effective exchange rate for exports was so stable from 1964 on. The reduction in uncertainty reduced the variance in expected export earnings and made it more reasonable for individual entrepreneurs to concentrate efforts on exports.

Recent experience confirms the impression that Korean exports are highly sensitive to the exchange rate. The purchasing-power-parity exchange rate adjusted for realignments in Japanese and European currency revaluations against the dollar, increased about 10 per cent in 1972 and another 10 per cent in 1973. This was the result of a float of the won in the first half of 1972, the dollar devaluation in early 1972 and 1973 and the float of other currencies against the dollar. Exports increased 52 per cent in 1972 and 98 per cent in 1973.

The increased sensitivity of exports to exchange rates and subsidies may be due to the unification of exchange rates and the relative stability of the purchasing-power-parity effective exchange rate from 1964 to 1970. The elimination of multiple rates removes the uncertainties and administrative costs to the private entrepreneur in dealing with an unstable, multiple rate system.

The rapid growth of Korea's exports, however, cannot be explained simply in terms of those incentives subject to quantitative measurement. Other very important factors, perhaps even more important, are the Government's attitudes and methods of operating. For example, government officials used moral and political suasion to urge private entrepreneurs to meet export targets. Firms who are successful in promoting exports receive favorable treatment by tax officials, an important incentive in a country where effective tax rates are set more by administrative procedures than by law. Entrepreneurs who are successful exporters are publicly acclaimed and feted by the President and other high officials.

With an atmosphere in which businessmen are certain that government will reward efforts to export, it is relatively easy to take the substantial risks of expanding production and capacity for export markets. A businessman cannot only expect tangible rewards for export performance, but knows that if he runs into financial difficulties, the Government will provide some form of special treatment to help him out of his troubles.

C. Earnings on Capital Account

The other major sources of foreign exchange were on capital account. Official grant aid plus net capital inflows were many times greater than export earnings for some time after the Korean War. Capital imports reached $373 million or almost twenty times the level of exports in 1957 (see Table 17). By 1964, however, export earnings exceeded capital account earnings for the first time since the Korean War. The growth of foreign borrowing in the latter part of the sixties, however, exceeded the growth of exports so that until 1969, capital imports exceeded export earnings. In 1970, restrictions on capital imports again reduced them below the level of exports. By 1972, exports were three times as large as capital imports.

Foreign capital imports provide both a source of foreign exchange and a source of savings. We discussed the role of foreign capital in the section above on savings.

XI. THE DEMAND FOR FOREIGN EXCHANGE

Gold and foreign exchange holdings of Korea have been relatively ample compared to total imports. In 1960 they were more than 50 per cent of the total import bill. Despite the rapid growth of the economy from 1963 to 1972, end-of-the-year foreign exchange reserves were never less than one-quarter of the annual import bill and were as high as 37 per cent of imports in 1964, the year of the exchange rate reforms (see Table 17).

During the same period, substantial liberalization of the import regime took place. The average tariff level declined and quantitative restrictions were much less important than before 1963. The demand for imports was held in check, mainly by exchange rate policy. The large devaluation of 1964 substantially raised the effective exchange rate on imports which went from 207.39 won to the dollar on a purchasing-power-parity basis in 1963 to 282.79 won to the dollar in 1965 (see Table 18). From 1965 to 1970, although the average effective rate declined, it remained higher than at any time during the earlier period 1955 to 1963 – except for 1961 when there was a sharp devaluation.

Imports into Korea are very sensitive to exchange rate changes. This is vividly illustrated by even a cursory look at the data in Table 18. In 1958 and 1959, imports dropped sharply, even though GNP grew at 5.5 and 4.4 per cent, respectively, in those years. In 1958, there was no devaluation of the official exchange rate, but a foreign exchange tax

Table 17: Capital Account Transactions and Foreign Exchange Holdings: 1953-1972

Year	Official Grant Aid ($ million)	Net Loan Capital Inflows [a]	Net Capital Imports ($ million)	Ratio of Net Capital Imports to Merchandise Exports	Gold and Foreign Exchange Holdings [b] ($ million)	Gold and Foreign Exchange Holdings [b] Per Cent of Imports
1953	193	112	305	7.62	109	—
1954	139	28	167	6.96	108	—
1955	240	-3	237	13.17	96	29
1956	298	14	312	12.48	99	26
1957	355	18	373	19.58	116	30
1958	319	-7	312	18.35	146	42
1959	229	-17	212	10.60	147	54
1960	256	-1	255	7.28	157	51
1961	207	19	226	5.51	207	73
1962	200	-16	184	3.35	169	43
1963	208	-104	204	2.34	131	26
1964	141	-26	115	.97	136	37
1965	135	9	134	.77	146	35
1966	122	218	340	1.36	245	36
1967	135	299	334	1.00	356	39
1968	121	422	543	1.10	391	30
1969	104	631	735	1.12	553	34
1970	85	582	667	.76	610	34
1971	64	662	726	.64	568	27
1972	51	530	581	.35	740	33

a Loan capital, both private and government, short term and long term, net of amortization payments.

b Includes reserve position in IMF and special drawing rights.

Source: Bank of Korea, *Economic Statistics Yearbook, 1973*, pp. 222-223 and various issues prior to 1973.

was instituted and a price stabilization program implemented, both of which raised the effective exchange rate on imports (on a purchasing-power-parity basis) about 15 per cent. The imposition of the foreign exchange tax was equivalent to a devaluation for imports. Imports fell by 12 per cent in 1958. Part of the reduction in imports was due to a fall in grain imports as domestic grain production increased sharply, but imports of consumer goods fell by 25 per cent and imports of capital and intermediate goods were also reduced. In 1959, foreign exchange tax receipts quadrupled and the effective exchange rate was increased by another 23 per cent. Imports fell by 21 per cent. Although grain imports continued to fall, consumption goods imports fell by almost 50 per cent and intermediate goods by almost 10 per cent.

Table 18: Effective Exchange Rate on Imports on Purchasing-Power-Parity Basis and Growth of Imports: 1955-1970

Year	Official Exchange Rate [a] (won/dollar)	Tariffs and Tariff Equivalents [a] (won/dollar)	Purchasing-Power-Parity Effective Exchange Rate on Imports [a] (won/dollar)	Imports ($ million)	Growth Rate of Imports (per cent)
1955	99.71	11.67	111.38	327	–
1956	132.10	10.43	142.53	380	16.2
1957	118.12	12.74	130.86	390	2.6
1958	121.80	28.42	150.22	344	-11.8
1959	119.73	65.84	185.57	273	-20.6
1960	135.37	64.86	200.2[illegible]	305	11.7
1961	244.79	34.42	279.21	283	-7.2
1962	226.57	28.39	254.96	390	37.8
1963	189.32	18.07	207.39	497	27.4
1964	232.22	23.35	255.57	365	-26.6
1965	265.40	28.39	283.79	420	15.1
1966	256.34	23.40	279.74	680	61.9
1967	243.12	23.48	266.60	909	33.7
1968	233.30	22.62	255.92	1,322	45.4
1969	234.53	20.60	255.13	1,650	24.8
1970	240.21	20.29	260.50	1,804	9.3

a The first three columns are on a purchasing-power-parity basis, i.e., won/dollar rates deflated by a purchasing-power-parity index, and represent averages over the year. The third column is the sum of the first two columns.

Source: Same as Table 16.

In January and February of 1961 a sharp devaluation took place, reducing the value of the won from Won 65 to 130 to the dollar. Grain imports increased by 50 per cent, but there were sharp reductions in consumer and intermediate goods imports. The net result was a 7 per cent decline in total imports despite the fact that the growth of GNP was 4.2 per cent.

In 1964, there was a very sharp reduction in imports of 27 per cent. The official exchange rate was devalued almost 50 per cent. The growth of GNP was 8.3 per cent, but there were very substantial reductions in nearly all categories of imports, including a 50 per cent decrease in consumer goods imports.

The evidence on the sensitivity of imports to exchange rates is corroborated by regression analysis. The regressions dealt with imports of consumption goods, capital goods and intermediate goods. The regressions

were stable, regardless of the time period used. Linear regressions provided very good fits. The elasticities of imports with respect to the official exchange rate (ORD) and the level of tariffs and tariff equivalents on imports (SUBM) are shown in Table 19.

Consumption goods are by far the most elastic with respect to changes in exchange rates and tariffs. Imports of capital and intermediate goods are generally less than unit elastic with respect to the exchange rate, but imports of intermediate goods are fairly sensitive to changes in tariff rates. Since the supply of imports to Korea is probably close to infinitely elastic, it can be assumed that exchange rate changes have a substantial effect in reducing the dollar value of imports.

In the last half of the sixties, the demand for foreign exchange was augmented by requirements to service foreign debt. Beginning in 1970 attempts were made to restrict the import of foreign capital. By 1971, debt service payments reached $326.6 million on debt of maturity greater than one year. But debt service payments were still only a small fraction of the total use of foreign exchange before 1971.

Korea has been relatively successful in restraining the demand for foreign exchange during the period of rapid growth from 1963 to 1972. A less developed economy, growing at more than 10 per cent per annum, can be expected to run into foreign exchange difficulties because of the rising demand for imports. Although imports rose rapidly through much of this period, import growth would have been much greater had it not been for frequent devaluations and maintenance of the purchasing-power-parity effective exchange rate for imports at a constant level. Furthermore, as described above, the stable exchange rate helped stimulate export receipts which were used to finance an increasingly large share of the total import bill.

XII. ECONOMIC EFFICIENCY

There is no conclusive way in which to determine whether the Korean economy has operated in an efficient manner. The various empirical measures used in the literature all have their faults. It is necessary, therefore, to introduce considerable caveats in discussing measures of efficiency. One thing is clear, however, as far as Korea is concerned. The level of inefficiency has not been sufficient to stifle the very rapid growth over the decade beginning in 1963. Furthermore, most of the conventional measures point in the direction of a relatively low level of inefficiency.

Table 19: Elasticity of Imports

Import Variable [a] (Dependent Variable)	Commercial Policy Variable [b] (Explanatory Variable)	Time Period			
		1955-1959	1960-1964	1965-1970	1955-1970
Imports of Consumption Goods (MC)	Effective Exchange Rate on Imports (ORD & SUBM)	-2.09	-5.48	-1.42	-2.11
Imports of Capital Goods (MK)	Official Exchange Rate (ORD)	-0.86	-0.99	-0.21	-0.36
Imports of Intermediate Goods (MI)	(Official (Exchange (Rate (ORD (	-0.57	-0.80	-0.33	-0.47
	(Tariffs and (Tariff Equiv- (alents (SUBM)	-0.97	-1.36	-0.57	-0.79

a Import variable in constant 1965 prices.

b Commercial policy variables on a purchasing power parity basis.

Note: Elasticities based on regression equations and computed as the means of the variables. For details on method, data, and results see Charles Frank, Kwang Suk Kim, and Larry Westphal, *Foreign Trade Regimes and Economic Development: South Korea*, National Bureau of Economic Research, forthcoming, Chapter VIII.

Prior to the 1964 exchange rate unification and liberalizing reforms, the system of exchange rates and trade policy probably fostered substantial inefficiencies. Quantitative restrictions were very important and there were a variety of widely divergent exchange rates.

From 1964 to the present, however, the Government followed a substantially different set of policy prescriptions. Although liberalizing trends waxed and waned, the fluctuations were relatively minor and there was never any close approximation to the chaotic regime of the late fifties.

The average level of nominal protection is relatively low in Korea. The level of nominal protection was measured in 1968 based on a price survey to determine the excess of domestic prices over international prices.

For manufacturing, the level of nominal protection estimated from information on comparative prices was about 10.7 per cent and is probably much less today as average tariff levels have declined steadily. Quantitative restrictions are relatively unimportant in terms of giving rise to large differences in international and domestic prices. Quantitative restrictions in 1968 were found to give rise to significant protection over and above that afforded by tariffs to 77 commodity groups accounting for only 11 per cent of total domestic sales of commodities sampled in the international domestic survey of price comparisons for 1968.

Unlike in many other countries, there are not large differences in nominal protection levels between industry and agriculture. Average nominal protection was 16.6 per cent in agriculture compared to 10.7 per cent in manufacturing. The general variability of protection among sectors in Korea is quite low. When the growth of the economy is measured in terms of constant international prices rather than constant domestic prices, the overall rate of growth and rates of growth by sectors do not differ significantly. Korea has emphasized an export promotion strategy which has resulted in rapid growth of the most labor-intensive sectors.

All of these observations indicate a relatively efficient pattern of growth. If anything, the inefficiencies that arise come from an emphasis on protection of agricultural and import-competing manufacturing sectors. The level of effective subsidy (taking into account taxes and subsidies in a measure of effective protection) was 21.3 per cent (Corden definition)[18] in agriculture and -4.7 per cent in manufacturing in 1968. Effective protection is also much higher for import-competing industries than for export industries and for domestic sales as opposed to export sales in industries which sell in both export and domestic markets.

Policies which affect the incentive to import foreign capital can have substantial effects on efficiency just as do policies affecting exports and import substitutes. In the case of Korea, there was probably a somewhat excessive incentive provided to the importation of short-term foreign capital in the middle and late sixties. Domestic inflation, high real and nominal domestic interest rates, and a failure to devalue smoothly and adequately were all contributing factors to a slightly excessive demand for foreign loan capital.

Government policies with respect to credit, interest rates, pricing, subsidization and management of government enterprises and taxation also

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[18] W. M. Corden, *The Theory of Protection*, Oxford: Clarendon Press, 1971.

can have substantial efficiency implications.[19] These were taken into account only partially in our estimates of effective subsidy. It is clear, however, that when taxes, credit subsidies, and other forms of subsidy are taken into account, both the total level and variability of total effective subsidies increase.

XIII. THE ROLE OF LIBERALIZATION AND THE EXCHANGE RATE

The major liberalization effort in Korea took place in 1964 and 1965. A liberalization attempt in 1961 and 1962 failed of full implementation and there was a return to the multiple exchange rate system in 1963.

There is no clear correlation between the 1964-65 liberalization and the start of the period of rapid growth. In fact, mining and manufacturing output in constant 1970 prices grew 14.1 per cent in 1962 and 15.7 per cent in 1963, the two years before the liberalization took place, and at only 6.9 per cent in 1964, the first year of the liberalization. 1962 was a poor year overall, only because of a poor harvest, and 1964 was a good year overall, only because of an excellent harvest. The good performance in 1962 and 1963 was due largely to expansionary government fiscal policies and the poor industrial performance in 1964 was caused by the fiscal and monetary stabilization measures which were rigidly enforced in that year along with the liberalization efforts.

The rapid growth of exports certainly cannot be attributed entirely to the liberalization efforts. Rapid export growth actually began in 1959. In 1960 exports increased from 20 to 33 million and have been undiminished to the present time. Various export incentives were intensified and the effective exchange rate on exports increased by about 11 per cent between 1963 and 1964, but this did not spur a noticeable increase in the rate of growth of exports. The best that can be said is that the liberalization efforts probably laid the groundwork for continued rapid growth of exports over the following decade and that without the liberalization efforts, such phenomenally rapid export growth could not have continued. Likewise the exchange liberalization, the interest rate reform, and the fiscal reform probably laid the basis for a decade of rapid growth in GNP which would not have been possible otherwise.

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[19] See Gilbert Brown, *Korean Pricing Policies and Economic Development in the 1960's*, Baltimore: Johns Hopkins Press, 1973 for an analysis of the efficiency aspects of a number of these policies.

The period since the liberalization was one in which the effective exchange rate on exports and imports remained high and one in which foreign exchange was never a severe constraint on growth. The 1964 devaluation was followed by numerous other devaluations, both floating devaluations and discontinuous changes in the value of the won over the next eight or nine years. The basic engine of growth after the reforms was exports. The effective exchange rate on exports has been somewhat higher than on imports (see Tables 16 and 18). The growth of exports was the dominant factor in the growth of the economy. Furthermore, exchange rates had a very substantial effect on export performance, particularly after the exchange rate reforms of 1964. We can conclude that the unification of exchange rates and the relatively stable effective exchange rate was a substantial stimulus to the decade of growth after the 1964-65 reforms.

The interest rate reform of September 1965 was probably even more important in affecting the rate of growth. The interest rate reform greatly stimulated household savings which were negative in 1964 but about one-quarter total domestic savings in 1969. Business savings, which had been relatively stagnant from 1962 to 1964, more than doubled between 1964 and 1970. Even more important than the stimulus to savings was the effect of the interest rate reform on incentives to hold different forms of assets. Commercial bank time deposits became the more favored way in which to hold savings; the increase in commercial bank deposits far exceeded the overall increase in savings.[20] A relatively greater proportion of loanable funds was controlled by the commercial banking sector. While some commercial bank lending was done at subsidized interest rates, thus encouraging inefficient use of resources, the commercial banking sector could lend in much greater volume than the unorganized money markets and operate with much lower administrative costs. The cost to large borrowers was also substantially less when dealing with the commercial banking sector compared to the cost of arranging for many smaller loans through a myriad of operators in the unorganized money market.

The August 1972 reforms involve a very different approach. After the 1964-65 reforms, there were no further substantial attempts to reduce the rate of inflation. Rather, high nominal interest rates and frequent devaluations were used to compensate for the high rate of inflation. With the August 1972 reforms, low nominal interest rates, stability of

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[20] Commercial bank deposits increased from 28 billion won in 1964 to 636 billion won in 1971; time and savings deposits increased from 9 to 467 billion won over the same period. See *Economic Planning Board, Major Economic Indicators, 1961-1971*, p. 35.

the exchange rate, and less rapid price inflation were to be the basic elements of policy. It has been contended that there are important flaws in this new policy approach. A major factor in increasing the money supply in Korea is the discount of export bills at very low rates of discount and low rates of interest on the bills themselves to exporters. The low rate of interest on the bills increases exporters' demand for this form of credit and the even lower discount rate encourages commercial banks to discount the bills at the Bank of Korea, thus increasing commercial bank reserves. In fact, in the first six months of 1973, the discount of export bills exceeded the increase in commercial bank reserves, the other sources of reserve creation having undergone a net decline. Because of the discount of export bills, which has become the main source of reserve creation, the Bank of Korea has lost effective control of the money supply. Under such conditions, it is unlikely that inflation can be held within reasonable bonds. Added to the inflationary difficulties is the rapid increase in prices of petroleum products and grains, both of which Korea imports in large amounts. The success of the new policies in the long run, however, will depend on finding ways to bring the money supply back under control.

The effect of the exchange rate, export subsidies, tariffs and tariff equivalents was analyzed quantitatively through the use of a simulation model over the period 1960 to 1970. The model was estimated econometrically and different values of the trade policy values were substituted for actual ones to see if Korean policies were optimal.

The results of these simulation experiments show that only minor improvements in growth of output and consumption could have been achieved with different policies. At best, the discounted value of output over the sixties could have exceeded the actual value by about 4 per cent while the discounted value of consumption could have been improved by about 1 per cent.

The optimal exchange rate was just about the same as the actual value over the sixties. A higher exchange rate would have generated excessive foreign exchange revenues and the real constraint would have been savings. A lower exchange rate would have done almost as well but would require a substantial increase in export subsidies and a quadrupling of tariff levels to keep the foreign exchange constraint from being binding.

Improvements could be made, however, in the relative balance between export subsidies and tariffs given the actual level of the exchange rate. Korea has attempted to promote exports through subsidies of various sorts. Tariffs have been set at relatively low levels and export industries have been granted many tariff exemptions. This has resulted in sacrifices of government revenues and less than optimal growth. This assumes that

increased government revenues would have resulted in increased government savings and that these savings would have been channeled into directly productive investments. The Korean government has maintained a good performance in keeping the growth of current expenditures low and in channeling government funds into productive investments. Whether they could have achieved the same degree of success with further increases in revenues is not certain.

XIV. CONCLUDING REMARKS

The Korean experience over the decade since 1963, remarkable as it seems to have been, does not necessarily provide a model for other less developed countries. There have been a number of special factors operating which are not likely to be replicated in other countries. It is the confluence of these factors, no one of them separately, which has led to the successful growth performance. First, high levels of foreign assistance, particularly during the Korean War reconstruction period, helped build the infrastructural base for subsequent growth, although the periods of high levels of foreign aid are not the same as the periods of most rapid growth. Only a few other countries, having a special relationship with the United States because of U.S. foreign policy goals, have had such high levels of per capita foreign aid.

Second, Korea was able to maintain high and growing levels of government savings. Levels of taxation and public enterprise profits rose substantially. The growth of current expenditures was extremely moderate. This kind of government savings performance is probably possible only in countries where political leaders are relatively powerful and secure. In many less developed countries political power is fragmented, the political process is highly competitive, and ethnic and regional differences are acute. Policy-makers in such countries are unlikely to be able to control revenues and expenditures to the same degree. In order to maintain political hegemony at all, those in control must use government expenditures as a means of gaining support of particular interest groups. Public enterprises are rarely profitable. Jobs in public enterprises become a form of dispensing political patronage. High-level management posts are filled on the basis of political criteria. Costs are high and productivity low. Prices tend to be maintained at unrealistically low levels in the fear of injuring powerful interest groups by higher prices. Higher levels of taxation are feasible only if they are accompanied by greater expenditures directed at particular interest groups.

Third, frequent devaluations, either of the discontinuous type or of the gliding peg variety, are not always feasible in many countries because of the resistance of political interest groups. Discontinuous devaluations typically raise prices sharply for many imported goods, particularly for non-luxury items which have not been subject to stringent import controls. Consumer groups and industrial end-users who suffer appreciably may offer considerable resistance to efforts to devalue. Even gliding devaluations, which raise prices of imported goods more gradually, are not always popular. The Allende regime in Chile abolished the gliding exchange value of the domestic currency when it came into power, partly because of the political unpopularity of the gliding peg. Even in Korea, the gliding peg was abandoned in the August 1972 reforms. Considerable resistance to devaluations had gathered from a wide variety of industrialists. Many of the Korean firms had accumulated large amounts of foreign debt and were financially precarious. Continuous devaluations increased the amount of their dollar-specified liabilities in terms of won. Other firms producing mainly for the domestic market saw the costs of imported inputs rising and joined the resistance. Exporters, always favored by subsidies of various sorts as well as frequent devaluations, have not offered an effective counterforce, possibly because they felt they could always count on enough subsidization to make up for losses due to failure to devalue.

Fourth, government policies toward labor in Korea were such that real wages did not rise except in response to labor shortages in the late sixties. This had two main effects in terms of growth. Profit rates and returns to capital were high, stimulating high levels of investment. Wage disparities did not arise among sectors; labor was efficiently allocated among sectors; and there were no large and growing pools of wasted labor in the form of unemployed workers. On the contrary, unemployment rates declined throughout much of the sixties.

The lack of organized labor pressures in Korea is partly historical accident. During the industrialization phase under the Japanese occupation prior to and during World War II, labor organizations were suppressed. This suppression continued under the indigenous political regimes since World War II to the present day. In many other less developed countries, organized labor is a powerful political interest group and political regimes are dependent on the support of organized labor. The demands of labor groups cannot be ignored in such cases and it would be foolish on the part of the government to insist that wages be set by market forces.

Fifth, Korea underwent a substantial land reform under the United States military government, which held power after World War II. Japanese land owners were expropriated. The relatively equal distribution of land

meant that there were no large number of landless laborers streaming into the urban areas in response to slight differences in urban and rural wage rates. No doubt there has been a substantial migration of workers from rural areas to urban areas in Korea, but the migration did not overburden the system in the sense that more jobs were available in the urban areas than there were migrants into these areas. This is evidenced by the decline in urban unemployment rates. The even distribution of land also meant that agricultural production could be easily organized along labor intensive lines, resulting in efficient resources use in the context of land and capital scarcity and labor surplus.

A land reform of the type experienced in Korea is not possible to duplicate in many other countries. Large land holdings were in the hands of foreigners, the Japanese, and the initial expropriations were done by another group of foreigners, the Americans. When an indigenously controlled government attempts to expropriate land and the major landholders are politically powerful local citizens, the reforms are not likely to be so sweeping. The implementation of the reforms may be done by regional and local governments rather than at the national government level. At the local and regional level, the large landholders frequently hold substantially political powers and are able to subvert or block the implementation of the reforms.

Sixth, the Korean culture is one in which a very high value is placed on education. Parents are willing to spend large amounts of their own funds on educating their children. Consequently, a vigorous system of high quality, private schools has evolved at all levels. Thus, despite the fact that public expenditures on education in Korea are low by international standards, Korea has one of the highest literacy rates in the world. Korea also has a very high proportion of secondary school and university graduates. The large investment in human capital has not required a large expenditure of public resources which were channeled instead into economic overheads and directly productive investments.

These special factors are not operative in many other less developed countries and the combination of a number of them is found in very few indeed. The Republic of China is the only country where there are strong similarities on most of these counts.

These special factors, however, are not sufficient in themselves to explain the successful performance of the Korean economy. Economic policies made a substantial contribution. The tax and government expenditure reforms, the interest rate reforms, the exchange rate reforms, and the general emphasis on export promotion and reliance on international prices were some of the most critical of these policies. There is some evidence

that the emphasis on export promotion was a bit overdone – more reliance on tariffs particularly as a revenue device may have generated slightly more growth – but the bias toward exports was far preferable to a strong bias in the direction of import substitution. The export bias allowed efficient industries to become established which were not limited in size by the domestic market. The export bias led to an increasingly open economy and generated an increasingly larger share of the supply of foreign exchange which enabled the Korean economy to become less dependent on foreign capital imports. The subsidization of exports, while it led to some inefficient resource allocation, did not result in the same distortion of incentives which often occurs as the result of a strategy of import substitution. Quotas on imports or prohibitive tariffs can distort the structure of product prices much more than the instruments typically used to promote exports. Exports are subsidized by tax exemptions and rebates, subsidization of credit, and subsidization of inputs. The effects of these instruments on costs and prices are limited. For example, income tax exemptions can be applied only if a firm is profitable and only to the extent that profits are made. Subsidized electricity and transportation rates typically affect only a small proportion of costs. In theory a direct export subsidy could be made to have as large a distorting effect as any tariff or import quota. In fact, direct subsidies have been rarely used. There has always been a reluctance, however, to use direct subsidies, partly because they must be appropriated as a specific government expenditure item and the effect on the government budget is obvious and direct. A tax exemption, however, does not appear directly in the budget either as an expenditure or as a negative revenue item. An import quota has no obvious impact on the government budget. An import tariff except at a prohibitive level makes a positive contribution to the revenue side of the budget.

The Korean experience illustrates the effectiveness of price-oriented economic policies in initiating and sustaining rapid economic growth. The relevance of the Korean experience for other less developed economies, however, is questionable at best since the combination of political, historical, and cultural circumstances found only in Korea probably made the implementation of these policies feasible while implementation in another set of circumstances may well be impossible.

REPUBLIC OF KOREA

Introduction: **Larry E. Westphal**

Between 1963 and 1973 real GNP in the Republic of Korea had grown at an annual rate of 10.3 per cent. Korea's rapid growth was clearly associated with the dynamic export sector with exports growing at 43.7 per cent per annum during this period. Employment expanded at an annual rate of 9.6 per cent from 1957 to 1967. With increasing tightness in the labor market annual growth in employment declined to 7.2 per cent from 1967 to 1972. Real wages had fallen somewhat in the first half of the 1960s but, by 1967, had recovered to the levels of 1957. Thereafter, with Korea moving out of the "labor surplus" phase, appreciable wage increases have accompanied the slower growth in employment. Income distribution has been comparatively more equitable than in most other developing countries.

The relevance of Korea's remarkable development experience to other developing countries was, however, unclear. Largely due to her special relationship with the U.S., foreign savings had constituted about 10 per cent of GNP since 1960 and were responsible for about 4 percentage points of the 10 per cent rate of growth. The foreign capital inflow was largely composed of U.S. foreign aid at the beginning of the period and of commercial credits at the end, with direct foreign investment having been only 7.4 per cent of the total foreign capital inflow from 1959 to 1971. However, little of the rapid growth of Korea's exports could be attributed to U.S. military procurement or the war in Vietnam.

The very strong government in Korea was a special factor which had enabled the imposition of far-reaching economic policies including frequent devaluations which had maintained the effective exchange rate fairly constant. Tax collections had also expanded over time and, with government expenditures growing at a relatively slow rate, government savings had grown to 40 per cent of total domestic savings.

Land reform had been initiated by the U.S. occupation government after World War II and was completed by the Korean government in 1952. Along with the aftermath of the economic dislocation caused by two wars and the departure of the Japanese, land reform produced a relatively egalitarian distribution of assets throughout the society.

The level of education in the Korean labor force is very high. The adult literacy rate in 1972 was 88 per cent and 97 per cent of primary school age children were in school. Additional special factors include the cultural homegeneity of the population, the absence of a large or politically potent minority group, and the colonial experience under Japan.

In terms of the Phases suggested by the Project, Korea was in Phases I and II up to about 1961. There was a brief period of liberalization thereafter associated with a devaluation, but differentiated trade controls were re-imposed within two years.

Major and lasting reforms were initiated in 1964/65 when the exchange rate was unified and floated, interest rates were increased, the administration of taxation strengthened to greatly increase tax collections, and inflation was successfully reduced. The devaluation itself was largely a change in the nominal rate of exchange. The effective rate of exchange for both exports and imports changed only slightly as differentiated controls, subsidies, and other policies were concurrently withdrawn. The increase in the commercial bank interest rate ceiling from 16 to 25 per cent channeled more of the rapidly growing private savings through formal financial sector institutions. With government savings increasing rapidly at the same time, an increasing share of investment was financed from domestic sources.

As of 1968, quantitative controls afforded very little additional protection to that given by tariffs. Nominal rates of protection (based on price comparisons rather than tariff rates) were low, with the unique feature that nominal rates of protection for primary commodities, averaging 16 per cent, were higher than those for manufactures, averaging 11 per cent. Effective rates of protection for primary commodities, averaging 17 per cent, were also significantly greater than the average negative effective protection of one per cent for manufactures. Manufactured export sales were granted a clear incentive with an effective rate of protection, adjusted to include interest rate and direct tax subsidies, of 12 per cent, as against negative protection, measured on comparable basis, of 9 per cent for sales on the domestic market.

Much of the Korean growth in industry and exports may be interpreted as a return to "normalcy" after the dislocation of the war. In 1955 exports were less than 2 per cent of GNP when, in terms of per capita income and population, Chenery's estimates of average development patterns suggest that 10 per cent of GNP should have been exported. Likewise, industry contributed only 13 per cent of GNP as against a norm, also derived from Chenery's cross country comparisons, of 14 per cent. By 1972 the export share in GNP was 21 per cent compared with

a norm of 12 per cent, indicating that the growth of exports was clearly in excess of what would be expected on the basis of cross country comparative analysis. The pace of industrialization was similarly extremely rapid.

Export subsidies were initiated in the early 1950s and increased in magnitude and variety throughout the 1960s. The major subsidies offered were tariff and indirect tax exemptions on imported intermediate inputs, direct tax exemptions, and interest rate subsidies. The combined value of all export subsidies in 1968 amounted to about 30 per cent of the gross value of exports, with direct tax and interest rate subsidies forming about one-fifth of the total subsidy.

The incentive bias in favor of exports and against sales on the domestic market was further strengthened by active government intervention in, and efficacious administration of, a vigorous export promotion program. Export targets were allocated by the government in consultation with producers; there is evidence for a number of products that the targeting procedure sustained the cross-subsidization of export sales through higher prices on the domestic market. Considerable marketing advice and assistance was also provided to exporters.

From 1955 to 1968 the rapid growth of exports contributed about 20 per cent of the total growth in output and about 30 per cent of the growth in employment. There was also a substantial diversification of export commodities and markets.

The study concluded that relatively efficient overall growth had been achieved through the dynamic expansion of the export sector. Import substitution had played a very minor role in fostering industrial development.

COMMENTS

by

Narongchai Akrasanee

The methodology used to calculate the contribution of exports to industrial growth would always suggest that growing exports made a positive contribution. Similarly, too, increased imports led to a negative conclusion about import substitution even when the domestic production

of import replacements had increased. The measurement of import substitution by the constant import-demand ratio had limited analytical meaning and the growth of both exports and imports could have been better analyzed in relation to deviation from an average rate of growth of, say, GNP.

The calculation of the domestic resource cost would have provided the Study with a better basis for the analysis of comparative advantage and economic efficiency and also enabled an analysis of the relationship between the total factor intensity of trade and protection. The relationship between the structure of incentives and the choice of techniques should also have been explored in the Study.

The Study had concluded that the economy had operated efficiently largely on the basis of the low average effective rate of protection and of the export of labor-intensive products. While the average effective rate of protection was low, the evaluation of economic efficiency should have considered the great variation in effective rates as between industries. The measurement of effective rates of protection had included only the direct costs and the use of the Leontief factor intensity measure and the domestic resource cost which also included indirect costs would have been more revealing. Thus, in analyzing efficiency through the factor-intensity of trade, the Study should have taken into account the domestic resource cost. The econometric study included had also suggested that the economy had achieved less than an optimum growth performance.

The conclusion of equitable income distribution had not been satisfactorily substantiated in the Study. With low wages, income distribution should have become more inequitable particularly when the system of incentives continued to increase the non-wage component in value-added output.

The Study had stressed the special circumstances of the Korean experience. However, other developing countries could benefit from the experience in the use of the interest rate to increase savings and to economize on capital; in the importance attached to human and physical infrastructure and in the important role played by strong government. The experience had also demonstrated that industrialization could be undertaken in a developing country along with outward-looking policies and with comparative advantage. The more basic lesson was that industrialization could be achieved through various approaches provided that the criterion of economic efficiency was met.

The Korean experience had also demonstrated that liberalization alone was insufficient to induce industrial growth. Biases in the entire

structure of incentives had also to be removed. Thailand, for example, had liberalized during the early 1950s but the incentives granted during the 1960s biased the system towards import substitution rather than remaining neutral in effect.

An elaborate system of export subsidies had been identified as one of the more important instruments in the success of Korean exports. Export subsidies had become so high that exports were effectively being dumped on the world markets at below cost. With the comparatively high price on domestic market sales the economy was effectively subsidizing consumption in the markets of more developed economies. That also meant that other developing countries would have to subsidize at least as much in order to compete with Korean exports and such competition would benefit the more developed consumer markets further. The extreme concentration on export promotion was, thus, not entirely a desirable policy.

COMMENTS

by

Wontack Hong

The estimates of effective rates of protection were underestimated as subsidies arising from direct and indirect government investment in selected industrial sectors had not been included. Furthermore, since real interest rates in the 'curb' market exceeded 50 per cent per annum in the 1960s, the true opportunity cost of capital in Korea was, possibly, much higher than the non-preferential bank interest rate which had been used as the shadow price of capital in estimating the interest rate subsidies.

The Study had concluded that, from 1955 to 1968, about 20 per cent of GNP growth was attributable to export expansion and that the contribution of import substitution was negative. The contribution of exports was exaggerated by the assumption that the import content of export production was zero while the actual import content of Korean exports was about 40 per cent.

The aggregated import substitution index as used in the Study also had limited value as the analysis had concluded that there had been negative import substitution in spite of reduced imports of many com-

modities and no absolute declines in domestic output. According to that method of analysis, a balanced growth in import and output implies zero-import substitution regardless of the changes in factor endowment of an economy. That is, the method ignored the aspect of changing factor endowment and comparative advantage of an economy in the growth process and, consequently, yielded misleading implications.

The simulation model used in the Study had suggested that less export subsidies and higher import tariffs could have increased tariff revenues and government savings and, thereby, generated greater growth. However, policies of tax-cum-subsidy would be more effective in correcting distortions while higher tariffs and greater protection would create more distortions. The model had not adequately taken into account the probable impact of increased distortions on resource allocation and the possibility that investment funds could be raised through more efficient means.

The Study had concluded that income levels in agriculture and in manufacturing were not too different, and also concluded that there were no great market imperfections that could have led to large sectoral wage disparities. The average farm household income data in the Study had been obtained from the Farm Household Economy Survey, but the data on the number of workers in farm household had been obtained from another source. However, the Survey itself had data suggesting that the number of workers in the average farm household was about 50 per cent larger than the estimate used in the Study. Consequently, per worker farm household income was only about one-half that of the average income in the manufacturing sector.

The Farm Household Economy Survey data of labor input on man-hour basis suggested employment in agriculture of 1.9 million man-years in 1970 as against 4.9 million persons obtained from the population census. An alternate computation combining the labor: output ratio of the Study with the agricultural output data in the Input-Output Tables suggested employment in agriculture of about 2.8 million man-years in 1970. The large differences between the employment data obtained from the population census and the alternate computations given above suggest the existence of a large amount of seasonal and disguised unemployment in the agricultural sector, which would have grave implications for industrial and trade policies in the future. This aspect was also ignored in the Study.

The Study had concluded that efficient resource allocation, as evidenced also by a very low capital:output ratio, had led to rapid growth. A comparison with the capital coefficients of Japanese manufacturing industry, however, showed that Korean industry used 1.7 times more

fixed capital and 4.4 times more labor per given output. While comparative (rather than absolute) advantage was of relevance to competitiveness in trade, the comparison suggested definite inefficiencies within the industrial sector in Korea.

General Discussion:

The circumstances of the Korean experience were considerably different from that of countries like India where a large domestic market and large areas of unsatisfied domestic demand had enabled and encouraged a greater bias towards import-substituting industry. In Korea, the limited size of the domestic market, a relatively stagnant agricultural sector, a limited resource endowment and growing strains on the balance of payments appeared to have compelled the move to export-oriented industrialization. The Study should have considered these factors in greater detail as the circumstances of the Korean case provided only limited scope for import-substituting industrialization and, thereby, had effectively reduced the policy options available as between these two alternate strategies of industrialization.

Development strategies and trade regimes had been basically similar in the Republic of China and the Republic of Korea. The results had, however, been considerably different. China had maintained exchange-rate stability since 1963 and had progressively achieved a surplus in the trade account with relative stability in the domestic price level. Korea, on the other hand, had continued deficits in the trade account, large foreign borrowings, periodic devaluations and significant increases in the domestic price level. The main reason for these differences was, probably, that China had a highly developed agricultural sector with an export surplus while Korea continued to be food-deficient. It was, thus, likely that the availability of an agricultural surplus – which was the classical pre-condition for industrialization – may be one of the most important conditions also for the successful maintenance of viable liberalized trade and payments regimes.

It was noted that the resource endowments of Korea and China were considerably different. Korea had a very small land:man ratio and a short cultivating season because of geographical and climatic factors: the possibilities for agricultural self-sufficiency were, consequently, very limited. It was suggested that the special circumstances of Korea and the economic policies followed might be better elucidated by comparison with the markedly different economic policies which had achieved outstanding economic performance in the Democratic People's Republic of Korea.

There had been a large unorganized money market prior to the interest-rate reforms of 1965. The large increase noted, thereafter, in household savings might, consequently, be more apparent than real because of the diversion of savings from the unorganized market and the possible under-estimation of savings in the unorganized sector.

Estimates of unemployment, underemployment and the labor force were subject to considerable error in countries like Korea which had large agricultural populations. However, even other supplementary data indicated a level of underemployment in Korea which was significantly small for a developing country.

The 1964/65 episode of devaluation and the floating exchange rate had removed large differentials in export incentives. The devalued rate of exchange was, however, about 10 per cent over-valued in relation to the equilibrium rate of exchange and the aggregate export subsidies had, on an effective basis, roughly offset that overvaluation.

The effective rate of exchange (adjusted for purchasing-power priorities) had, for exports, remained almost constant for over 10 years while that for imports had, with somewhat greater fluctuations, moved around a constant value.

Exports had increased rapidly during this period when the effective rate of exchange for exports had remained almost constant. The general conclusion was that export expansion required a realistic effective rate of exchange rather than that the effective exchange rate on exports had necessarily to continue to increase.

Interest rate subsidies had been included in the calculation of effective exchange rates although the export subsidies were somewhat underestimated by the non-inclusion of government overhead investments.

There had been significant import-substitution in some industries. Six separate measures had been used to estimate the contribution of exports and of import-substitution and the conclusions were that, overall, there had been negative import-substitution and a very large contribution by exports.

Effective rates of protection had been calculated for about 150 industries. Variance in effective rates of protection were the proper indicator of the relative efficiency of the industries concerned but there were no adequate quantitative techniques to measure this variance. In general, it appeared that effective rates of protection had not been too diverse. While effective rates of protection had been generally low, that,

in itself, was not necessarily an indicator of the relative efficiency of the industries concerned.

While it was suggested that Korean industry had used more capital and more labor per unit of output than comparable industry in Japan, it was noted that there were many difficulties in comparing the available data. The more striking indicator was that the Korean incremental capital:output ratio of 2.0 to 2.3 was one of the lowest among the developing economies.

INDIA

by

T. N. Srinivasan

I. INTRODUCTION

The synopsis summarizes and, to a limited extent, brings up-to-date the Country Study on India in the NBER Project. The Study is, in some ways, a sequel to an earlier study[1] which had been completed when the initial effects of the 1966 devaluation were being experienced. The present Study analyzes, in greater detail, the policies which accompanied the 1966 episode of devaluation and liberalization and the effects on India's foreign trade and payments regime largely within the common framework suggested by the Project scheme.

Section II of the synopsis contains an overview of the Indian economy since the beginning of the Five Year Plans in 1950: Section III describes the Anatomy of Exchange Control in India; Section IV deals with the 1966 episode of devaluation and liberalization; Section V analyzes the effects of the trade and payments regime on economic growth while Section VI brings together some concluding remarks.

II. THE INDIAN ECONOMY, 1950-1970: AN OVERVIEW

India became an independent dominion of the then British Commonwealth on August 15, 1947, and constituted the major part of British India that was partitioned into the dominions of India and Pakistan. The attainment of independence was preceded by extensive clashes between the two major religious communities – Hindus and Muslims – and followed by the migration of millions of refugees to India and to Pakistan. The resettlement of the refugees, the political integration of large number of princely states (that were outside British India at the time of independence)

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1 Jagdish N. Bhagwati and Padma Desai, *India: Planning for Industrialization*, Oxford University Press, 1970.

into the Indian Union and the drafting of a republican constitution for the country took three years. India was proclaimed a republic within the Commonwealth on January 26, 1950. With the immediate and urgent tasks following independence successfully completed, the nation and its leaders turned their attention to economic matters.

The notion that the economic development of the country should be ushered in through national planning with central direction had been accepted even before independence by private business interests as well as by the then leaders of the Indian National Congress which was spearheading the fight for independence. In fact, a National Planning Committee headed by Jawaharlal Nehru – who later became the Prime Minister – produced a number of studies while prominent Indian businessmen had, in 1943, also produced the so-called Bombay Plan as a blueprint for national development. Some of the objectives of planned economic development such as universal free and compulsory primary education, the right of all citizens to an adequate means of livelihood and to social, economic and political justice were enshrined in the constitution as Directive Principles of State Policy. These principles, though not enforceable through the courts of law, were regarded as fundamental in the governance of the country. Soon after the proclamation of the Indian Republic under the new constitution, the Government of India set up the Planning Commission in March 1950 under the chairmanship of the Prime Minister and assigned to it the task of preparing a plan for the "most effective and balanced utilization of the country's resources".

The First Five Year Plan, covering the period April 1, 1950 to March 31, 1956 was, after public discussion and debate, presented to Parliament in December 1952. In many ways, this Plan was essentially a compendium of on-going projects partly to rehabilitate productive capacity that had been over-worked and ill-maintained during the War. Nevertheless, there was an attempt to expand the infrastructure by investment in irrigation, power and transport. The analytical model implied in the Plan was the Harrod-Domar type with an emphasis at raising domestic savings to the degree required to match the investment levels derived from planned real income growth and an assumed marginal capital-output ratio.

The Second Five Year Plan, based on the Plan Frame authored by the late Professor P.C. Mahalanobis, set the economy on a course of industrialization with a strong emphasis on the establishment of domestic capacity in the public sector for the production of capital goods and heavy industrial raw materials. The investment priorities indicated in the Second Plan have effectively continued to date with only minor changes in emphasis. The analytical core of the Plan was the Two-sector (later elaborated into Four Sectors) Mahalanobis model that was remarkably

similar to the Feldman model of Soviet planning.[2] The basic assumption was that any investment plan that was physically feasible could be financed; this ignored the institutional and political constraints that could, and did, prevent the formulation and implementation of the policies that would have made the assumption valid. The control of investment, both in respect of allocation between the public and private sectors and in respect of its sectoral pattern, was to be exercised through an administrative (rather than market-cum-fiscal) mechanism. This, together with the response to the severe foreign exchange crisis that beset the early years of the Plan, determined the initiation and subsequent intensification of two basic pillars of economic policy: (i) industrial targeting and licensing and (ii) exchange control over all current transactions, resulting in the licensing of imports of capital goods, intermediates and consumer goods. The severity and coverage of these two controls have varied over time but the basic tenets of the policy continue to hold sway to date. And, the economic performance of India under the Plans was strongly influenced, if not completely determined, by this policy. The subsequent Five Year Plans adhered broadly to the economic philosophy as enunciated in the Second Plan while changing emphasis, very often in rhetoric but sometimes in fact as well, to reflect the changing economic environment and other factors.

Certain institutional features of the Indian economy of some importance should be noted: (i) significant growth of public sector investment in areas outside of infrastructure; (ii) significant growth of trade with Soviet Union, Eastern Europe and Egypt under bilateral agreements; (iii) increasing canalization of profitable imports, and partial handling cum subsidization of exports, by the public sector enterprise, the State Trading Corporation; (iv) a strict *(ex ante)* regulation, on a case-by-case basis of the inflow of private foreign capital and technology; and (v) the availability of an efficient administrative service, entrepreneurial talent, and educated and skilled personnel for manning the projected investments – though both administrative and managerial talent came to be stretched thin in later years.

A. Review of Economic Performance

Some major features of India's economic performance are briefly reviewed below:

National Income: The Indian economy grew, in real terms, at 3.5 to 4 per cent per annum on the average during the first decade of

[2] For a detailed discussion of the economic theory and techniques underlying the successive Plans, see: Jagdish N. Bhagwati and S. Chakravarti, *Contributions to Indian Economic Analysis: A Survey*, American Economic Review, Special Supplement, 1970.

planning (i.e., from 1950-51 to 1960-61) and then experienced a decline during the Third Five-Year Plan to an average annual rate of growth of about 2.5 per cent (Table 1). It is important to note that the end of the Third Five-Year Plan was attended by serious drought which led to an unprecedented decline in agricultural production, thus reducing the rate of growth for 1966-67 and overall for the Third Five-Year Plan period. A recovery in agricultural output brought a sharp rise in national income in the following year, followed by moderate though sustained rates of growth until pronounced slowdown again came with still another fall in agricultural production in 1971-72 and 1972-73. Agricultural output recovered in 1973-74 though not attaining the peak level of 1970-71 but industrial production showed only a modest rise.

Population and Per Capita Income: The 1951 census revealed a population of 361 million of which 84 per cent lived in the rural areas. The corresponding figures in the 1961 and 1971 censuses were 439 million (82 per cent rural) and 547 million (80 per cent rural), respectively. The rapid growth of population with an average annual rate of increase of 1.98 per cent in the 50's and 2.25 per cent in the 60's resulted in lowering the rate of growth of per capita income below that of the rate of growth of national product (Table 1).

Domestic Savings: As noted earlier, a continuing objective of all the Plans had been to increase domestic savings. As a proportion of net national product, domestic savings rose from a level of 5.27 per cent in 1951-52 to a peak of 13.24 per cent in 1965-66. Since then there has been a decline and as of 1972-73 this peak has not been surpassed. While public savings was to provide an increasing share of domestic savings, and tax revenue as a proportion of national product increased from 7.76 per cent in 1951-52 to a peak of 14.41 per cent in 1965-66, the share of public savings in total domestic savings has declined substantially from a peak of 29.3 per cent in 1964-65: this decline contrasts sharply with the considerably more modest decline in tax revenues as a proportion of NNP since 1965-66.

External Resources: The inflow of external assistance to India has been low both as a proportion of GNP and as a proportion of gross domestic capital formation: external assistance reached a peak of 3.67 per cent of GNP in 1965-66. The role of private foreign investment has been even less important both because of the official reluctance to entertain such investment uncritically and because of the outflow of foreign capital from older industries such as tea.[3]

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[3] M. Kidron, *Foreign Investments in India*, Oxford University Press, 1965.

Table 1: Selected Economic Indicators: 1950-1973

Year	Fiscal Year Series[a]				Calendar Year Series		
	Wholesale Price Index (1950-51 = 100)	Net National Product (billions of 1961-62 Rs.)	Annual Growth rates (per cent)	Agricultural Prodtn. (1959-60 to 1961-62 = 100)	Industrial Prodtn. (1960=100)	Exports (US $ mn)	Net Foreign Exchange Reserves (US $ mn)
1950-51	100.0	90.9		68.9		1,146	2,000
1951-52	105.5	93.1		70.3	58.7	1,611	1,892
1952-53	89.4	96.4		74.1	60.8	1,295	1,724
1953-54	93.6	102.6	3.7	83.9	62.0	1,116	1,790
1954-55	87.0	105.3		84.8	66.3	1,182	1,841
1955-56	82.7	108.9		84.4	71.9	1,276	1,881
1956-57	94.2	115.1		89.5	77.9	1,300	1,463
1957-58	97.0	113.2		83.7	80.7	1,379	769
1958-59	101.0	122.3	4.0	96.6	82.1	1,221	545
1959-60	104.7	124.5		94.3	89.2	1,308	682
1960-61	111.7	132.8		102.7	100.0	1,331	607
1961-62	111.9	137.3		103.0	109.2	1,387	477
1962-63	114.4	139.9		101.4	119.8	1,403	220
1963-64	121.0	147.7	2.6	103.9	129.7	1,631	309
1964-65	136.6	158.8		115.0	140.8	1,749	344
1965-66	147.0	150.8		95.8	153.8	1,686	312
1966-67	171.1	152.3	1.0	95.9	152.6	1,606	247
1967-68	190.2	166.1	9.0	116.6	151.4	1,612	206
1968-69	188.0	171.9	3.3	114.8	161.1	1,760	308
1969-70	195.0	180.9	5.5	122.5	172.5	1,835	686
1970-71	205.9	188.6	4.3	131.4	180.8	2,026	975
1971-72	214.1	191.7	1.7	130.4	186.1	2,034	1,124
1972-73	235.4	188.5	1.7	118.5	199.4	2,404	1,098

[a] Years beginning April 1.

Prices: The Indian economy was somewhat atypical in that price increases from 1950 to 1956 were moderate: the wholesale price index had, by 1965-66 increased at an annual (simple) rate of only 3 per cent. The remarkable stability in prices was, in reality, only till 1962-63. With the increase in defence expenditures following the Sino-Indian border war of 1962 and the Indo-Pakistan war of 1965 prices increased more rapidly also due to the severe impact of the droughts of 1965-66 and 1966-67. During the recessionary period thereafter, price increases moderated to trend level but have, since 1972-1973 accelerated sharply partly due

to the added defence and refugee burdens following the Bangladesh crisis and the bad harvest of 1972-73; price increases exceeded 20 per cent in 1973-74 and are likely to exceed 30 per cent in 1974-75.

Structure of Production: Agriculture and allied activities continued, during the 1970s, to provide, as in the 1950s, approximately one-half of net domestic product (at current prices). There has, however, been a greater increase in the prices of agricultural products than in the products of other sectors. At constant (1960-61) prices the shares in net domestic product in 1972-73 were 41.0 per cent for agriculture and allied activities, 23.7 per cent for industry, 16.6 per cent for trade and transport and 18.8 per cent for services as against the corresponding percentages of 47.7, 20.4, 15.9 and 16.0 at current prices. The continued importance of the agricultural sector in the economy, thus, makes the course of agricultural production a major factor in explaining the post-devaluation export performance and movements in the price level.

The agricultural sector has been the dominant supplier of wage goods and of raw materials for wage goods; has provided more than one-third of exports and, according to the 1971 Census, employs nearly 70 per cent of the work-force.

In analyzing the trends in agricultural production, the period after 1964-65 has to be considered separately because of the spread of the "Green Revolution" thereafter and the two unprecedented droughts of 1965-66 and 1966-67. The effects of the droughts on agricultural output clearly dominate the effects of the "Green Revolution". The annual compound (semi-log trend) rate of growth of agricultural output was 3.2 per cent for the period from 1949-50 to 1964-65; the rate of growth falls drastically if the droughts years are also included. For the period from 1949-50 to 1969-70 the annual compound rate of agricultural output falls to 2.9 per cent (with the exclusion of the drought years).

Output of foodgrains increased at an annual compound rate of 3.0 per cent from 1949-50 to 1969-70 and at 2.9 per cent for the period up to 1969-70 (with the exclusion of the drought years). Thus, the Green Revolution (which affected the output of foodgrains) appears to have arrested a possible decline in foodgrain production but could not prevent a slight decline in the overall trend growth rate of agricultural production.

Increased outputs of foodgrains had arisen, in equal measure, from an expansion in cultivated area and from increased yields per hectare. The rate of growth of output, however, diverged considerably

as between commodities. The new technologies had their impact primarily on wheat. Wheat output increased at an estimated 4.0 per cent per annum from 1949-50 to 1969-70 and at 5.1 per cent per annum in the period up to 1969-70. Increased yields contributed 1.3 per cent in the annual rate of growth up to 1969-70 and about 2.4 per cent in the annual rate of growth up to 1969-70. The introduction of the new technology had, thus, increased total outputs of wheat by accelerating increases in yields per hectare.[4] Since 1971-72, however, there has been a decline in the production of wheat that is explained only in part by unfavorable weather and shortages of fertilizer.

Industrial production, during the same period, was characterized by two main features: first, growth of industrial output exceeded that of agricultural output and steadily increased during successive Plan periods. The index of industrial production grew at a compound annual rate of 5.75 per cent in the First Plan, at nearly 7.5 per cent in the Second Plan and at almost 8 per cent during the Third Plan. Industrial output was affected by the recession from 1966-67 to 1969-70 and, since 1972-73, by the shortages in the power and transport sectors.

Second, the structure of industrial output has gradually shifted away from the production of consumer goods to that of capital goods and intermediates. During the period from 1951 to 1963, in terms of gross value added, gross output at factor cost and gross output at market prices, the relative share of consumer goods in total industrial output declined steadily: the relative share of raw materials and intermediates remained steady at around 35-40 per cent while that of capital goods rose steadily.

The First Plan was characterized by substantial import-substitution in the consumer goods sector while, during the Second Plan, the emphasis on investment in heavy industries resulted in relatively little import-substitution in consumer goods with the greatest contribution being from the capital goods sector. Through the period 1951 to 1963 the capital goods sector had made the largest contribution to import substitution.[5] The process had continued up to 1972 as well with the index of production (1960=100) being 243.5 for capital goods industry, 171.2 for intermediate goods industry and 168.2 for consumer goods industry in that year.

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[4] T. N. Srinivasan, "The Green Revolution or the Wheat Revolution?" in *Comparative Experience of Agricultural Development in Developing Countries of South East Asia since World War II*, Indian Society of Agricultural Economics, Thacker & Co., Bombay, 1972.

[5] Padma Desai, *Import Substitution in the Indian Economy*, Hindustan Publishing Corporation, New Delhi, 1972.

External Trade: India has a relatively low ratio of external trade to national income. The share in world trade had also fallen since the post-War years and, in 1970, was (at 0.72 per cent) less than one-third that of the post-War years.

The composition of exports has remained heavily biased towards the "traditional" commodities such as tea, jute manufactures and cotton textiles which accounted for one-quarter of export earnings even by 1970-71. "Non-traditional" exports increased during the 1960s and engineering goods, chemicals and allied products now contribute over 10 per cent of export earnings.

With import licensing, the structure of imports has shifted almost exclusively towards capital goods, intermediates and raw materials. Food-grains are the only consumer good imported in any significant quantities while the other consumer goods were only 5-8 per cent of total import in the late 1960s.

The balance of trade has remained in continuous deficit of from $700 to 1,300 million annually. The balance on invisibles has also been in small deficit. The total current account deficit was between $750 to 1,500 million between 1961-62 and 1967-68 but has declined thereafter to between $437 to 767 million in the period up to 1971-72. The deficit in the balance of trade has varied largely dependent on the availability of external resources in the form of foreign assistance and long-term investments. In a restrictionist regime, however, the trade balance is, in itself, of less intrinsic significance than the potential trade deficit (which has been supressed) and the premia on imports that has consequently resulted.

B. Key Institutional Features

The more important aspects of the economic and political structure of India are briefly surveyed below to provide the relevant background within which the analyses have been made.

Industrial targeting began with the Second Plan and subsequent Plans have continued to set detailed targets for capacity and output in the organized industrial sector. Comprehensive **industrial licensing** has been wider in scope than industrial targeting with finer product classification, the determination of regional industrial development and in handling industrial sectors and products not anticipated in the Plans. Industrial licensing has, in fact, been comprehensive except for some exemptions granted during the latter part of the period under study in respect of size of investment and industrial classification.

Any expansion of industrial capacity or new industrial investment required both the necessary industrial license as well as the required import license. This dual control over industrial investment primarily explains the conclusion of the Study that the relaxation of industrial licensing policies in the late 1960s did not change the degree of restrictiveness of the economic regime because import licensing did not change in substance.

The principal objective of the industrial licensing system was to prevent the further concentration of economic power in the large concerns. The administration of the licensing system, however, precluded even marginal additions of equipment (even to achieve balance among the various branches of a plant), product diversification and other such responses to changing market conditions that would have been normal in an efficient industrial environment.

In practice, too, the bureaucratic system of administered allocations became as disproportionately accessible to the larger business houses as the market system was in view of their greater access to finance. The smaller entrepreneurs could not, generally, invest as much in the targetted industries – as envisaged by the Plans.

In the late 1960s investment by designated Large Industrial Houses were restricted to the "core" (generally heavy) industries. The nationalized banking system was to encourage the expansion of the small-scale sector and a Monopolies and Restrictive Practices Commission was to examine and check the expansion of monopoly and concentration in the industrial sector. These policy changes were intended to increase total investment by permitting and encouraging investments by the Large Industrial Houses in the "core" industrial sectors. However, in practice, the policies were unsuccessful and, for other reasons as well, industrial investments were slack during the late 1960s.

A more important institutional feature of the economy was the large share and continuing expansion of the public sector in total, as well as industrial investment. The particular importance of this phenomenon lay in the fact that the impact of trade and exchange rate policies on allocation and production decisions within the public sector could not be totally decisive. Public sector investments could also survive market conditions through implicit subsidies such as not having to make "normal" profits. In practice, the difference between performance in the public and the private sectors did not particularly go beyond this as the policy of automatic protection for all domestic investments, whether public or private, made market conditions mostly irrelevant in weeding-out inefficient firms.

In addition to public sector enterprises which export their own outputs, the **State Trading Corporation** (established in 1956) handles an important proportion of the export-import trade. Although by 1965, the STC handled only about 5 per cent of total external trade, the role of the STC is particularly important in the channelling of the (lucrative) imports of some scarce commodities and in subsidizing the exports of some other commodities. Of relatively minor importance in external trade are the Minerals and Metals Trading Corporation (established in 1963) and the Metal Scrap Trading Corporation (established in 1964).

External trade is also conducted under **bilateral trade agreements** with the Soviet bloc and some developing countries. Trade with the Soviet bloc, in particular, has steadily increased from about 5 per cent of total exports during the Second Plan to nearly 16 per cent during the Third Plan. However, since the overwhelming volume of external trade is undertaken outside such agreements and, as international prices appear to govern even bilateral trade agreements, the analyses of the Study are not complicated by such trading arrangements.

The **political structure** of India – since independence in 1947 – has been a parliamentary democracy with remarkable political stability. With only three Prime Ministers in more than twenty-five years, the government has been characterized by long periods of firm leadership. Political stability was also engendered by the dominance in government of a single party (the Congress party) throughout the bulk of the period under review. Only in the late 1960s was there major dissension within the Congress party which ultimately led to a consolidation of Prime Minister Mrs. Indira Gandhi's leadership.

The economic and political philosophy of the ruling Congress party has been fairly etatist and centrist with the ideological orientation largely identified with that nebulous word "socialism". Necessary attention to objectives such as the prevention of the concentration of economic power and land reform have, however, not been pursued with the same keenness that attends the affirmation of the objectives.

Opposition political parties range from the *laissez-faire* Swatantra party and the backward-looking Jan Sangh to varying shades of revisionist and non-revisionist Communist parties. With regular splintering within, and bickering among, the opposition parties there has not been any sustained or serious challenge to the ruling Congress party.

The country is governed under a federal constitution. The Congress party has always controlled the central government which now oversees

the state governments in seventeen states. The Congress party has generally controlled the state governments as well but less so in recent years. But, even with the Congress party controlling the state governments, center-state frictions have not been reduced with regional loyalties tending to cut across party affiliations.

Internationally, there have been continuing problems on the borders with China and Pakistan resulting in one war with the former country and three wars with the latter country. Defence expenditures have been estimated at 3 per cent of GNP since the 1962 war with China.

C. The Economy, 1950 to 1970

The economy from 1950 to 1970 is delineated below in terms of the different Phases in the Project schema: **1950 to 1956 (Phase IV):** This period roughly corresponds to the period of the First Plan. It was characterized by good harvests with agricultural output increasing by nearly 5 per cent per annum. The index of agricultural production (1949-50=100) increased from 90.5 in 1950-51 to 120.8 in 1956-56 for foodgrains and from 95.6 in 1950-51 to 124.3 in 1956-57 for all agricultural commodities.

Although exports remained stagnant in absolute value after the Korean-war peak and fell as a percentage of world exports, it was balanced by import demands which resulted in a roughly equilibrated exchange rate which put little pressure on the QR framework inherited from the Second World War. Foreign exchange reserves remained close to $1.8 billion throughout the period and there was no evidence of high import premias, systematic allocation of imports, industrial licensing and associated policies which followed in later periods.

As convertibility was not total and the QR regime still existed, this period did not correspond to Phase V of the Project schema. The QRs were not, however, systematically designed to adjust the international accounts and their scope was severely limited: they had been left over from the Second World War period but the administrative machinery had not been dismantled. In a predominant sense, the 1950 to 1956 period could be characterized as corresponding to Phase IV of the Project schema.

1956 to 1962 (Phase I): A severe balance of payments crisis in early 1957 led to the imposition of a strong QR regime. This period (broadly that of the Second Plan) also saw a shift in investment to manufacturing (and heavy) industry, the imposition of strict industrial licensing, significant foreign assistance flows, an increased rate of domestic

savings, a drastic fall in foreign exchange reserves and continuing stagnation in exports (i.e., a falling ratio of exports both to GNP and to total world exports).

With the extensive and intensive use of QR regime policies to adjust the international account, this period clearly fell into Phase I of the Project schema. Concident with the objective of protecting the balance of payments, the introduction of industrial licensing and targetting implied also the objective of selective industrialization which was buttressed by the automatic protection generated by the QR regime.

1962 to 1966 (Phase II): The difficult balance of payments situation described above continued into this period as well. The significant difference – which characterizes this period as Phase II – was that export subsidization began in earnest around 1962 and was further intensified through the period on a wide range of exports. Exports increased significantly until 1965 when the drought affected the traditional exports adversely.

Foreign assistance flows remained stable up to 1964-65 while foreign reserves remained under pressure.

Industrial licensing continued to be severe but, towards the end of the Period, it eased somewhat. QRs remained severe and the premia on imports increased to unprecedented levels in late 1965 and early 1966 consequent on the suspension of foreign assistance following the Indo-Pakistan war in late 1965. Towards the end of the period, import duties were increasingly used to reduce the premia afforded by QRs.

This period could be broadly characterized as one of "partial liberalization" with the halting moves towards more liberal industrial licensing procedures and the *de facto* devaluation that resulted from the export subsidies and import duties. The policies of this Phase II period were to culminate in the June 1966 devaluation and the accompanying episode of liberalization.

1966 to 1968 (Phase III): Phase III begins with the devaluation of June 1966 and the liberalization of imports based on increased flows of foreign assistance. Along with the devaluation, export subsidies were eliminated and import duties reduced.

A second disastrous harvest, however, led to price increases, adverse effects on traditional exports and to an industrial recession. These difficulties were further compounded by the acute political pressure brought to bear by the aid donors for the change in economic policies. For various

reasons, consequently, this Phase III era did not result in further liberalization leading to a Phase IV regime but relapsed, by 1968-69, into Phase II again.

1968 (Phase II): By 1969-70, the situation had reverted back almost to that of 1962 to 1965. The premia on imports had increased to 30-50 per cent on average while export subsidies had been reintroduced and had reached high levels. Attempts at industrial de-licensing had little effect because of the severity of the QRs which also continued to provide automatic protection.

The relapse into Phase II meant that the episode of liberalization had effectively failed. Exogenous factors (such as the price increases due to the drought) and the foreign pressures for the adoption of the liberal policies (erroneously) discredited the liberal policies in the political and the public sphere and appears to have effectively diminished the possibility that such policies could be attempted in the future.

It is striking that, even during the December 1971 episode of worldwide exchange-rate realignments, the political preference in India was to maintain the gold-parity of the currency. It was only the ingenious strategy of a link to the pound sterling (which did not appreciate to the full extent of the dollar devaluation) that held the exchange rate to Rs. 7.28 to a dollar rather than at Rs. 6.90 to a dollar had the gold-parity have been maintained.

III. THE ANATOMY OF EXCHANGE CONTROL

The First Five Year Plan period (April 1, 1951 to March 31, 1956) was one of relatively easy availability of foreign exchange. The machinery of exchange control was put together following the severe exchange crisis during the first year of the Second Five Year Plan. The organizational features and the allocation procedures of the exchange control authorities during the period 1956-1966, that is up to the Period ending with the devaluation of June 1966 are described below:

A. Organization and Procedures

The import and exchange policy regimes, throughout this period, aimed at direct and comprehensive control over the utilization of foreign exchange. Thus, administrative decisions had to be made over the allocation

of foreign exchange for practically all uses in the economy. For the overwhelming bulk of imports, the Government did not explicitly aim at using tariffs (except for a beginning in this direction after the budget in 1965) either to siphon off the resulting import premia or to regulate imports via the price mechanism – with the exceptions of crude rubber, pulp and waste paper, cotton, and kerosene.

The allocation of permissible imports was, broadly, by two administrative categories: private sector and public sector. Further, there was an important operational distinction between imports of raw materials, spares, and components as against imports of capital goods and equipment. The allocation of different permissible imports by these categories among industries, and further still by firms and plants, was carried out by an elaborate administrative machinery which evolved through the period. Since the details of this evolution are of little economic significance, the system is described as it was at its peak (around 1965) when it began to be gradually "liberalized" into the somewhat major changes that accompanied the devaluation of June 1966.

The procedure of administrative allocation began with six-monthly (April to September and October to March) estimates of foreign resource availability as prepared by the Foreign Exchange Budget Branch of the Department of Economic Affairs in the Ministry of Finance. Foreign debt repayments and embassy expenditures had first call on available foreign resources while, thereafter, required imports of food, fertilizers, petroleum, oil and lubricants (POL) and defence needs were normally given priority.

The balance available was, thereafter, allocated for three main purposes: (i) to the ministries concerned for the raw material and equipment needs of public sector undertakings; (ii) to the Economic Adviser, Ministry of Commerce for the private sector's requirements of raw materials, spares and components; and (iii) to the Iron and Steel Controller.

Industry and unit-wise allocations normally involved a number of these administrative authorities. For example, an industrial unit could receive import allocations for iron and steel from the Iron and Steel Controller; for non-ferrous metals from the ministry concerned and for other inputs from the bulk allocation granted to the Directorate-General of Technical Development (DGTD) in the Ministry of Industries.

Three license-issuing authorities were involved: (i) the Iron and Steel Controller (I & SC); (ii) the Development Officer (DO), Tools, Development Wing, Ministry of Commerce and Industry; and (iii) the Chief

Controller of Imports and Exports (CCI & E) who issued all licences except for iron and steel and certain types of machine tools.

The bulk of the import licences were issued by the CCI & E and were divided into: (i) established importers (EI); (ii) actual users (AU); (iii) new-comers (not EI or AU); (iv) *ad hoc* (such as STC imports); (v) capital goods (CG); (vi) heavy electrical plant (HEP); (vii) export promotion (import entitlements for exporters); (viii) miscellaneous categories such as Railway Contracts, Replacement licences (for defective or unsuitable imports) and Blanket licences (mainly for POL).

The procedures followed for each category of licenses, and the authorities involved in the process, reflected two major criteria: (i) the principle of "essentiality"; and (ii) the principle of "indigenous non-availability". Thus imports, in terms of *both* magnitude *and* composition, were permitted under each category only if the designated agency of the Government certified that they were "essential" (as inputs or equipment for production). At the same time, another designated agency had to clear the imports from the viewpoint of indigenous availability; if there was domestic production of the imports demanded, then the imports were not permitted (regardless of cost and quality considerations). Thus, in addition to the license-*issuing* authority, there was a "sponsoring" agency certifying "essentiality" and a "clearing" agency for "indigenous clearance".

For *public sector* applications, the procedures were basically similar. Paradoxically, the procedures were even more complex at times – as when the sanction of the Department of Economic Affairs had to be obtained for raw material imports *in addition* to indigenous clearance and essentiality certification. Besides, in certain cases, the project authorities themselves had the authority to grant "indigenous" clearance and "essentiality" certificates.

Principles and Criteria of Allocation: The allocation of foreign exchange among alternative claimants and uses in a direct control system such as that described above would have been expected to work within a well-defined set of principles and of criteria based on a system of priorities. In point of fact, however, there were few such criteria, if any, followed in practice.

There are basically two questions of economic significance which need to be asked here: (i) how were industry-wise allocations decided? and (ii) how were these allocations further divided up among the constituent firms or units?

Industry-wise Allocations: As far as the industry-wise allocations were concerned, the sheer numbers involved made any meaningful listing of priorities extremely difficult. The problem was Orwellian: all industries had priority and how was each "sponsoring" authority to argue that some industries had more priority than others?

It is not surprising, therefore, that the agencies involved in determining industry-wise allocations fell back on vague notions of "fairness", implying *pro rata* allocations with reference to capacity installed or employment, or shares defined by past import allocations or other similar rules of thumb.

Unit-wise Allocations: The principles and criteria adopted for further subdividing industrial allocations among constituent firms or units were equally without any rationale other than the spreading-out evenly of a scarce resource on a "fair" and "equitable" basis. There were a great variety of norms used but the overwhelming bias of the system was towards some form of "equitable" allocation. This conclusion holds, not merely for the DGTD but also for small-scale sector allocations, the scheduled industries not on the books of the DGTD and the other classes of import applicants.

Quality of Information for Assigning Priorities: As we have already noted, numerous authorities were involved in the licensing procedure: sponsoring bodies, authorities granting indigenous clearance and actual license-issuing authorities. While, in principle, each such authority was presumed to act on some set of priorities, and, therefore, had to have reasonable information so as to enable it to exercise its functions meaningfully, in practice it was impossible to have a meaningful, well-defined set of priorities at any level in this bureaucratic machine, except in relation to overriding matters such as defense. However, no allocations were ever made without intensive scrutiny and examination of individual applications at each stage in the bureaucracy. For instance, the State Directorates of Industries were the authorities which were supposed to process the import applications in the first instance and to attach Essentiality Certificates (ECs). While considerable time was indeed taken in granting these ECs, the quality of the information on which the relevant decisions had to be made was poor. The case of the DGTD was hardly any better, despite its obvious advantages over the Directorates in charge of the small-scale sector. It is well known, for example, that capacity as well as capacity utilization data, both of which were taken ostensibly into account in making unit-wise allocations, were inaccurate and lacking. Similarly, with respect to those units which had to seek "indigenous clearance" from the DGTD, the DGTD directorates frequently maintained incomplete records of the indigenous suppliers; did not have sufficient information in adequate detail on what these suppliers

could produce and of what quality; did not distinguish adequately between the mere fact of the existence of an indigenous supplier and the availability of the supply in time to an individual purchaser, and thus ended up occasionally by withholding sanction even for critical imports.

The DGTD tried not only to determine "indigenous clearance" prior to permitting imports but also often to determine the quantitative mix of permissible imports. Clearly the DGTD had very little capacity to form reasonable judgments on such issues in the absence of very detailed information on plant conditions – which was almost impossible since the DGTD carried over 5,000 units on its books in 1965.

The rationale for the exchange control system has been rarely argued on the basis of the existence of a clear and rational set of criteria for allocation and of the flow of information required to sustain it. More generally, it was believed that the exchange control system served the following socially desirable ends: (i) the small-scale sector could be assured of imported inputs, and (ii) foreign resources could be directed for investment and denied for inessential consumption.

Neither of these objectives, desirable though they may be from a social point of view, were necessarily best served by the exchange control system. Firstly, in its day-to-day operation, the system implicitly, if not explicitly, favored the larger firms who were more likely to have the requisite resources to maintain frequent contact with the bureaucracy and to obtain the clearances and certificates for foreign exchange allocations. Secondly, even if the system did provide foreign exchange to the small entrepreneur it is by no means certain that this method was the most economical and efficient way of subsidizing the small entrepreneur.

Furthermore, while the control system no doubt drastically reduced imports of manufactured consumer goods, domestic industrial capacity was established for the production of the same goods and the import demands for raw materials and spares have been significant.

The large premia on imports generated by the control system also encouraged corrupt practices and various illegalities such as (i) innumerable bogus claims to import licences under the existing rules of allocation and (ii) the illegal trading of imports and import licences whose transferability was governed by numerous official restrictions.

Such illegal transactions existed widely but cannot be quantified in any meaningful manner. It is, however, noted that these illegal transfers of imports and import licences could have served to increase economic

efficiency by reducing the irrational inflexibility that was brought about by the official restrictions on transfers.

B. Economic Effects of Import Controls

Among the many undesirable economic effects of import controls, the following seem to be worth elaborating on:

Delays: The working of any system of allocation takes a certain amount of time. Even if a free foreign exchange market were to operate, the participants in the market would have to expend time, for example, in acquiring information about the availabilities of different kinds of foreign exchange. In principle, an administrative system of allocation should involve no significant increase in time, and hence in "delay", over a price system in which scarce foreign exchange is rationed out in the market: the determination of priorities would, in principle, be equally time-consuming in both cases, though the procedure would be different, since the price system would involve administrative decisions as to tax and subsidy incentives whereas the control system would involve administrative decisions as to quotas.

In practice, however, the exchange control system seems to degenerate into an inordinately time-consuming allocational device. There are essentially three reasons for this: (i) in a situation of general scarcity of foreign exchange, the definition of priorities becomes exceptionally difficult, and the system then attempts to accommodate all conceivable demands on some "equitable" basis, while making a pretense of administering priorities. This pretense frequently takes the form of collection of yet more information from applicants and with more time taken in "scrutinizing" the extra information and "arriving at an informed decision". Delays become, sociologically, the "conspicuous" substitute for exercise of priorities by the bureaucracy. (ii) Equally important, the multiplication of the bureaucratic apparatus leads inevitably to files failing to move quickly and decisions being delayed because procedures are time-consuming. Most of the delays in the Indian import-control system arose from the inefficiency of administrative procedures. For example, where "indigenous clearance" had to be obtained by the DGTD from two or more other directorates, these were sought sequentially rather than simultaneously. (iii) Some significance must also be attached in explaining delays to the fact that relevant papers are not processed and forwarded till lower-level employees are bribed. If all such corrupt payments were paid promptly, no delays should result. However, newcomers who are unaware of the workings of the system and honest applicants who do not conform to this widespread practice, in particular, face considerable delays.

Administrative and Other Costs: While it is difficult to disentangle and quantify the expansion in the governmental bureaucracy that has been necessitated by the licensing machinery, it is very likely that much of the enormous expansion in current governmental expenditures since 1956 is a direct result of this regime. The indirect costs of the licensing mechanisms also include the added expenditures incurred by entrepreneurs in conforming with the multifarious requirements and the costs involved in maintaining elaborate and frequent 'contact' with the licensing authorities. Alternative allocative mechanisms would, no doubt, also necessitate administrative and information-gathering expenditures. But, the specific type of the Indian QR and industrial licensing regime further increased costs by the payments required to lower-level employees who were in a position to delay applications from reaching the decision-making levels of the bureaucracy.

Inflexibility: The dual requirements of "essentiality" and "indigenous non-availability" have resulted in considerable inflexibility in the pattern of utilization of imports. This has happened mainly because of the rigid itemization of permissible imports often by specified value for different items (for AU and EI licenses alike).

The transfer of AU licences among different industries and even among units within the same industry was prohibited. Imports under AU licences could not also be legally resold (though they were occasionally resold illegally).

This rigid administration of permissible imports (which was only occasionally varied by discretionary action to change the contents of the lists) and the requirements of non-transferability created inflexibility and resultant economic inefficiency because: (i) the *total* AU allocations to individual units were based neither on well-defined priorities nor on an assessment of reasonably accurate information. Allocative decisions appear to have been largely based on notions of "fair sharing", "pragmatism", and the "judgment of cases on merit"; (ii) the *itemized* breakdown of allocations was based on the certification of "indigenous non-availability" which was prone to serious error and on an assessment of the mix of imported inputs which was determined on an administrative and *ad hoc* basis rather than on any recognizable criterion of economic efficiency; and (iii) the considerable uncertainty and unpredictability about the availability of foreign resources and the economic situation in general was such that no mix of inputs however well determined (which it wasn't) could have been expected to be optimal *ex post*.

Another result of the inflexibility caused by the restrictions on the transfer of import licenses could have been an excessive holding of inventories. However, inventories – though high compared to other countries

– had declined during the period under study. Inefficiencies in transport and the availability of low-interest credit should also have encouraged the holding of large inventories. Thus, while it makes *a priori* sense that, *ceteris paribus*, the Indian import control regime would have tended to inflate inventory holdings, the available evidence does not support this hypothesis.

Lack of Coordination among Different Agencies: The multiplicity of agencies dispensing import licenses further accentuated the difficulties in procuring desired imports. Unfortunately, there has been no routine coordination of import allocations, either in initial allocations or in reductions made thereafter.

Absence of Competition: The import allocation system also virtually eliminated the possibility of competition, either foreign or domestic. Foreign competition was ruled out because of the principle of "indigenous availability": every item of indigenous production, irrespective of by how much its costs of production exceeded the landed c.i.f. price, was automatically shielded from competition through imports.

At the same time, the possibility of domestic competition was, in turn, minimized by the combination of CG licensing (concomitantly with other industrial licensing provisions) and the method of AU licensing on a "fair-share" basis among rival firms in an industry. Strict CG and industrial licensing eliminated free entry by new firms as also efficiency-induced expansion by existing firms. And the fact that each firm was entitled to its "share" of AU licenses, and no more, ensured that the efficient firms could not even (legally) enlarge output from existing capacity by competing away the scarce imports from less efficient firms.

Thus, all forms of effective competition, potential and actual, were virtually eliminated from the industrial system resulting in the elimination of incentives to reduce costs per unit of output and the prevention of concentration of production in the most efficient units (and industries).

Bias in Favor of Industries Using Imported Inputs: The AU system of import allocation and the principle of "indigenous availability" should, *ceteris paribus*, make the *quantum* of import allocation tend to be inversely related to the availability of indigenous inputs. That would, in turn, bias the effective incentives in favor of processes that use relatively more imported inputs as, under AU licenses, the inputs would be at import-premium-*exclusive* prices which would include only the explicit tariff duty. The use of import-substituting indigenous inputs would,

however, be at import-premium-*inclusive* prices since the inputs would be priced at c.i.f. prices plus the import premium. While relative subsidization might have been required even on purely economic grounds, the differential incentives provided by the import-control system was incidental rather than intentional.

Anticipatory and Automatic Protection to Industries: The exclusion or restriction of imports in favor of domestic import-substitutes also meant the extension of protection regardless of cost, efficiency or comparative advantage. Such automatic protection could also be anticipated by every producer who informed the agencies in charge of "indigenous clearance" of the capacity available and the production possible.

Discrimination Against Exports: Import-control policies clearly discriminated against exports. The effective exchange rate on exports was, on the average and by industry, continually less than the effective exchange rate on imports (Table 2). From about 1962 the schemas of export subsidy did, to some extent, redress the discrepancy.

The application of the principle of "indigenous availability" also created further difficulties for exportable items which had to be manufactured with inferior domestically produced capital equipment and inputs: this was particularly so with exportable products from the engineering industries. Furthermore, the restrictive nature of the import policies allowed little flexibility to obtain additional inputs from the market while equally stringent controls precluded the expansion of capacity. This, of course, further handicapped export industries which needed the flexibility in production which would have enabled competition for large export orders as they became available.

Industrial licensing and import-control policies from the beginning of the Second Plan until late 1964 had a substantial inward-looking bias which was clearly unfavorable to manufactured exports.

Loss of Revenue: An important effect of the import-control system was that premia on scarce imports passed into the private sector and not to government revenue. This was particularly so where EI licenses channelled imports through traders and the import premium would have fully reflected the scarcity value of the imports. Consequently, the scarcity premium would have accrued to government revenue if the imports had been channelled through government agencies or if the imports had been auctioned or if suitable tariffs had been levied.

In the case of AU imports, it is to be expected that the outputs would have been at the prices that the market could bear. Hence, the

Table 2. EERs, PLD EERs and PPP EERs for Exports and Imports: 1950-1971

			IMPORTS			EXPORTS								
						$\alpha = 0$		$\alpha = 0.05$		$\alpha = 0.10$		$\alpha = 0.20$		
Year (1)	I_t (2)	I_t^p (3)	EER (4)	PLDEER (5)	PPPEER (6)	EER (7)	PLDEER (8)	EER (9)	PLDEER (10)	EER (11)	PLDEER (12)	EER (13)	PLDEER (14)	PPPEER (15)
1950	0.823	0.7732	5.5843	6.7853	8.[illegible]756	4.3878	5.3315	4.4577	5.4164	4.5277	5.5015	4.6677	5.6716	4.40
1951	0.906	0.9105	5.4550	6.0210	6.6128	4.1736	4.1736	4.6066	4.2407	4.6807	4.3073	4.4411	4.9019	4.35
1952	0.793	0.9090	5.5611	7.0127	7.7147	4.3030	5.4262	4.3730	5.5145	4.4430	5.6028	4.529	5.7792	5.21
1953	0.786	0.8762	5.6930	7.2430	8.2664	4.4187	5.6218	4.4906	5.7132	4.5625	5.8047	4.7069	5.9884	5.27
1954	0.752	0.8730	5.7829	7.6900	8.8087	4.4330	5.8949	4.5001	5.9842	4.5672	6.0734	4.7019	6.2525	5.45
1955	0.691	0.8913	5.6573	8.1871	9.1856	4.4658	6.4628	4.5377	6.5669	4.6105	6.6722	4.7518	6.8767	6.11
1956	0.775	0.9232	5.5559	7.1689	7.7653	4.5382	5.8557	4.6158	5.9559	4.6938	6.0565	4.8495	6.2567	5.76
1957	0.821	0.9540	5.4221	6.6043	6.9227	4.5363	5.5253	4.6862	5.7079	4.8362	5.8906	5.1360	6.2558	5.97
1958	0.838	0.9603	5.3721	6.4106	6.6662	4.5929	5.4808	4.7500	5.6683	4.9071	5.8557	5.2212	6.2305	5.94
1959	0.872	0.9655	5.4331	6.2306	6.4532	4.6529	5.3359	4.7709	5.4712	4.8890	5.6067	5.1251	5.8774	5.62
1960	0.929	0.9753	5.4059	5.8191	5.9665	4.6696	5.0265	4.8462	5.2166	5.0232	5.4071	5.3769	5.7878	5.60
1961	0.950	0.9866	5.6120	5.9074	5.9876	4.6757	4.9218	4.8519	5.1073	5.0280	5.2926	5.3807	5.6639	5.57
1962	0.961	0.9957	5.7596	5.9933	6.0192	4.7015	4.8923	4.8790	5.0770	5.0565	5.2617	5.4121	5.6317	5.59
1963	1.000	1.0000	6.0609	6.0609	6.0609	4.7452	4.7452	4.9309	4.9309	5.1170	5.1170	5.4888	5.4888	5.49
1964	1.105	1.0095	6.1875	5.5995	5.5468	4.7500	4.2986	4.9366	4.4675	5.1227	4.6359	5.4954	4.9732	5.05
1965	1.195	1.0316	6.6302	5.5483	5.3783	4.7514	3.9761	4.9414	4.1351	5.1313	4.2940	5.5111	4.6118	4.79
1966	1.338	1.0598	9.2295	6.8980	6.5088	6.7912	5.0756	6.9540	5.1973	7.1175	5.3195	7.4438	5.5634	5.93
1967	1.539	1.0630	9.0248	5.8641	5.5166	6.7808	4.4060	6.9525	4.5175	7.1242	4.6291	7.4671	4.8519	5.22
1968	1.531	1.0780	8.9692	5.8584	5.4345	7.0755	4.6215	7.2518	4.7366	7.4280	4.8517	7.7798	5.0815	5.58
1969	1.563	1.1212	9.0645	5.7994	5.1725	7.1498	4.5744	7.3425	4.6977	7.5352	4.8210	7.9200	5.0672	5.73
1970	1.660	1.1675	9.4530	5.6946	4.8776	7.2030	4.3392	7.3852	4.4489	7.5675	4.5587	7.9320	4.7783	5.64
1971	1.723	1.2215	9.7042	5.6322	4.6109	7.1752	4.1644	7.3755	4.2806	7.5742	4.3959	7.948	4.6284	5.65

NOTES:

EER: Effective Exchange Rate.

for exports, the average annual rate of export duty was derived from total export duties as a proportion of total export receipts. As export subsidies on non-traditional products could not be quantified with any degree of accuracy (see text), three subsidy rates (α) of 5 per cent, 10 per cent and 20 per cent were assumed to derive subsidy-inclusive EERs. In general, EERs up to 1962 could be considered to involve no subsidy: EERs from 1962 to 1964 to involve 5 per cent subsidy; EERs in 1964-65, 10 per cent subsidy and in 1965-66, 20 per cent subsidy. Since export subsidies were revived only some time after the June 1966 devaluation, export subsidies for the period 1966 to 1971 are best conceived of as having progressed from 5 per cent to 10 per cent and to 20 per cent over this period.

for imports, the average annual tariff rate was derived from total imports' tariff receipts as a proportion of total import payments. The premium on imports has been excluded for lack of reliable (and quantifiable) data (see text). It is, however, noted that the import premia was often close to 100 per cent during most of the 1960s.

I_t: Wholesale price index.

I_t^p: Import-share weighted partner-country wholesale price index.

PLD EER: EER deflated by I_t.

PPP EER: for imports, PLD EER multiplied by I_t^p.

for exports, PLD EER multiplied by I_t^p (partner-country weight in exports).

Sources: International Monetary Fund. *International Financial Statistics*, December 1969, July 1971, 1972 Supplement, January 1973. International Monetary Fund. *Direction of Trade*, annual issues. United Nations. *Statistical Yearbook*, 1972. Department of Statistics, India, *Basic Statistics Relating to the Indian Economy*, various issues. Ministry of Finance, India, *Explanatory Memorandum of the Central Government Budget*, annual issues.

effect of increasing tariffs to the level of the "implicit" premium on AU licenses would not generally have affected the price of the outputs but would have reduced the profits that accrued purely as a result of access to scarce imports.

Distributional Impact: It has been suggested that the system of AU allocations had assisted employment by providing scarce inputs even to inefficient units that would otherwise have failed to compete successfully for such inputs on the market. The protection of inefficient units is, however, not the most desirable policy to provide employment. Rather, the diversion of scarce imported inputs to the more efficient units would have resulted in increased output in the short run and led to greater investment and more employment in the long run as well.

It has also been claimed that AU allocations enabled greater equity among the various regions in the country. However, since AU allocations were determined by existing production capacity, the system only perpetuated the regional disparities when other policies such as fiscal transfers could have achieved greater regional equity.

C. Export Policy and Performance: 1951 to 1966

The main focus in the analysis of export policy and performance would be the sub-period 1956 to 1966 where the first six years (1956 to 1962) was characterized by an essentially passive export policy while the latter years (1962 to 1966) saw an increased effort at export subsidization to offset an over-valued rate of exchange.

1951 to 1962: The value of exports had reached a peak in 1951 but collapsed after the Korean War and remained relatively stagnant till 1961: this implied both a falling share of total world exports and a falling share of exports to GNP.

The Phase IV episode of the First Plan period had, on annual average performance, improved over the average export performance of the previous three years. That was largely due to the export price increases registered during the Korean War years of 1951 and 1952. There was also a continuous (though mild) improvement in average export volumes since 1952.

Export performance deteriorated significantly during the period of the Second Plan and the concurrent Phase I era. Both average export prices and export volumes stagnated and, with the exception of the Korean war boom years, the stagnation in prices and volume during the entire decade is very striking.

Table 3: **Exports Earnings, Volume and Price Indices, 1948 to 1966**

Year	Value of Exports (US $ millions)	Export Value Index (1958 = 100)	Export Price Index (1958 = 100)	Export Volume Index (1958 = 100)
1948	1363	112	90	124
1949	1309	107	90	119
1950	1146	94	98	97
1951	1611	132	143	96
1952	1295	106	117	89
1953	1116	91	100	92
1954	1182	97	102	94
1955	1276	104	100	105
1956	1300	106	101	101
1957	1379	113	101	110
1958	1221	100	100	100
1959	1308	107	100	107
1960	1331	109	109	101
1961	1387	114	111	105
1962	1403	115	106	112
1963	1631	134	106	126
1964	1749	143	106	134
1965	1686	138	112	124
1966	1606	132	111	119

Source: International Monetary Fund. *International Financial Statistics*, supplement to 1966-67 Issues, March 1968.

Of individual export commodities, only cashew kernels, iron ore and coffee demonstrate an upward trend during this decade. The principal export commodities had a dismal rate of growth in earnings and a consequent falling share in the world market. The five major export commodities which contributed over one-half of export earnings – jute manufactures, tea, cotton textiles, vegetable oilseeds and oils, and unmanufactured tobacco – faced discernible (and, sometimes, considerable) reduction in their share in world trade.[6]

[6] Man Mohan Singh, *India's Export Trends*, Clarendon Press, Oxford, 1964.

Table 4: **Export Earnings from Principal Commodities 1951 to 1960**
(Rs. mn.)

	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957 58	1958-59	1959-60	1960-61
1. Total exports	7,288.9	5,723.0	5,261.6	5,884.7	6,038.5	6,310.3	5,845.2	5,531.0	6,299.0	6,320.4
Commodities Composition										
2. Jute manufactures	2,697.3	1,289.2	1,137.6	1,237.8	1,182.5	1,188.1	1,109.2	1,011.5	1,090.0	1,317.2
3. Tea	939.4	808.6	1,021.6	1,477.4	1,091.4	1,451.4	1,136.5	1,296.0	1,290.9	1,235.9
4. Cotton fabrics	521.5	620.6	636.4	633.1	566.3	629.6	584.7	454.8	641.5	576.5
5. Vegetable oils	236.1	255.4	48.9	200.2	343.5	155.9	63.7	148.1	148.1	85.4
6. Iron ore	10.0	37.0	58.2	42.1	62.7	93.1	118.6	96.5	145.9	170.3
7. Manganese ore	156.9	217.6	242.7	129.2	107.2	253.1	297.0	136.4	110.0	140.6
8. Mica	132.1	00.1	79.0	67.2	83.7	87.7	86.6	08.8	100.4	101.5
9. Unmanufactured tobacco	161.4	139.3	110.2	117.6	206.5	124.8	146.3	146.8	135.3	145.1
10. Coffee	5.5	13.0	14.6	76.4	14.9	66.9	67.3	78.9	63.3	72.2
11. Cashew kernels	90.5	129.8	109.0	107.0	129.2	145.3	151.6	158.5	160.5	180.1
12. Manufactured leather	250.2	201.1	249.7	205.8	225.2	209.7	209.2	188.6	304.5	248.5
13. Spices	291.7	205.9	162.0	104.3	93.1	78.0	80.1	80.1	144.6	166.4
14. Coir yarn and manufactures	102.8	71.6	81.5	84.5	89.4	96.9	96.0	82.8	82.1	90.0
15. Raw cotton	136.7	193.3	94.0	101.9	296.9	134.6	90.8	166.2	100.6	70.0
16. Lac	148.7	74.4	67.6	105.5	117.1	94.6	68.5	57.0	62.9	63.2
17. Raw wool	49.0	84.1	53.7	86.1	97.3	104.0	110.8	96.6	122.1	77.2
18. *Sub Total (2-17)*	5,929.8	4,422.9	4,173.5	4,776.1	4,606.9	4,918.7	4,445.9	4,210.4	4,719.1	4,750.1

Source: Bhagwati & Desai: *India, Planning for Industrialization*, Oxford University Press, 1970.

Table 5: **Exports by Major Destinations, 1956/57 to 1960/61 and 1961/62 to 1965/66, annual averages and change**
(Rs. mn.)

Destination	Annual Average Second Plan	Annual Average Third Plan	Change	% Change on Second Plan Total	% of Total Change
Socialist countries	357.1	1,132.9	+775.8	217	49.11
(USSR therein)	(234.5)	(352.4)			
W. Europe	2,323.3	2,383.2	+59.9	17	3.79
(EEC therein)	(466.2)	(574.3)	(+108.1)		
(EFTA therein)	(1,758.7)	(1,702.2)	(- 56.5)		
Asia and Oceania	1,596.2	1,900.3	+304.1	19	19.25
(Japan therein	(303.3)	(553.5)	(+250.2)		
Africa	474.9	521.5	+46.6	9	2.95
(UAR therein)	(109.0)	(159.6)	(+ 50.6)		
Americas	1,285.7	1,679.1	(+393.4)	31	24.90
(US therein)	(927.6)	(1,311.4)	(+383.8)		
TOTAL	6,037.2	7,617.0	1,579.8	26	100.00

Source: Bhagwati and Desai, *India: Planning for Industrialization*, Oxford University Press, 1970.

Except in the case of a few export items (such as iron ore) the stagnation of export earnings during this decade could be largely attributed to domestic policies which frequently led to declines in traditional exports and to the absence of export promotion policies to encourage new exports. This conclusion is also supported by the aggregative regression analysis in this Study which underlines the role of domestic production and availability (and, hence, the price paid to producers which is a function of the effective exchange rate on exports) in explaining export performance in the more important traditional commodities such as tea and jute textiles and, thereby, also the probable role of the 1966 devaluation in the improved export performance in new, non-traditional exports.

1962 to 1966: The policy of neglect of the export sector was later rationalized as that of "export pessimism". The period of the Third Five Year Plan, however, witnessed a policy of escalating export subsidization and by the end of the Phase II era of 1962 to 1966 subsidies (sometimes at substantial rates) were extended to a large number of exports.

Export performance improved during this period both as a result of the subsidies and because of expanded trade with the socialist countries.

The success of the export subsidies in countervailing the effects of the overvalued exchange rate was particularly marked in the growing exports of non-traditional manufactured items and served also to counter the pessimism about exports which had developed under the policies of the Second Plan period.

But, while the export subsidies succeeded in reducing the average overvaluation of the exchange rate, it was not an efficient policy and was as selective, chaotic and cost-unconscious as was the process of automatic protection in import substitution.

D. Policies of Export Subsidy

Export subsidies were provided mainly through fiscal measures and import entitlement schemes. In addition to these measures – which improved the direct profitability of export sales – there were government-financed export promotion schemes which indirectly increased the profitability of export sales.

Fiscal Measures: A number of fiscal measures were adopted to encourage exports. Of these measures, the more important were: (i) the exemption of final export sales from sales taxes and the refund of indirect taxes, excises and customs duties. These measures applied both to imported

inputs and to the exported outputs but their incidence was not always as intended due to dilatory procedures and administrative inefficiencies.

Drawback of import duties for raw materials used in the manufacture of some export items was originally introduced in 1954. Rebates of excise duties on raw materials used in the manufacture of a few other export items were introduced in 1956. The scope of both these measures was considerably enlarged during the 1960s. In practice, the exemptions and rebates of sales taxes and excises proved particularly difficult to administer while, in general, inefficiencies in procedure reduced the accessibility of exporters to the incentives granted.

(ii) Direct tax concessions were a more important incentive. In 1962, a non-discriminatory tax concession was granted whereby profits from export sales were to be taxed at 45 per cent (as against the standard tax rate of 50 per cent). In 1963 the direct tax incentive for export sales was made selective and applied not to profits but applied directly to the f.o.b. value of exports (at 2 per cent). In 1965 selective tax credits at varying rates were extended to a larger number of industries. While the tax credits ranged up to 15 per cent, the incentives were relatively small and confined to a narrow range of exports when compared to the import entitlement incentive (described later).

(iii) Apart from the tax concessions (which were, in effect, subsidy-equivalents) cash subsidies were provided for sugar exports. A further disguised (cash) subsidy arose from the operations of the STC exporting some commodities at a loss and subsidizing such losses through profits made on other (mainly imported) commodities.

(iv) Reductions in rail-freight rates had been granted, from 1960, for the transportation of selected export commodities between specified destinations. These concessions applied essentially to the newer manufactured exports which were non-agriculture-based.

The intention of the scheme was to offset the transport cost disadvantage suffered by exporters and, on this premise, progressively concessional rates were sometimes offered as the distance increased. Rail freight concessions appeared to become an increasingly important element in the export promotion strategy although even the real costs to the economy ('shadow' freight rates) continued to be higher than even the non-concessional freight rates.

(v) Other forms of explicit or implicit subsidization of exports included governmental expenditures in export promotion such as Export Promotion Councils, research exhibitions and export market surveys. Special allocations

to exporters of scarce items at controlled prices and priority access to rail space provided further elements of subsidy.

Import Entitlement Schemes: Under the import-entitlement schemes eligible exporters were granted import licenses *pro rata* to the value of exports achieved. By early 1965 the import-entitlement schemes had a very considerable coverage and, because of the very high premia on imports, the import-entitlement schemes became, in effect, the principal instrument in export promotion.

The rates of import-entitlement varied widely as between different export products. The official criterion in determining these varied rates was declared as:

"The most important feature of these schemes is that a specified percentage of the f.o.b. value of exports is allowed to be used for importing raw materials and components required in the production of the export products or a group of allied products. The import entitlement is generally determined on the basis of twice the import content subject to a maximum of 75 per cent of the f.o.b. value of exports."[7]

The original intention, thus, appeared to be that a uniform incentive should be provided whereby the import-entitlement to double the import-content of the export would have enabled additional output for the domestic market. However, it is noted that this scheme did not provide a uniform *ad valorem* export incentive to all the specified commodites.

The rationale for the ceiling of 75 per cent of f.o.b. value appeared to have arisen from the consideration that there should be a net foreign exchange earning and/or that excessively large import-entitlements could encourage either the over-invoicing of exports or the 'dumping' of exports.

With the intensification of the export-promotion drive from 1963 neither the 75 per cent ceiling nor the twice-the-import-content requirement was strictly observed and, with the grant of further rail-freight concessions, the official attitude appeared to be that the announced restrictions in the incentives should not impede the export drive.

Permissible Imports: Unlike other schemes of exchange-retention or import-entitlement, the import-entitlement scheme in India did not permit free use of the entitlements but specified the imports that were permissible.

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[7] Ministry of International Trade, *Annual Report 1963-64*, New Delhi, 1965, p. 14.

Generally, permissible imports were direct inputs into the industries included in that particular export-promotion scheme. However, since different industries were often grouped together into the same scheme, the system could not ensure that permissible imports would be channelled only into that particular single industry permitted the imports. Furthermore, in the case of multi-product manufacturers and/or of products with interchangeable inputs, the use of imported inputs either for export products or for non-export products was difficult to control. Moreover, many imported inputs (especially chemicals) are utilized by a large range of industries and along with the legal transferability of entitlements, illegal inter-scheme transfers also resulted. Ultimately, too, the principle of import-entitlements for direct input into the exporting industry became irrelevant when *ad hoc* entitlements for the import of high-premium yielding dry fruits were allocated to exporters of diverse commodities (including chemicals and engineering products); this scheme was essentially an indirect system of cash subsidy for the exports.

There were also occasional changes in the items on the permissible list of imports of materials and components. The changes were often occasioned not by significant changes in objective economic conditions but rather by the conflict, in a sheltered market, between the exporters who desired to import high-premia commodities and the domestic producers of the same commodity who favored restrictions on import.

At the initial stages of the scheme, import entitlements were restricted to the import of materials, spares and components and not for capital goods either for replacement or for the expansion of capacity. The restriction was probably prompted by the desire not to disrupt the Capital Goods (Import) Control (CGC) scheme although that should not have precluded imports of capital goods with the prior approval of the CGC. It is, thus, probable that import-entitlement schemes had been regarded more as a mechanism to ease the bottleneck to more exports because of the lack of imported inputs to utilize existing capacity rather than for the subsidies thereby provided. It did not also appear that the possibility that the expansion of capacity in the export industries might be desirable for export increases had been considered fully.

These restrictions on the use of import entitlements were, however, gradually reduced (or, in some cases, eliminated) and a considerable proportion of the entitlements were freed for the import of machinery and equipment.

Transferability: At the initial stages, import-entitlements were subject to stringent requirements regarding transferability. Later, however,

some of these requirements were relaxed and import-entitlements became more readily saleable.

Premiums: Import-entitlements which were transferable within a particular scheme earned the prevailing market rate of premium although, not infrequently, the maximum premium which could be so earned was fixed.

For the bulk of the import-entitlements, the effective subsidy to the exporter depended on the premium obtainable and the rate of entitlement offered. However, the segmentation of the market by different import-entitlement schemes made for variations in the premium obtainable depending on the commodity exported. The premium did, in addition, vary over time within each such market.

Among the factors that determined the level of the premium obtainable on import-entitlements were the restrictiveness of the permissible import list, the rate of entitlement, the extent of leakage into prohibited sales and expectations about the current and future level of availability of entitlements in particular markets.

Variability of Export Incentives: The export promotion policies were based essentially on the import-entitlement schemes which, by 1965-66, applied to nearly 60 per cent of export earnings. The element of subsidy provided was, however, unforeseeable and discriminatory in incidence among commodities and export incentives varied among the entitlement schemes due to (i) changes in the coverage of the schemes; (ii) changes in the entitlement granted for individual products due to periodic changes in the formula for determining entitlement or to revisions in the quantum of entitlement granted; and (iii) to changes in the premium realizable on the entitlements arising from changes in the rules governing transferability, or to changes in the items for whose import the entitlement could be used and/or the seasonal/periodic changes in the market for entitlements.

Economic Effects: The import-entitlement schemes were, until the June 1966 devaluation, the most important measures of export subsidy. These schemes had, in contrast to the simple foreign-exchange retention schemes of other countries, the almost unique features of: (i) a very large number of entitlement rates subject to occasional change; (ii) entitlement rates which were generally less than 100 per cent of export earnings; (iii) the transferable entitlements marketable only within particular export-promotion schemes; (iv) a fluctuating premium on entitlements as between the segmented markets; (v) the exclusion of consumer goods from the list of permissible imports; (vi) of applying only to 30 per cent

of total exports (60 per cent if exports of tea and coffee were included); and (vii) affecting only 5 per cent of total imports.

While the import-entitlement schemes, in a situation of an over-valued rate of exchange, reduced the serious discrimination against exports, these schemes were an inefficient way of simulating the workings of a flexible exchange rate system and these inefficiencies were compounded by the differential effective subsidies that resulted.

The subsidy element in the import-entitlement schemes also gave an incentive, *ceteris paribus*, to over-invoice exports even though a premia had to be paid for foreign exchange on the "black" market. This incentive to over-invoice exports also led to the export of sub-standard products which were disposed of at whatever price could be obtained in the export markets. Such practices, needless to say, jeopardized the export drive which had to be built on a reputation for quality manufactures. Furthermore, the instability of the incentives and their differential incidence on various export commodities encouraged traders to seek short-term profits by switching to the more lucratively subsidized commodities at the expense of the long-term interests in developing and expanding export markets. It is noted that a direct adjustment in the exchange rate would, by not requiring such subsidies, have eliminated the incentive to over-invoice and the other undesirable practices that concurrently developed.

The incentive of the subsidies offered by the import-entitlement schemes was self-limiting. With fixed entitlement rates, increased exports also meant that more import-entitlements would be available on the market and, consequently, as exports increased the incentives (i.e. the premia) at the margin got progressively smaller. A system of *ad valorem* subsidy would, on the other hand, have provided an equal incentive to export irrespective of the level of export value. An appropriate rate of exchange would have had effects similar to an *ad valorem* except that the costs of imported (or import-competing) inputs would also be affected.

It has, however, been argued that export subsidies provided through import-entitlements made for a self-financing system as the subsidy was, in effect, paid by the users of the import licenses. On the other hand, the more effective system of direct subsidies for exports could have been administered from the proceeds of direct taxes on imports unless the (unacceptable) contention is that import taxes are feasible only when disguised. In addition, it is noted that the revenue effect from an adjusted exchange rate would have been more favorable than from a regime of an over-valued exchange rate with import-entitlement schemes as imports exceeded exports approximately by the amount of the considerable net inflow of foreign assistance.

The import-entitlement schemes in India allocated high-premia imports as economic reward and as incentive to exporters. No imports of consumer goods were, however, permitted. Import priorities, therefore, were not violated as would have happened if the import of luxury products had been prohibited but had been permitted under import-entitlement or export bonus schemes. However, while adequate statistical data is not available, it appears that there might have been some leakage of foreign resources into non-priority industries (e.g., art silk) where the total foreign allocations on AU licences and import-entitlements could have been greater than under an *ad valorem* scheme.

A favorable effect of the import-entitlement schemes was that they introduced greater flexibility in legal access to foreign resources to meet unforeseen demands and to eliminate otherwise expensive bottlenecks in production. The inflexibility in access to foreign resources was more an indictment of the import-control regime rather than an inherent virtue of the import-entitlement scheme as the financial subsidy could have been more efficiently provided by direct fiscal subsidies and a more appropriate exchange rate could have removed the inflexibility consequent on strict import controls.

It has been contended that most producer-exporters followed an export policy which would realize sufficient foreign resources for the full utilization of available capacity rather than to maximize profits by expanding exports; consequently, the replacement of entitlement schemes by financial incentives could affect exports. There is, however, very little evidence to suggest that policies of output, rather than profit, expansion had been followed. The fact that many exporting firms did market the import-entitlements itself does not lend credence to this contention.

It is, however, quite likely that exports might not be possible even with attractive financial incentives if sufficient foreign resources were not available on the market. This, of course, assumes that AU allocations are insufficient and that, consequently, existing production would have to be diverted to exports. However, even in this case, the incremental export earnings available to the economy could eventually be used to augment production for exports.

Other Welfare Effects: As noted, the policies of export subsidy worked within the overall framework of an overvalued exchange rate and strict import controls. The effects of this system differed significantly both from situations of uniform exchange rates at equilibrium levels and from situations where *ad valorem* subsidies were granted to reduce the discrimination against exports.

In the workings of the system, too, varied exchange rates with unpredictably different and bizarre incentives for resource allocation resulted also because the effective rate on AU imports was the parity rate plus the relevant tariff while the effective rate on inputs purchased from the market contained the import premium as well. In such a situation, while a unified export subsidy would have reduced the discrimination against exports, it would still have perpetuated the existence of non-unified exchange rates. There was also the possibility that such a subsidy could have led to "value-subtracted" at international prices.

Many of the inefficiencies of the import-entitlement schemes were compounded by the selectivity with which these schemes were administered. While, even with a unified exchange rate, the use of tariffs, subsidies and other departures from the unified rate can be justified on sound economic grounds, the export subsidy schemes of India involved a selective intervention devoid of any economic rationale.

The original principle that underlay the export subsidy schemes was the grant of an economic incentive to export by allocating more than the import-content of the export itself. Consequently, the *ad valorem* rates of import-entitlement for different commodities varied and so would have any equivalent *ad valorem* subsidy. Furthermore, the effective export subsidy varied between commodities because for administrative reasons and vague notions about relative priorities, the import-entitlements could be marketed only within segmented markets and, hence, fetched differential premia.

By about 1965-66 the maximization of exports appeared to have become the guiding principle in the policies of export subsidy. It should, however, be noted that many traditional exports were not entitled to export subsidies and, in these cases, absorption by the domestic market hindered expansion of exports.

The principle of maximizing exports of the newer manufactured commodities was effectively pursued by increasing the effective subsidy. *Ad hoc* entitlements were granted by the Ministry of Trade for chemical and engineering exports ostensibly to cover the difference between the domestic sale price and the supposed f.o.b. export price plus the subsidy available through drawbacks, fiscal tax concessions and entitlements. The policy of maximization of new exports also led to freight concessions to compensate for the "transport cost disadvantage" of products manufactured in the hinterland without regard to the fact that such transport involved a real cost to the economy.

Thus, the policies of export promotion during the Third Plan period could best be characterized as a system of indiscriminate export promotion with even a perverse bias whereby the subsidy was inversely related to the competitive strength of the exportable commodity. The counterpart to this system was the indiscriminate protection that the import policies provided to the domestic industries. While, therefore, the Third Plan period witnessed a major shift towards export subsidization, the export promotion policies themselves were inefficiently designed and implemented and the significant change toward greater efficiency came only with the devaluation of June 1966.

IV. THE EPISODE OF LIBERALIZATION

By the time of the devaluation in June 1966, some partial and hesitant moves towards liberalization had been made. The exchange rate, however, continued to remain over-valued, the import premia remained high and export subsidies had steadily increased to offset, however inefficiently, the adverse effects of over-valuation on exports. With the Indo-Pakistan war in late 1965 and the consequent suspension of foreign assistance, the shortage of foreign exchange and the resultant increase in the import premia posed serious problems.

The major motivating factors for the devaluation were (i) that a devaluation seemed in accord with the government's earlier, slow attempts to reduce the ill-effects of the over-valued exchange rate with off-setting measures such as export subsidies, and (ii) more importantly, the Aid-India Consortium had virtually made a major devaluation a precondition for the resumption of aid in a situation when the government had little maneuverability because of the acute shortage of foreign exchange.

These two factors greatly influenced both the policy package that accompanied the devaluation and the final outcome of the policy package. The fact that a major impulse for the devaluation came from the growing realization that the export subsidies and tariffs were only an inadequate and inefficient substitute for the formal devaluation required indicated that the government desired the devaluation primarily to substitute for the existing measures. Hence, the degree of the devaluation was to reflect mainly the existing levels of export subsidization and only partially to go beyond that.

The policy-package consisted of (i) the formal devaluation of the Indian rupee, (ii) a substantial elimination of the export incentives for non-

traditional products and the imposition of export duties on the traditional exports which faced inelastic demand and oligopolistic competition on the world market, (iii) a significant reduction in import tariffs, (iv) a policy of liberalized imports and (v) a significant increase in aid-financed imports after the condition that there should be a devaluation had been met.

A. The June 1966 Devaluation

The formal parity rate of the Indian rupee was, on June 6, 1966, changed from Rs. 4.76 to Rs. 7.50 per US$. The *"de jure"* (gross) devaluation was, thus, 57.5 per cent.

At the same time, too, various other measures affecting export subsidies, import duties and the like were implemented. The analysis that follows adjusts the gross devaluation for the simultaneous changes in trade taxes and subsidies to obtain the *"de facto"* (net) devaluation: the effects of other measures such as liberalized imports and larger aid flows are not included.

The net devaluation for individual *exp rt* commodities is given in Table 6 by adjusting the gross devaluation by (i) the imposition of export duties on traditional exports and the elimination of the import-entitlement schemes, (ii) the effects of the elimination of tax credits and (iii) the effects of the withdrawal of the cash subsidies provided for selected engineering exports.

The net devaluation on all exports was 21.6 per cent (as against the gross devaluation of 57.5 per cent) on the weighted average of the individual commodity net devaluation rates on the basis of their share in exports during 1964 to 1966.

The formal parity change affected *invisible earnings* by the identical amount except for inflows under the National Defence Remittance (NDR) scheme of October, 1965 which was abolished after the devaluation. The effective subsidy obtained on the NDR scheme was 110 per cent (the average rate on quotations during May to July 1966). Since this subsidy was eliminated, there was a reduction of 52.5 per cent in the incentive to remit – after allowing for the gross increase of 57.5 per cent. Since inward remittances were 30.8 per cent of invisible earnings during 1964-66 and since other invisible earnings had not been earlier subsidized, the weighted net devaluation for all invisible earnings was 25.6 per cent.

The net devaluation for *imports* is estimated in Table 7 by adjusting the gross devaluation for the changes in import tariffs. The weighted net

Table 6: Net Devaluation in June 1966 after Adjusting for all Changes in Export Subsidies and Duties

Product or Product Group	F.o.b. value of exports in 1964-65 plus 1965-66 (Rs. millions)	Net devaluation based on parity change, imposition of export duties and elimination of entitlement schemes (per cent)	Effect of tax credit elimination (per cent)	Full net devaluation adjusted for all changes (per cent)
(1)	(2)	(3)	(4)	(5)
1. Jute manufactures				
a. carpet backing	306	26.3	-13	13.3
b. hessian	1,979	14.6	-7	7.6
c. sacking and other products	1,023	16.8	-7	9.8
d. cotton backing	132	1.9	-7	-5.1
e. jute waste	3	-70.3	-7	-77.3
2. Tea	2,395	22.8	-5	17.8
3. Coffee	266	45.8	-1	44.8
4. Black pepper	178	26.3	-1	25.3
5. Oil cakes other than copra cakes	730	27.5	-1	26.5
6. Raw cotton	203	17.2	-1	16.2
7. Cotton waste	61	20.0	-1	19.0
8. Raw wool	141	40.4	-1	39.4
9. Tobacco manufactured	445	36.4	-1	35.4
10. Mica	210	37.9	-1	36.9
11. Hides, skins (raw)	186	42.0	-5	37.0
12. Coir and coir manufactures	222	36.8	-7	29.8
13. Manganese ore	242	33.5 to 49.2	-31	2.5 to 18.2
14. Iron ore and concentrates	799	29.1 to 43.5	-21	8.1 to 22.5
15. Engineering goods	312	-17.5	-7	-27.8
16. Chemicals and allied products	153	-17.5	-7	-24.5
17. Plastic and linoleum goods	8	7.5	-3	4.5
18. Certain natural essential oils	56	27.5	-3	24.5
19. Handicrafts	201	7.5	-1	6.5
20. Finished leather and leather products	4	22.5	-7	15.5
21. Woollen carpets, rugs and druggets	99	22.5	-3	19.5
22. Silk fabrics and ready-made garments made of silk fabrics	52	12.5	-7	5.5
23. Cotton textiles	1,128	7.5	-7	0.5
24. Books, journals, paper and paperboards	23	-17.5	-1	-18.5
25. Fish and fish products	136	42.5	-3	39.5
26. Processed food	25	42.5	-7	35.5
27. Coir yarn and coir products				
28. Tanned hides and skins	554	23.0	-7	16.0
29. Cashew kernels	564	57.5	-5	52.5
30. Pearls, precious stones, diamonds, imitation jewellery, etc.	279	-22.5	-7	-23.5
31. Gold jewellery and gold articles	31	7.5	-1	6.5
32. Wooden manufactures and timber	45	-17.5	-7	-24.5
33. Fabrics of synthetic fibre and spunglass (including art silk fabrics)	144	57.5	-7	50.5

(1)	(2)	(3)	(4)	(5)
34. Vanaspati-hydrogenated oils and refined vegetables oils, refined castor oils, groundnut oil, cotton seed oil, etc.	167	-12.5	-7	-19.5
35. Agarbattis and chandan dhoop	6	32.5	-3	29.5
36. Fresh fruits and vegetables	152	57.5	-21	36.5
37. Coal[a]	71	57.5	-21	36.5
38. Crushed bones	54	57.5	-21	36.5
39. Tiles and earthen wares[b]	7	57.5	-21	36.5
40. All mineral ores other than iron and manganese ores	40	57.5	-31	26.5
41. Ferro manganese	102	57.5	-31	26.5
42. Alcoholic beverages	0.1	57.5	-31	26.5
43. Processed mica powder[c]	1	57.5	-31	26.6
44. Sugar	333	57.5	-7	50.5
45. Rubber goods[d]	39	57.5	-7	50.5
46. Glass	10	57.5	-7	50.5
47. Cement and gypsum products[e]	7	57.5	-7	50.5
48. Cigarettes	21	57.5	-7	50.5
49. Deoiled rice bran[f]	18	57.5	-5	52.5
50. Calcium magnite	16	57.5	-11	46.5
51. Other products[g]	1,910	57.5	-1	56.5
52. All commodities	16,258	-	-	21.6[h]

Notes: Just before the devaluation export industries were being accorded incentives in the form of relief from direct taxation. A number of export industries, mainly the traditional ones, were given tax credit certificates at varying rates subject to a maximum of 15 per cent of the f.o.b. value of exports. Besides the relief in the form of tax credit certificates, 10 per cent of profits attributable to exports could be deducted by exporters of all products from their taxable income. In the case of certain specified industries (those figuring in the First Schedule of the Industries (Development and Regulation) Act, 1951, a further deduction—to the extent of 2% of f.o.b. value of exports—from taxable income was permitted. All these forms of tax incentives were abolished when the rupee was devalued. The effect of the elimination of tax incentives thus equals $(2t_c+2+10\pi)$ where t_c is the rate of tax credit certificates and π is the rate of profit as a proportion of f.o.b. value. This formula assumes a 50 per cent tax on profits and applies only to industries which were eligible for all the three tax incentives, with appropriate modifications being made for industries not eligible for all the three incentives. The figures in column (4) assume a value of 10 for π.

a This figure includes — 3.8 per cent for cash subsidy elimination as explained in the text.

b Red earthen tiles.

c Mica powder.

d Rubber manufactures not elsewhere specified.

e Cement

f Rice bran.

g This includes refractories, guar splits, ceramics, timber products, arms and ammunication, surgical cotton and dressings and cinematographic films and other films.

h This figure is 16.9 per cent when "Other products" are not included.

devaluation for all imports is 42.3 per cent. With the inclusion of invisible payments (for which only the gross parity change is relevant) the net devaluation for all *current account payments* rises to 44.8 per cent.

In total, the net devaluation on merchandise exports was 21.6 per cent and on merchandise imports, 42.3 per cent. For the current account as a whole, the net devaluation was 22.3 per cent for receipts and 44.8 per cent for payments.

Table 7: Effect of Changes in Import Duty as on 6th June 1966

		Effective ad-valorem duty[a] (%)		Effective Devaluation (%)	Share in total imports (1964-66) (%)
		Pre-Devaluation	Post-Devaluation		
	(1)	(2)	(3)	(4)	(5)
1.	Iron and Steel	63.6	49.6	44.0	9.99
2.	Metals other than iron and steel and silver	22.7	19.3	53.1	6.26
3.	Machinery	37.4	26.1	44.5	40.67
4.	Motor cars, cycles, scooters, chassis, omnibuses, vans, lorries and and parts thereof	78.9	63.2	43.7	3.52
5.	Chemicals	37.6	25.1	43.2	6.48
6.	Petroleum products	204.7	132.2	16.7	4.40
7.	Raw cotton	12.9	3.2	43.9	5.14
8.	Artificial silk yarn and thread	217.0	176.7	37.5	0.91
9.	Wood pulp, paper and stationery	51.1	50.9	57.3	1.99
10.	Cinematographic films	66.4	37.0	29.7	0.26
11.	Spirits and liquors	537.8	929.6	154.3	0.04
12.	Spices	68.3	—	-7.0	0.05
13.	Tobacco	1,330.0	600.0	-21.3	0.03
14.	All others	67.0	57.1	48.3	20.26
15.	Total	53.9	39.6	42.3	100.00

Sources: Directorate General of Commercial Intelligence and Statistics, and Ministry of Petroleum and Chemicals, Government of India.
Explanatory Memorandum to the Central Government Budget, Government of India.

[a] The effective duty rates reported in columns (2) and (3) are obtained by dividing duty collection by the value of imports. Though devaluation took place on June 6, 1966, the effective rate for the year 1965-66 ending on March 31, 1966, has been identified with the pre-devaluation rate and that for the year 1966-67 starting from April 1, 1966, with the post-devaluation rate. To the extent the pre-devaluation rates were higher than post-devaluation rates, this procedure will over-state the predevaluation rates. Even though this procedure yields a weighted average rate for each group of items, the weights are not the same in the two years--each year's rates are weighted by that year's imports.

[b] The figure in column (4) is obtained as follows: $\frac{157.5\,[1 + \text{col.}(3)]}{[1 + \text{col.}(2)]}$

If we compute it instead as: 57.5-[col.(2)-col.(3)], the total figure changes only to 43.2 per cent.

B. Export Subsidies: 1966 to 1970

With the June 1966 devaluation, budgetary tax credits, import-entitlement schemes and other export subisides had been removed. However, soon thereafter, export subsidies were revived and increased steadily. Due to their selective and variable nature these schemes again embodied many of the defects noted in the export subsidy schemes in the pre-devaluation period.

Cash Subsidies: The major change in the method of subsidizing exports in the post-devaluation period was the heavy reliance on cash subsidies. Cash subsidies were introduced in August 1966 for the exports of most engineering goods and chemicals and progressively extended to many other exports. By the end of 1967, cash subsidies were provided for exports of most engineering goods, chemicals, processed foods, paper products, sports goods, woollen carpets, steel scrap, prime iron and steel, cotton textiles, yarn and "made-up" goods: these exports, in total, amounted to 15 per cent of total exports in 1964-65 and 1965-66.

Cash subsidies were provided at *ad valorem* rates which ranged from 2 per cent to 25 per cent. However, a very limited number of different rates were applied and, hence, the selectivity of the subsidy was less than in the pre-devaluation period.

These cash subsidies were normally adjustable upwards by official notification. In addition, *ad hoc* increases in the cash subsidy were provided by special dispensation, if the export order was likely to be sizeable: additional cash subsidies of 2.5 to 5.0 per cent were granted, in several cases while *ad hoc* increases were considered where it could assist to procure export orders of more than $670,000.[8]

Import-Replenishment: The schemes of import-entitlement had been abolished along with the devaluation but were replaced in August 1966 by schemes of import-replenishment. Under these schemes, exporters were assigned import licenses of a pre-specified proportion of export earnings. The major difference between the two schemes was, supposedly, that the import-replenishment scheme replaced the import-content of the exports while the earlier import-entitlement schemes provided an "open" subsidy by permitting imports of twice the import-content of the export. Effectively, however, even the replenishment licenses afforded a subsidy to exports in a situation where imports commanded a scarcity premium: the implicit

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[8] Mark Frankena, *Export of Engineering Goods from India*, Ph. D. Thesis, Massachusetts Institute of Technology, 1971.

ad valorem subsidy was that of the replenishment rate multiplied by the premium at which the license could be sold.

Many of the undesirable features of the earlier import-entitlement schemes soon emerged in the import-replenishment schemes as well: (i) controls on the transferability of the licenses lowered the subsidy element and made the operation of the scheme unnecessarily cumbersome, (ii) as with the import-entitlement schemes, the import-replenishments granted were greater than the direct import-content. This was particularly so with exports of machine tools, stationary diesel engines, electric fans, sewing machines and certain chemicals where the import-replenishments granted were considerably greater than the average current import-content of the exported product (Frankena, op. cit.), (iii) there were also restrictions on the commodities that could be imported on the import-replenishment licenses but these restrictions were, as with the import-entitlement schemes, occasionally permitted to be evaded, (iv) the import-replenishment licenses commanded a premium also partly because otherwise "banned" imports were occasionally permitted. A further reason for the premium on these licences was that imports were not source-tied unlike AU licences which often permitted imports only from the higher-cost, source-tied foreign assistance receipts.

The import-replenishment scheme appears to have differed from the earlier import-entitlement schemes mainly in the relative stability of the rates of entitlement (which were a percentage of f.o.b. export value) and in the import-replenishment granted in free foreign-exchange licences for exports to the Soviet bloc as well.

Supply of Indigenous Materials at International Prices: Prior to the devaluation, domestic supplies of iron, steel and tinplate had been provided to the engineering industry for export production. The scheme was operated by direct subsidies and the subsidy element was positive since the domestic (controlled) prices of steel exceeded international steel prices till late 1969. In May, 1967, this scheme was expanded with all (export) manufacturers using primary iron and steel being made eligible. Winding wires, PVC resin and aluminum were later included in the scheme but these schemes worked less efficiently than the steel scheme which worked on direct subsidization of the steel price.

The drawbacks of the scheme included the fact that the subsidy was restricted, without any apparent economic rationale, only to steel of certain kinds produced by certain major domestic producers and to administrative delays in operation.

Other Direct Subsidies: Three other major measures of direct subsidy of exports which had been introduced prior to the 1966 devaluation were continued after the devaluation as well. They were: (i) the refund of excise and import duties on direct inputs into exports, (ii) the effective export subsidy provided by the State Trading Corporation by exporting products such as rice, sugar, art silk fabrics and jute goods at losses which were offset by the profits on imports handled by the STC and, (iii) concessions on freight, credit and promotional activities. Rail freight concessions of up to 50 per cent were provided for exports of engineering goods produced more than 200 miles from the port of exportation. In 1967 the Reserve Bank of India (RBI) introduced a concessional refinance rate of 4.5 per cent for commercial bank advances against pre-shipment and post-shipment of exports. In 1969, export credits of up to 10 years at 6 per cent were subsidized provided that certain conditions relating to low-import-content and repayment in hard currency were fulfilled: even these conditions were occasionally waived. Marketing and export promotion subsidies included facilities for participation in foreign exhibitions, overseas expenses, visits of foreign delegations to India and income tax concessions for expenditures on export marketing.

Other Indirect Subsidies: The major indirect subsidies provided for exports were: (i) the preferential allocation of scarce or rationed materials to exporters. In addition to supplying indigenous raw materials at concessional international prices for export production, scarce raw materials such as iron and steel, aluminum, cycle tires and materials for tires and plastics were also allocated to exporters on a priority basis. The implicit subsidy element in such priority allocation cannot, however, be quantified also because there was no explicit policy guidelines in the allocations, (ii) AU and CG licences were allocated on a preferential basis to export firms. This facility was extended in 1968, to engineering firms exporting more than 10 per cent of output and, during that year, licenses valued at $2.7 million were issued to 46 firms. In 1969, firms exporting more than 10 per cent of their output were permitted to import (under AU allocations) from preferred sources. In 1970-71, firms which exported more than 25 per cent of output (during 1969) were allowed free (i.e. source-untied) AU licenses; exporters of 10 to 25 per cent of output were allowed free imports for two-third the AU allocation and exporters of less than 10 per cent of output were allowed free imports up to one-half the AU allocation, (iii) a more lenient policy was followed both in expediting decisions on applications for foreign collaboration by exporting firms and in permitting foreign collaboration in non-priority industries and even trade provided that exports were made, (iv) exporters were given preference in the approval of overseas investments by Indian firms. This privilege was of particular value to the Large Industrial Houses whose domestic investment outputs had been

narrowed by the revised, industrial licensing policies aimed at stricter and more effective control of their expansion; to industries where foreign investments were more profitable than domestic investments and in cases where foreign equity investments could facilitate the illegal export of capital. Equity in foreign enterprises abroad was normally purchased by the export of machinery and this facility was, consequently, more restricted in scope than the other export incentives. Approval was also, occasionally, granted for foreign investment by non-machinery-exporting firms such as hotel management, etc.

The grant of permission for new investment or the expansion of capacity was linked to contractual obligations to export. In addition, several of the 59 "priority" industries were pressured to export at least 5 per cent of total production or face penalties in the form of reduced AU allocations, source-tying of import licenses and non-approval of capacity expansion. This policy was, prior to the 1966 devaluation, administered on an *ad hoc*, informal basis but was formalized in 1968 and 1969.

C. Quantification of the Export Subsidies

The manner of export subsidization remained complex even after the June 1966 devaluation. In view of the complexity in rates, drawbacks, import premia etc., quantification of the export subsidies can only be partial and, hence, only serve to indicate the broad orders of magnitude for the further analysis of the trends in export performance and growth. At the policy-making level, too, the important and unfortunate consequence of this highly complex policy-mix was that any systematic analysis of export policy and its results was precluded.

Cash Subsidies: The cash subsidy scheme for exports, in the post-devaluation period, operated on a detailed classification of nearly 300 product-types. As no comparable classification of export data was available, the export-share-weighted average cash subsidy rate could not be calculated. However, broad orders of the magnitude of cash subsidy for exports of engineering goods, chemicals and other groups can be estimated. Major cash subsidy rates (1969-70) are available for 80 per cent of engineering goods' exports during 1969 (Frankena, op. cit.). Weighted by the relative share in exports, the average cash subsidy rate for engineering exports (plus iron and steel) is estimated, during 1969-70, at 12.4 per cent and for engineering goods (excluding iron and steel) at 17.6 per cent.

Availability of Domestic Materials at International Prices: The supply of domestic steel to the engineering industry at international prices

was the most important component in this scheme. The average *ad valorem* subsidy on exports of engineering goods is estimated at 8 per cent of f.o.b. prices on the basis of the London Metal Exchange (LME) prices for different types of steel, the corresponding domestic Joint Plant Committee (JPE) prices and the corresponding input-output coefficient for the steel input into engineering goods in relation to the unit f.o.b. value of engineering goods exports.

The subsidy provided by this scheme was also of importance in exports of chemicals and plastics. In the plastics industry, in particular, raw materials such as low and high density polyethylene, PVC and polysterene were made available at international prices which, in some instances, were 75 per cent below domestic prices.

Duty Drawbacks and Tax Rebates: The incidence of drawbacks and rebates varied very greatly as between different products. In the engineering industry, for instance, these indirect rebates, in 1969, were estimated to range from 2 to 49 per cent of f.o.b. value with an export-share-weighted average of 17.5 to 18.0 per cent. (Frankena, op. cit.)

A more comprehensive sample survey during 1969-70 which also covered exports of lamps and tubes, cables and wires, radio and auto accessories, tires and tubes and small tools estimated that the incidence of these incentives ranged from 2 to 60 per cent of f.o.b. value. Thus, while it is impossible to arrive at a meaningful average of the export-subsidy equivalent of these incentives by commodity groups, it would appear that fairly sizeable incentives were provided – despite the continuing administrative difficulties in availing of the benefits.

STC Losses: The announced policy of the STC was to absorb losses on certain exports. The export-share-weighted average subsidy on all STC-assisted exports was 14 per cent in 1969-70 and 20 per cent in 1970-71 (loss: export value). The subsidy on the two major items – art silk fabrics and jute goods – was 23.5 per cent and 10.5 per cent respectively on average for 1969-70 and 1970-71.

Overall Assessment: The incidence of the other export incentives cannot be quantified even in broad orders of magnitude. However, unpublished sample surveys and interviews suggest that, particularly in the engineering industry, these other export incentives provided an *ad valorem* subsidy of 10 to 20 per cent for specific firms.

The grant of "preferred-source" AU import licences appears to have been important in the manufacture for export of machine tools, diesel engines, small tools, abrasives, tires and tubes, batteries and accessories and transformers. Preferential licensing for expansion of capacity was claimed, in interviews, to have been of importance for firms exporting batteries, tires and tubes and electric lamps. Profitability was also improved, in some instances, by being permitted to import banned and restricted items under AU licences.

The enormous complexity of the export incentives provided in the post-devaluation period precludes any reliable estimate of a single effective equivalent *ad valorem* subsidy rate on exports. It is clear, however, that for engineering goods exports, in particular, and for chemicals, plastics, sports goods, paper products, processed foods and some other new exports, the export incentives provided 45 to 85 per cent on an effective *ad valorem* basis.

D. Devaluation, the Price Level and Economic Activity

It has very often been contended that the inflationary aftermatch of devaluation would negate the price advantage that devaluation could have provided for exports. Prices had been increasing in India since 1962-63 and the more rapid rise in prices in 1966-67 was attributed by some analysts to the 1966 devaluation on a *post hoc ergo propter hoc* basis.

The endogenous impact of devaluation on the price level is worthy of more detailed analysis while, in particular, the effects on the price level of the two abnormal droughts of 1965-66 and 1966-67 must also be considered.

The major economic features represented in Table 8 are: (i) the fall in real income originating in agriculture in the drought years of 1965-66 and 1966-67, (ii) the continued rise in the wholesale price index, (iii) rise in the relative price of food articles as compared with the prices of manufactures in general and of equipment in particular, (iv) a shift in public sector expenditures from investment to consumption, (v) a drastic fall in net non-food foreign assistance disbursements after 1965-66, (vi) a decline in exports and in imports – particularly, complete machinery, (vii) a fall in the ratio of tax receipts to national income and of gross domestic savings to gross domestic product.

Effect of the Droughts on Prices: Prices of manufactures appear to be very closely related to the prices of industrial raw materials which

Table 8: Key Economic Indicators: 1964 to 1968

	1964-65	1965-66	1966-67	1967-68
1. Index Number of Wholesale Prices (1961 = 100)				
All commodities	122.3	131.6	149.9	167.3
Cereals	112.0	135.2	146.2	173.7
Food articles	135.4	144.6	171.1	207.8
Raw materials	115.9	132.8	158.4	156.4
Manufactures	109.0	118.1	127.5	131.1
Cotton manufactures	109.6	114.4	121.6	128.9
Equipment	108.	111.8	117.7	126.5
2. Public Sector[a] (Rs. billion)				
Tax receipts of centre state and local government	26.94	30.48	34.26	36.38
Subsidies	1.47	1.91	4.12	3.55
Public consumption	20.05	22.96	24.96	27.80
Gross public investment	20.10	21.22	21.86	20.01
Net defense expenditure	8.06	8.85	9.09	9.68
Overall deficit	1.52	3.31	2.26	2.57
3. Private Sector (Rs. billion)				
Consumption	178.49	180.02	213.18	256.85
Gross investment	17.55	21.60	24.01	28.01
4. Foreign Trade[b] (U.S.$ million)				
Exports	1714	1692	1542	1598
Imports	2833	2958	2771	2677
of which: food	592	676	868	691
maintenance	1684	1726	1393	1508
complete machinery	435	438	363	289
iron and steel	219	205	131	142
non-ferrous metals	123	144	114	119
5. External Assistance (U.S. $ million)				
Gross aid disbursements	1519	1623	1494	1575
Of which: Food aid	446	476	538	447
Project aid	701	684	497	380
Non-project aid	352	421	424	672
Non-food PL 480 aid	20	42	35	76
Debt service	255	315	365	444
Net aid other than food	818	852	591	684
6. National Income[c] (Rs. billion)				
At current prices	200.61	206.21	239.03	283.74
At 1960-61 prices	159.17	150.21	152.43	166.60
Of which: Agriculture	72.24	61.45	60.94	71.93
Others	86.93	88.76	91.49	94.67

Table 8 (continued)

	1964-65	1965-66	1966-67	1967-68
7. **Changes in Money Supply with the Public** (Rs billion)	3.35	4.43	3.80	4.51
Of which: (a) Reserve Bank Net Credit to government	1.36	3.98	1.89	1.66
(b) Commercial Bank holdings of government securities	1.41	1.14	0.83	0.96
(c) Total net bank credit to government [=(a) + (b)]	2.77	5.12	2.73	2.61
8. **Some Percentages**				
i) Gross public investment / Gross public outlay	50.0	48.0	46.7	41.9
ii) Tax receipts / National income	13.4	14.8	14.3	12.8
iii) Gross domestic savings / Gross domestic products	14.2	15.6	13.5	12.2

Source: *Economic Survey*, 1967-68 and 1968-69, Government of India, Ministry of Finance, Department of Economic Affairs. *Estimates of National Product, 1960-61 to 1969-70 and Index Numbers of Wholesale Prices in India*, annual issues from 1952 to 1970, Government of India.

[a] The total expenditure exceeds tax receipts plus the overall deficit because of non-tax revenue and capital receipts consisting of domestic and external borrowing.

[b] Maintenance imports consist of intermediates, raw materials, spares and components of machinery. Therefore, they also include iron and steel as well as non-ferrous metals.

in turn seem to be closely related to the prices of food articles.[9] The latter relationship is because a large proportion of industrial raw materials are agriculture-based and, consequently, are affected by the same factors that affect agriculture in general.

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[9] The following regression relationships were observed (figures in parenthesis are 't' values):

$$M_t = \underset{(24.29)}{56.6215} + \underset{(0.63)}{0.0267f_{t-1}} + \underset{(10.30)}{0.5050R_t} - \underset{(-4.57)}{8.1552D_t}$$

R^2 = 0.98; D. W=1.15: period 1951-1952 to 1960-1961 and 1962-1963 to 1970-1971.

$$R_t = \underset{(1.22)}{11.9317} + \underset{(2.56)}{0.6422f_t} + \underset{(0.75)}{0.1789f_{t-1}} - \underset{(-0.97)}{9.8396D_t}$$

R^2 = 0.91; D.W. = 1.57: Period 1952-1953 to 1960-1961 and 1962-1963 to 1970-1971.

where:

M_t = Index of wholesale prices of manufactures with base 1950-1951 up to 1960-1961 and with base 1961-1962 beyond 1960-1961.

f_t, R_t = Index of wholesale prices of food articles and raw materials respectively with base periods as for M_t.

D_t = A dummy variable (introduced to reflect the change in the base of the price index in 1961-1962) which takes the value zero up to and including 1960-1961 and the value 1 beyond.

Thus, an explanation of the behaviour of prices in the economy has to be mainly sought in the explanation of the behaviour of the prices of food articles.

With cereals having a large weight in the food price index, a simple simultaneous equation model is used to explain the prices of cereals.

In a poor peasant economy like India's, the bulk of food output is consumed on the farm. The behaviour of food prices is, however, explained by the marketed surplus – about which there is no time series data. Available data on market arrivals in selected markets also could not be used as the number of markets have varied over time.

The data used is a time series of the marketed surplus of cereals, up to 1964-65, based on the National Sample Surveys.[10] This data has been extended to later years by assuming that the marketed surplus has changed in the same proportion as the market arrivals of major cereals: the number of markets on which the market arrival data is based has remained the same since 1964-65.

The behavioural model estimated is:

$$y_t = \alpha_0 + \alpha_1 Y_{At} + \alpha_2 P_t + u_t \qquad (1)$$

$$y_t + z_t = \rho_0 + \rho_1 Y_{NAt} + \rho_2 P_t + v_t \qquad (2)$$

where the endogenous variables are y_t, the marketed surplus of cereals, and P_t the wholesale price of cereals relative to that of cotton manufactures. In defining the relative price P_t, the price of cotton manufactures was used because cotton manufactures are a major consumer item and because their price is highly correlated with the price index of manufactures in general. The exogenous variables are Y_{At}, the real income originating in agriculture; Y_{NAt}, the real income from the non-agricultural sector (both incomes measured in Rs. billion) and z_t, the imports of foodgrains (in million tonnes). In the first (supply) equation, it is postulated that the marketed surplus is related to real agricultural income and the relative price of cereals. In the second (demand) equation demand is related to the relative prices of cereals and real non-agricultural income. The reduced form equation for P_t was estimated at:

$$P_t = \underset{(3.26)}{0.9030} + \underset{(4.18)}{0.0133}\, Y_{NAt} - \underset{(-1.99)}{0.0135}\, Y_{At} - \underset{(-1.31)}{0.0193}\, z_t \qquad (3)$$

$R^2 = 0.6154$ Period 1952-53 to 1969-70.

[10] P.K. Bardhan and K. Bardhan, "Price Responses of Marketed Surplus of Foodgrains", Oxford Economic Papers, New Series, Vol. 23, No. 2, July 1971.

The two-stage least squares estimates of the two structural equations are:

$$Y_t = 5.6380 + 0.3707\,P_t + 0.1828\,Y_{At} \qquad R^2 = 0.2939 \qquad (4)$$
$$(1.40) \quad (0.10) \quad (2.40) \qquad D.W. = 1.91$$

$$y_t + z_t = 16.8539 - 12.4023\,P_t + 0.2341\,Y_{NAt} \qquad R^2 = 0.8383 \qquad (5)$$
$$(7.01) \quad (-2.49) \quad (5.84) \qquad D.W. = 2.30$$

In the supply equation, the relative price variable is not significant while the income variable is. In the demand equation, both the relative price and income variables are significant.

The reduced form equation for P_t can be used to assess the effect of the drought on the prices of cereals. This has been done as follows: first, an estimate of the expected value of P_t is obtained on the assumption that real income originating in agriculture *maintained* the level attained in 1964-65 both in 1966-67 and 1967-68 (income actually fell by 14.9 and 15.7 per cent, respectively). These expected values of P_t are then converted to an expected value index of cereal prices by multiplying by the observed value of the index of prices of cotton manufactures in these two years.[11] (Table 9).

Thus, the expected prices of cereals should have been lower by approximately 10 per cent in 1965-66 and 1966-67 had the drought not lowered real agricultural income (and hence the marketed surplus) in these years as compared with 1964-65. The above analysis suggests, therefore, that in the behavior of prices immediately after devaluation the effect of the two consecutive droughts of unprecedented proportion was the dominant one.

In evaluating the effect of drought, the relevant comparison is between column (3) and either of columns (4) and (5) in Table 9. Column (3) indicates that, given the actual values of real agricultural and non-agricultural incomes as well as imports of foodgrains, the results derived from the model imply an increase in cereal prices in 1965-66 over 1964-65 and a more substantial increase in 1966-67 over 1965-66. Had there been no drought (in the sense that agricultural incomes in 1965-66 and 1966-67 remain at the 1964-65 values), column (4) based on the model suggests very

[11] The effect of drought on the prices of cotton textile manufactures through its effect on raw cotton prices has not been incorporated as that would have required a more elaborate simultaneous equation model. In such a model, raw cotton prices will influence the prices of cotton manufactures and the latter will enter non-linearly in the relative price used (P_t) as it would be the denominator of P_t.

Table 9: **Index of Cereal Prices: 1964 to 1967**

Year	Observed Value	With Actual Values of Y_{At}	With 1964-65 Values of Y_{At} for 1965-66 and 1966-67	With Trend Values at Y_{At}
(1)	(2)	(3)	(4)	(5)
1964-65	139.3	133.6	133.6	135.3
1965-66	148.0	153.4	133.1	131.3
1966-67	175.8	175.0	152.3	146.3

little price change in 1965-66 and an increase in 1966-67 over 1965-66 of the same order in percentage terms as in column (3).

The price stability in 1965-66 and the substantial rise in 1966-67 in column (4) are due to the fact that while the urban demand for foodgrains increased because of the increase in real non-agricultural income Y_{NAt} in both years compared to 1964-65 (more so in 1966-67 because of a larger increase in Y_{NAt}), the imports of foodgrains which *increased* by 2 million tonnes in 1965-66 as compared to the previous year, fell by 1.50 million tonnes in 1966-67. Column (5) also shows the impact of the drought to be even larger than that shown by column (4). The reason is that the trend values of real agricultural income Y_{At} in 1965-66 and 1966-67 were higher than the actual value of Y_{At} in 1964-65 (which was itself higher than the trend value for that year).

Role of Monetary and Fiscal Policy: While a significant part of the post-devaluation price increase was due to the exogenous fact of the droughts, monetary and fiscal policies tended, during that period, to decelerate the trend rise in government expenditures and, thereby, in money supply as well. Such monetary and fiscal policies seem to have been motivated more by concern about the drought-induced price increases rather than by the 1966 trade-and-exchange-rate policy package. Consequently, along with the wage-goods price inflation, the contractionary fiscal and monetary policies contributed significantly to the industrial recession. The composition of government outlays also shifted away from investment to current expenditures and further reduced demand for the outputs of the capital goods sector.

The overall budgetary deficit of the central and state governments fell from Rs. 3.34 billion in the pre-devaluation year of 1965-66 to Rs. 2.26 billion and Rs. 2.57 billion respectively in the subsequent two years (Table 8); the budgeted (*ex-ante*) deficits for 1966-67 and 1967-68 were even lower at Rs. .52 billion and Rs. .89 billion respectively.

Furthermore, while money supply with the public increased by Rs. 3.8 billion and Rs. 4.51 billion respectively in the two post-devaluation years as compared with a rise of Rs. 4.44 billion in the pre-devaluation year of 1965-66, a major element in the expansion of money in India – increase in net bank credit to government – fell from Rs. 5.12 billion in 1965-66 to Rs. 2.73 billion and Rs. 2.61 billion in the subsequent two years.

The effect of the fiscal and monetary contraction was accentuated by an accompanying shift in the composition of government outlays. The pattern of outlays shifted in favor of current expenditure and among the significant reductions in government outlays was a cut back on railway expansion. This accentuated the deflationary impact of the fiscal policy because expenditure was shifting from items such as capital goods where output fell in consequence to items such as food where output could not increase owing to short-run production constraints. Thus, investment in the industrial sector decelerated on an accelerator-type mechanism whereas there was no offsetting impact through incremental outlays in agriculture. On balance, therefore, the effect of the shift in the composition of outlays was to accentuate the deflationary effect of decelerating government total outlays on production and investment.

Both the deceleration in total outlays and the compositional shift could be traced to two causes: the principal cause was the exogenous factor of the agricultural drought. Official policy pronouncements were explicit in stating that the government was concerned that any sustenance of the trend expansion in outlays would accentuate the rise in food prices that followed from the drought; and the same concern clearly dictated that, while current outlays could not be reduced (e.g., wages in the bureaucracy could not be controlled in a situation of rising prices without serious unrest), capital outlays could be axed without serious difficulty.

But the deflationary policy may, to a very small degree, have been inspired by the devaluation decision itself. There is some (though not considerable) evidence, in the writings of both the relevant Ministries and of outside economists, that the devaluation was thought to be necessarily inflationary. This belief, of course, stems from thinking in terms of the standard model of devaluation analysis, beginning with Alexander, Tinbergen

and Meade's work, that devaluation is likely to switch expenditure from foreign to domestic goods and that, for this policy to lead to improvement in the balance of payments, an offsetting deflationary policy is necessary. This view ignores one critical element in devaluations in a developing economy, namely, that the inflow of foreign assistance implies that the immediate effect of the devaluation is likely to be significantly deflationary because imports often exceed exports by a factor of even two. Also, the fact that the net, as distinct from the gross, devaluation was not quite as great as was commonly believed (Table 6) implied that any need for such a compensatory deflationary policy was, *ceteris paribus*, correspondingly less.

On balance, it seems that government decisions with respect to monetary and fiscal policy were largely motivated by the fear of inflation, prompted almost exclusively by the effects of the exogenous factor of the drought.

Recession and Inflation: There was, thus, the curious combination of a recessionary situation, with production and investment at reduced levels in the two years following the June 1966 change, along with an accelerated price increase. The latter was very much the result of the droughts. And the former was equally so. Indeed, if anything, the June 1966 policy package mildly improved the level of industrial production and, in the same fashion, may have had a favourable (even if negligible) impact on investment.

Effect on Production: The short run effect of the devaluation-cum-liberalization package on overall production was swamped by the effect of the two successive and severe droughts of 1965-66 and 1966-67. Compared to the expected values estimated from an exponential time trend fitted to the observations of the period 1949-50 to 1964-65, the actual values in 1965-66 and 1966-67 showed substantial falls. Except for a fall of 1.45 per cent in the case of jute in 1966-67, the shortfalls in all other cases (foodgrains, cotton, oilseeds and jute in 1965-66) ranged between 20.5 per cent and 26.2 per cent.

The fall in the availability of agricultural raw materials such as raw cotton and jute as well as in real incomes due to drought affected the output of the major export industries of cotton and jute textiles. The regression relating the output of these industries to raw material availability and real income variables indicates that, had the raw cotton output been at its trend value in 1965-66 and 1966-67 and had there been no fall in real income compared to 1964-65, the output of cotton textiles would have been higher by 5.7 and 5.1 per cent, respectively, in the two years. Similar calculations show that the output of jute textiles would have been higher by 6.4 and 12.3 per cent, respectively, in 1965-66 and 1966-67.

The effect of the liberalization package on the output of import-intensive industries (other than capital goods industries) was somewhat mixed, partly because of the demand effects due to the fall in real incomes and of some reduction in the availability of maintenance imports (i.e., raw materials and spares) in 1965-66. While the output of the chemical industries showed an increase of 11.41 per cent in the year following devaluation, the output of metal-based industries (other than machinery) fell by 17.71 per cent. This fall may have in part, been due to an unusual increase of 15.41 per cent in the year 1965-66 prior to devaluation and due to the indicated effect of the decline in output of capital goods industries.

On balance, one may conclude that the effect of the June 1966 policy package by itself on production was favorable.

The effect on the output of the machinery (capital goods) industries was heavily swamped by decelerating real investment, a factor virtually exogenous to the June 1966 policy package. Again, using a regression relationship between the index of output of capital goods and real investment and imports of finished machinery, it was found that, had the real investment levels been maintained in 1966-67 and 1967-68 at the 1965-66 level, the output of these industries would have been higher by 25 and 18 per cent, respectively in those two years.

Effect on Investment: While, therefore, the effect of the June 1966 policy package appears to have been mildly favorable, though not enough to offset the adverse effect of the drought, the effect on investment behaviour is far more difficult to disentangle. The data on investment (tenuous as it always has been) is not available by sectors of destination. Aggregate investment (both total and as a percentage of national income) has, however, shown a decline since 1965-66 and has fallen below the pre-1965-66 trend growth. This suggests a secular decline unrelated to the June 1966 policy package.

There are a number of explanations for the decline in real investment: (i) the decline in public sector investment as a consequence of drought-induced fears of inflation and its impact on private investment in general and investment in machinery industries in particular; (ii) disturbed political conditions in one crucial industrial state, namely, West Bengal, that discouraged private investment there; (iii) the liberalization of imports that was part of the policy package meant that the incentive to add capacity just to secure capacity-related allocation of imported inputs was blunted. In addition, the increased availability of imported raw materials reduced the profitability of import competing industries; and (iv) the liberalized industrial licensing policy of the government after June 1966 did not have

its full effect because of the continuation of import licensing, particularly in respect of capital goods. Further, the increasingly stringent controls of investment by the Larger Industrial Houses may have had an adverse impact on investment, particularly after 1968-69.

Overall Conclusions: It would appear, therefore, that the basic developments in the price level and production that dominated the economic scene in the two years following the June 1966 liberalization package (and over four years since the devaluation in the case of investment), were the product of factors that were substantially exogenous to the policy changes. In the main, the price rises were caused by the drought; the recession in production was also induced by the drought and was not the result of a concomitant "stabilization" policy aimed at an excessive deflation; while the decline in investment was largely the result of complex factors interacting on the Indian economic scene.

E. Liberalization and Export Performance

The effect of the June 1966 liberalization package on export performance reflected the interaction of the following factors: (i) the offsetting of the devaluation by export duties for several traditional export implied that there was negligible "net" devaluation for these exports; hence there was no reason to expect that their export performance should improve; (ii) the devaluation was largely neutralized on the "new" exports where the export subsidies were removed; while there were differential effects as between different industries within this group, the net devaluation was far less than the gross devaluation. Thus, on balance, *ceteris paribus*, only a modest (and possibly negligible) increase in exports might have been expected (on the assumption that price-elasticities of demand abroad were favorable); (iii) the June 1966 policy package provided incentives to those exports which had not, hitherto, benefitted from the earlier export promotion schemes; (iv) the devaluation implied a net increase in import parity that outweighted the net increase in the export parity when the changes in duties and subsidies were also taken into account. The net effect of this difference could have been to inhibit exports by industries using imported inputs. This effect was, however, moderated by the strong probability that the parity on imports of intermediates did not rise quite as much as indicated by the *average* import parity increase; (v) the abolition of the export subsidies should have significantly reduced the incentive to over-invoice exports and might, therefore, have been expected to result in a net decline in recorded exports; (vi) the increased availability of imports under the import-liberalization program, given the excess capacity in several of the new import-dependent industries, implied an outward shift in the export supply schedule, favorable to improved export performance in this non-primary-goods sector. On the other hand, this impact should have been

muted owing to delays in announcing the new import policy. There were also delays arising from the administrative procedures of donor countries: in the United States, a contract for aid-financed imports could be negotiated only after a six-week public notice (in the interest of small American suppliers).

Thus, the net effects of the devaluation plus the attendant changes in trade taxes and subsidies and the intended import liberalization (which constituted the total liberalization package) could have been expected to have only a negligible impact on the exports of traditional primary products and a mild, net improvement in the non-primary, new exports. (vii) the suspension of the major pre-devaluation export subsidies (the import-entitlements) was very soon replaced by cash subsidies and import-replenishment schemes. This should have been a major additional factor, leading to improved export performance in the non-traditional export sector.

These expectations were indeed to be fulfilled in the case of non-traditional exports, especially iron and steel, engineering goods and chemicals. Thus, as compared with $53.9 million in 1964-65 and $71.6 million in 1965-66, the exports in these three groups grew to $76.8 million in 1966-67 and $128.6 million in 1967-68.

On the other hand, the traditional exports actually declined. In fact, the juxtaposition (in Table 10) of major traditional export earnings (from jute and cotton textiles, tea, coir, tobacco, raw cotton, oilcakes and vegetable oils) against the major non-traditional export earnings (from engineering goods, iron and steel, and chemicals) shows clearly that the major reverses on the former front were significantly offset by gains on the latter front in the post-devaluation period. Thus, if we take the 1965-66 and the average 1966-69 export values, the increment in the earnings from the non-traditional exports was $67.2 million. On the other hand, the decline in earnings from (i) jute manufactures, tea and cotton manufactures was $120.7 million and (iii) these plus coir, oil cakes, tobacco, raw cotton and vegetable oils was $136.7 million. Thus, the increase in non-traditional export earnings was practically half of the decline in the traditional export earnings.

The quantitative significance of devaluation on export performance was analyzed through regression analysis. Since it was impossible to satisfactorily quantify the plethora of incentives or penalties implied by various export promotion schemes to arrive at the net realization per unit of export sales, the less satisfactory approach was adopted of estimating an export prediction equation for each major commodity group that included as explanatory variables, a proxy for domestic demand and domestic output; time trend as a proxy for world demand shifts and a

Table 10. Selected Indian Exports: 1964-65 to 1971-72

Selected Traditional Goods

($ mn)

	Jute Manu-factures	Tea	Cotton Fabrics			Coir Yarn & Manu-factures	Oil Cakes	Tobacco	Raw Cotton	Vegetable Oils — Non-essential & Essential
			Millmade	Handloom	Total					
1964-65	353.3	261.8	100.9	20.2	121.1	23.7	83.5	51.0	22.2	21.7
1965-66	383.9	241.1	99.0	17.5	116.1	22.5	72.8	44.4	20.4	13.5
1966-67	332.6	211.[illegible]	75.0	9.9	84.9	19.9	66.7	30.0	15.7	8.8
1967-68	312.1	240.2	79.4	7.7	87.1	17.1	60.7	47.5	19.7	10.3
1968-69	290.8	208.6	87.3	6.7	94.0	18.5	66.0	45.1	14.8	21.5
1969-70	275.5	166.0	83.2	9.7	92.9	17.9	55.3	44.5	19.6	12.3
1970-71	253.9	197.7	90.0	10.4	100.4	17.3	73.9	43.5	18.7	14.4
1971-72	356.1	210.0	89.7	13.4	103.1	18.0	54.1	60.4	22.3	15.0

Selected Non-Traditional Goods

	Engineering Goods	Iron & Steel	Chemicals and Allied Products	Total Exports
1964-65	30.1	9.2	14.6	1714.2
1965-66	34.9	17.5	19.2	1691.8
1966-67	30.7	31.6	14.5	1541.6
1967-68	43.5	69.2	15.9	1598.0
1968-69	89.8	99.3	23.3	1810.0
1969-70	119.3	102.9	29.6	1884.4
1970-71	173.9	89.6	39.2	2046.9
1971-72	158.9	34.2	57.1	2160.7

Source: *Economic Survey*, Annual issues since 1967-68, Government of India, Ministry of Finance, Department of Economic Affairs.

dummy variable which takes the value 0 for the years prior to the devaluation and the value 1 for the years after. The coefficient of this dummy variable, if significant and positive, is construed to mean that the devaluation-cum-subsidy schemes were effective in increasing exports.

The main conclusions of the regression analyses were that the non-traditional exports that should have been expected to benefit by the devaluation (such as engineering goods, iron and steel and chemicals) did indeed do so, with the devaluation dummy having a positive and significant coefficient in at least one version (if not all) of the regression relationships estimated for each of these commodity groups.

The regressions with respect to two of the major traditional exports (jute textiles and tea) had some explanatory power through considerably less so than in the case of the non-traditional exports: domestic supply or demand factors (as well as a secular decline in market share in the case of Tea) were found to be more significant in explaining export performance than the price or devaluation factor. In cotton textiles there were no regression relationships that had some explanatory power. The fact that the extent of net devaluation in the case of traditional exports was not significant explains in part our failure to obtain significant coefficients for the devaluation dummy. In addition, the marketing arrangements in respect of Tea in which, at least for part of the period of our analysis, some foreign firms operated both as exporters from India as well as buyers at London Tea Auctions complicated the picture. Also, in respect of jute textiles and tea, India is one of the few major suppliers and as such a simple explanatory relationship of the type that worked for explaining non-traditional exports cannot be expected to work.

F. The Liberalization Episode: Evaluation and Lessons

The liberalization episode was a complex of policies and an assessment of its effects appears to require a sharp distinction between the objectives of the policies and the public (and professional) opinion of the policies.

Objectives: The June 1966 policy reforms appear to have had the following major objectives: (a) the replacement of the inefficient *de facto* devaluation by a *de jure* devaluation; (b) the reduction, through the net additional devaluation plus import liberalization, of the adverse impact of the QR-regime on export performance.

The emphasis in official pronouncements seems to have been on the former objective. It was repeatedly stressed that the export subsidization

programs were inefficient and needed to be replaced by a formal devaluation. On the other hand, official pronouncements also promised an improved export performance, based on the net devaluation which had been built into the June 1966 package; on the improved availability of aid for raw material imports and on the basis that even the replacement of the subsidies by a formal devaluation, in the longer run, give more stable incentives for export promotion.

(c) It is not equally clear whether the government also intended to usher in import and industrial licensing policies that would have provided a more efficient set of incentives for the pattern of import substitution. In the beginning the import liberalization was apparently conceived to imply not just the additional availability of raw material imports (on AU licenses): there are some indications that the principle of automatic protection afforded by the "indigenous availability" system was also expected to be steadily dislodged. Industrial licensing policy also moved towards the more extensive de-licensing of industries.

It seemed, therefore, as if the June 1966 policy changes were intended in themselves and in the overall context of ongoing changes in industrial licensing also to (i) reduce the reliance on QRs through improved export performance and (temporarily) increased availability of aid, (ii) reduce simultaneously the element of automatic and indiscriminate protection that had resulted in a chaotic pattern of import substitution; (iii) increase the element of competition by permitting freer domestic entry into the de-licensed industries and with larger imports, and (iv) to improve export performance also by making investment and production responses to export incentives more readily possible than under the cumbersome licensing procedures.

Assessment of the Outcome: The outcome can then be judged in terms of these three sets of objectives. Judged in this light, the liberalization episode was less than successful, at best, and, probably, bordered on failure in the final analysis.

(a) The replacement of the *de facto* by the *de jure* devaluation was clearly accomplished by the very act of the June 6, 1966 devaluation. Import duties were reduced and export subsidies were also removed on that date. But, the intended reform of the trade and payments regime was not achieved and the regime lapsed again into Phase II as the cumbersome complex of multi-sided and selective export subsidization was again revived. The rationalization of the export subsidy situation was extremely short-lived indeed! It would appear that, with the overvaluation of the exchange rate still continuing to obtain on the overwhelming bulk of imports; and

with the exchange control mechanism still occupying its central role in the regime, the logic in favor of export subsidization was indeed strong: in principle, to offset the discrimination against exports in an overvalued system, export subsidization made sense. On the other hand, the indiscriminate administrative selectivity and other inefficiencies of subsidization did not make sense; and these were indeed to reappear, implying that the government had virtually abandoned its objective of rationalizing the export subsidization scheme on a continuing basis.

(b) The objective of improved export performance was indeed achieved if suitable adjustment is made for exogenous factors such as the second agricultural drought. This (post-adjustment) improvement was nonetheless not dramatic because the size of the net devaluation was significantly lower than that of the gross devaluation. At the same time, the revival of subsidization of the "new" exports clearly helped. Thus, it can be concluded that the total policy package (inclusive of export subsidization) as of, and since, June 1966 did improve export performance. However, it must be stressed again that this improved export performance was based, insofar as it reflected the impact of the revived export subsidization, on a set of subsidy policies that were conceived purely as export-augmenting policies rather than as efficient export-augmenting policies. Thus, the gain in export performance was, as before June 1966, bought at the cost of inefficiency in export promotion.

(c) The explicit surrender of the objective of a rationalized export subsidy system was also to be matched by the frustration of similar objectives in the fields of import and industrial policies: (i) the improvement in export performance did help *ceteris paribus*, to ease the restrictiveness of the QR-regime. However, the industrial recession, which was exogenous to the 1966 package of trade and exchange rate policy changes, also contributed significantly to this easing by reducing the demand for imports.

And, indeed, by 1967-68, as the industrial recession was giving way to a more buoyant industrial economy, the premia on several AU imports had already begun to reach higher levels. Thus, by 1967-68, the import liberalization did not quite match the original intentions of the government.

After the devaluation and associated measures were announced, they were followed on June 21, 1966, by a press note on import policy which marked the major steps toward liberalization of maintenance imports. A list of 59 "priority" industries was soon set up, extending to about 80 per cent of total organized sector industrial production. Liberal licensing for these industries, which included several exporting industries as well, was announced so that the units in these industries would be able to meet

their full requirements by merely seeking additional import licenses from the DGTD. In addition, the policy was to be liberalized (in respect of IDA credits) in easing restrictions on the value of the license that could be expended on specific imports, thereby ostensibly releasing the firms from obligation to seek detailed specific permissions each time they wished to change the composition of the imports they sought. Imports in the nonpriority sectors were to continue being regulated as before. Toward the end of 1968-69, these relaxations had begun to be tightened; and by 1970-71, the system was substantially back where it had begun, indicating a relapse into Phase II-type import controls.

(ii) Therefore, while the liberalization of maintenance imports did not remain on a continuing basis beyond 1968-69, the extension of the liberalization to imports that were in competition with domestic production was even shorter-lived: the principle of indigenous availability and the consequent automatic protection of domestic production was effectively enshrined again during 1966-67 itself.

(iii) The increase in industrial efficiency that was expected to result from increased competition was also to be frustrated. While liberalization of industrial licensing made it easier to establish new capacity, access to imported inputs, since it continued to be administratively controlled rather than through the market, was the point at which licensing was effectively being implemented! Little of substance, in relation to effective entry and hence, competition, was therefore to change in the system.

(iv) Finally, the expected improvement in the ability of exporters to respond to enhanced export incentives, following on the liberalized licensing structure was stymied because of the bureaucratic procedures and delays in respect of approval of product designs and changes or the expansion of capacity.

On balance, therefore, the basic objectives of the policies which peaked in the June 1966 set of measures do not appear to have been achieved.

Public Evaluation: Public evaluation, including that of financial commentators and the political and bureaucratic elite groups, appears to have been dominated by quite the opposite criteria! The "rationalization" of the trade and payments regime was hardly focused on and was implicitly either disregarded or not understood. On the other hand, the success (or rather the failure) was judged essentially by reference to the presumed

effect of the policy package on export performance and on the price-level. In addition, the political circumstances surrounding the policy announcements were critical; and the policy of increasing aid flows on condition that the policy changes were implemented seems to have created expectations that were not to be fulfilled. Furthermore, some concern about the impact on the terms of trade was expressed. Surprisingly, while economists would naturally worry about the possibly immediate deflationary impact of the devaluation, public evaluation of the industrial recession that followed June 1966 does not seem to have attributed the recession to the liberalization policies.

The public evaluation of export performance was deeply affected by the fact that total earnings failed to rise (and even fell marginally) in the two years after the devaluation. The fact that the net devaluation was significantly smaller than the gross devaluation and the drought (which was exogenous to the devaluation) adversely affected traditional exports was ignored.

Similarly, the *post hoc ergo propter hoc* illogic applied to the phenomenon of rising prices that dominated public consciousness in the year following the devaluation, with the effect of exogenous factors being completely ignored.

The political response to the liberalization package was extremely critical. The essential weakness of the package was the fact that it was widely considered – with much justification – to have been forced upon India by Western aid-donors.

In particular, since the Soviet Union, which is also a major aid donor in India, was not associated with this change of policies in June 1966, the charge has continued that devaluation is an "imperialist", "neo-colonial" policy.

The political failure of the 1966 liberalization package can thus be regarded as overwhelming: not merely did the government face a political storm over it but the political capacity to repeat such a package was damaged.

An interesting aspect of the decision by the donor countries virtually to impose liberalization on the Indian government by making aid conditional on such a change in policies was that the policies were often to be judged in terms of how much aid actually did come in, subsequent

to the devaluation! This was to work politically against the June 1966 reforms for the simple reason that, along with the general decline in aid flows during this period, Indian aid receipts were to decline steadily.

This was to lead to widespread criticism of the government by the influential press and politicians on the left, including those within the ruling Congress Party, that those politicians and economists who had accepted the imposition of these "market-oriented" and *laissez-faire*-type policies from the Western powers, and had hoped to be rewarded by large inflows of aid, had found that this "bribe" had not materialized and that the country had been unwittingly duped with their aid.

Lessons from the Experience: What principal lessons can we draw from this analysis?

(a) For the *donor* countries, the clear lesson is that changes in policy should not be forced – particularly those policies with an ideological slant in the public view – by using withdrawal of aid as the lever.

(b) For the liberalizing country itself, the implication equally is that the appearance (and, even more so, the reality) of surrender to "aid blackmail" would compromise the political success, and hence the repeatability, of a liberalization package.

(c) On the timing of devaluation-cum-liberalization, it is clearly important, in view of the tendency to judge major policy changes in terms of *post hoc ergo propter hoc* illogic, that developing countries (which typically have their price level and exports geared to their agricultural situation) should choose a time just after a good harvest.

(d) It is also clearly important not to delay the adoption of a liberalization package to a point where a large *de facto* devaluation has to be replaced by a still larger parity change. The distinction between gross and net devaluations is not generally appreciated and excessive expectations about improvements in export performance are aroused when the devaluation looks large. At the same time, the replacement of the *ad hoc* and selective export subsidization (which must invariably flourish under a large *de facto* devaluation) becomes both difficult and liable to contradict the assessed success of any net devaluation insofar as some exports, which were uneconomical but were promoted under indiscriminate export subsidization, are eliminated by the shift to a *de jure* devaluation.

(e) The impossibility of dislodging the principle of indigenous availability, and the consequent survival of sheltered markets, underline the conclusion that it is not easy to implement a "true" liberalization designed to improve the competitiveness and efficiency of domestic import substitutions when exchange control over a long period has corrupted domestic industry, bureaucrats and politicians into considering any production that competes with imports as necessarily desirable and therefore automatically superior to competing imports. It does suggest, however, that the more feasible, and less disruptive, approach to the dismantling of such automatic protection would be to convert the implicit tariffs into explicit tariffs and, then, to set a gradual time-schedule for bringing them to uniformity around a modest rate.

(f) Finally, the question arises whether the Indian policy package could have been improved, in any fundamental regard, so as to yield better results. This is a somewhat difficult question to answer as the analysis has indicated that there were several different factors interacting on the situation and the outcome: some were exogenous and beyond control while others were not. The question has, therefore, to be examined at several levels of approximation. If we assume that the Aid Consortium would necessarily have made aid flow conditional on a devaluation, and that the composition of the aid flow was also to be suboptimal, then, the only meaningful questions are related to whether (i) the government could have done better by changing the policy package (e.g., choosing a different degree of devaluation) and by choosing also a different set of fiscal and monetary policies, and (ii) whether the government could have done better by not succumbing to the pressure for devaluation.

Taking the latter question first: the economic situation had deteriorated in the aftermath of the Indo-Pakistan War of 1965 and the suspension of aid had led to shortages of imports that were affecting the economy badly. It seems, therefore, as if the effectiveness of aid diplomacy in forcing the devaluation was very great; and it does not seem that, unless the government could reasonably count on resumption of aid in any event, there was any real choice in the matter at that time.

If, then, the devaluation had to be undertaken anyway, was it of the correct magnitude? It is possible, in retrospect, to argue that it was either too much or too little. If, however, it is assumed (as it must) that the drought would follow the devaluation, it might have been quite sensible perhaps to have had a net devaluation as low as possible and to have claimed unambiguously that the sole objective of the devaluation was to replace the existing tariffs and export subsidies (which had been levied in lieu of devaluation) and that the short-term improvement of exports was not an objective of the devaluation. This might have eased the political repercussions

of the devaluation. On the other hand, if the decision to devalue was going to be unpopular anyway, then the objective should have been to devalue by as much as possible as it would not have been possible to use the instrument again in the near future! In fact, the (net) devaluation did help promote exports, it is arguable that a larger (net) devaluation would have led to more exports and also to greater economic activity. However, in the inflationary situation resulting from the drought, a larger devaluation would have led to price changes that might well have been politically unsettling at a difficult time. Given the external constraint of the demand for a devaluation by the aid donors as a precondition for the resumption of aid, and in view of the unprecedented drought that followed, the government was probably wise in having acted in a cautious manner by keeping the net devaluation within reasonable bounds.

The optimal course of action, in the light of later developments, would have been for the Aid Consortium to have pressed for a substantial unification of the tariffs and subsidies (a process which had begun) for the resumption of assistance and to have strongly urged that, at a future point (after the harvest had been reliably forecast as good) the *de facto* devaluation be replaced by a *de jure* change of parity. Such a course of action would have eased the political pressures and made the transition to a better and more efficient foreign exchange regime more attractive to the policymakers and the politicians and therefore also feasible. On the other hand, given the strong dissatisfaction that the Western aid donors felt with India's economic policies and performance, it would have been too much to expect them to forego the opportunity provided by the suspension of aid during the Indo-Pakistan hostilities of October 1965 to make the resumption of aid conditional on prompt changes in Indian economic policy.

G. Relapse into Phase II

In conclusion, the ultimate outcome of the attempted liberalization in 1966, which inaugurated Phase III, was a relapse into Phase II. Differential and significant export subsidies emerged; the QR-regime continued with a high premia on imports; the principle of automatic protection was continued and industrial licensing remained in substance. The emergence from the recession around 1969-70 appears to have combined with severely declining aid levels to produce a "structural deficit" that increased import premia and the consequent stringency of QRs, a phenomenon which was to be accentuated as the economy recovered to more "normal" levels of activity in the industrial sector.

The hope that India would have moved into a liberal regime with judicious use of exchange rate flexibility (either *de facto* or *de jure*,

and moderate tariffs to grant protection to industry, thereby, achieving greater economic efficiency and growth, appears to have been belied although the situation in 1970-71 was somewhat better in this regard than in 1965-66.

The events of 1971 that culminated in the creation of Bangladesh, the oil price increases and the acceleration of inflation since 1972 mainly because of faltering agricultural performance have made almost impossible any systematic analysis of the economy.

But, the virtual disappearance of US assistance since 1971 has further underlined the importance of efficient production and improved export performance which would be contingent on a successful transition to Phase III. However, it remains an open question whether there would be adequate appreciation of the situation and whether appropriate policies would be undertaken. There has been a tendency for official satisfaction over the recent substantial increase in export earnings without regard for the fact that this increase has arisen from increased unit values due to world inflation and not to any significant growth in quantities exported. On the other hand, it is noted that recent proposals for the floating of the rupee have, irrespective of their merits, not met with much opposition.

V. GROWTH EFFECTS OF THE FOREIGN TRADE REGIME

The growth effects of the foreign trade regime are analyzed in terms of (i) the inter-industry disparities in the productivity of investment that have emerged as a consequence of the foreign trade regime, (ii) the effects on export performance, (iii) the effects on investment, innovation and growth and (iv) the effects on domestic savings.

A. Inter-Industry Disparities

The index of domestic resource cost (DRC) used in the analysis to indicate inter-industry disparities is subject to a number of limitations: in particular, wide differentials in DRCs among alternative activities do not necessarily indicate commensurate losses to the economy. However, large variance in DRCs supports the conclusion of a detailed analysis of the system that the allocative mechanism had ignored opportunity costs in its operation.

Tables 11 and 12 present estimates of DRC for 77 sectors for 1963-65 and 1968-69 respectively – i.e. for periods before, and after, the 1966 policy changes.

Table 11. Domestic Resource Cost and Implicit Tariffs in Indian Industries: 1963-65

Sector Number as in 1964-65 Inter-Industry Table for India		Domestic Resource Cost per Unit Foreign Exchange Earned (or Saved)	Implicit Tariff Rate (per cent)
(1)		(2)	(3)
2.	Electrical equipment	14.25	175
3.	Non-electrical equipment	14.12	182
4.	Transport equipment	11.35	137
5.	Metal products	9.50	120
6.	Iron and steel	18.15	206
8.	Cement	10.55	83
9.	Non-ferrous metals	17.36	144
10.	Other minerals	6.08	30
11.	Rubber	183.02	29
12.	Leather	4.70	15
13.	Leather products	28.74	231
14.	Leather footwear	9.70	50
15.	Animal husbandry	7.32	30
17.	Sugar	11.88	40
18.	Plantations	4.66	0
19.	Gur and Khandsari	negative	40
20.	Vegetable oils	13.72	55
21.	Vanaspati	6.84	55
22.	Salt	4.66	0
23.	Starch	negative	243
24.	Milk products	negative	277
25.	Breweries and soft drinks	15.01	160
26.	Biscuits, confectionary	29.59	176
27.	Cigarettes and cigars	61.09	393
28.	Bidi	4.13	0
29.	Other tobacco products	4.70	393
30.	Fruits and vegetable products	30.59	150
31.	Cashewnut processing	negative	145
32.	Foodgrains	4.75	0
33.	Cotton	6.22	30
34.	Cotton yarn	4.42	10
35.	Cotton textiles	53.53	61
36.	Jute	5.23	10
37.	Jute textiles	22.56	66
38.	Woollen yarn	7.22	40
39.	Woollen textiles	17.01	100
40.	Raw silk	negative	609
41.	Silk textiles	33.68	609
42.	Man-made fibres	1048.66	609
43.	Artificial silk fibres	41.42	609
44.	Other textiles	14.06	136
45.	Oil seeds	6.79	40
46.	Sugar cane	4.56	0
47.	Tobacco	9.98	100
48.	Fruits and vegetables	7.22	50
49.	Other crops	4.75	0
50.	Fertilisers	4.23	0
51.	Ceramics and bricks	32.35	206
52.	Glass and glasswares	31.83	83
53.	Wood products	6.60	40
54.	Timber	6.65	40
55.	Chinaware, pottery	9.45	83
56.	Wood (others)	6.18	30
57.	Other forest products	5.70	30
59.	Petroleum products	negative	65
60.	Crude oil	0	0
61.	Rubber footwear	6.75	50
62.	Tyres and tubes	5.32	35
63.	Other rubber parts	6.03	40
64.	Paper and paper products	22.23	198
65.	Plastics	72.78	161
66.	Dye stuffs	13.16	170
67.	Paints and varnishes	29.02	190
68.	Insecticides and pesticides	12.02	150
69.	Drugs and pharmaceuticals	11.88	140
70.	Soap and glycerine	2.71	20
71.	Perfumes and cosmetics	19.52	155
72.	Miscellaneous chemicals	20.83	150
75.	Coal and coke	4.66	0
76.	Matches	10.12	100
77.	Printing and publishing	3.61	0

Table 12. Implicit Tariffs, Effective Rates of Protection and Domestic Resource Cost Estimates: 1968-69

Sector No. and Description	Effective Rates of Protection (per cent)	Domestic Resource Cost per Unit Foreign Exchange Earned or Saved	Implicit Tariffs (per cent)
(1)	(2)	(3)	(4)
2. Electrical equipment	119.6	.6.5	90
3. Non-electrical equipment	87.8	14.1	90
4. Transport equipment	61.2	12.1	70
5. Metal products	133.5	17.5	110
6. Iron and steel	151.9	18.9	127
8. Cement	43.8	10.8	50
9. Non-ferrous metals	37.9	10.3	40
10. Other minerals	38.7	10.4	40
11. Rubber	350.7	negative	67
12. Leather	127.6	17.1	120
13. Other products	120.0	16.5	120
14. Leather footwear	124.0	16.9	120
15. Animal husbandry	103.1	negative	125
17. Sugar	235.1	25.1	75
18. Plantations	-4.0	7.2	0
19. Gur and Khandsari	3354.0	259.2	50
20. Vegetable oils	139.5	18.0	80
21. Vanaspati	65.2	12.4	80
23. Starch	146.7	negative	75
24. Milk products	521.8	46.6	225
25. Breweries and soft drinks	81.6	13.6	100
26. Biscuits and confectionary	644.1	55.8	200
27. Cigarettes and cigars	113.5	16.0	110
28. Bidi	-12.4	6.6	0
29. Other tobacco products	113.0	16.0	110
30. Fruits and vegetable products	179.8	21.0	150
31. Cashewnut processing	86.2	14.0	150
32. Foodgrains	-1.0	7.5	0
33. Cotton	53.2	11.5	50
34. Cotton yarn	107.8	15.6	70
35. Cotton textiles	223.7	24.8	100
36. Jute	54.9	11.6	50
37. Jute textiles	457.3	41.8	110
38. Woollen yarn	26.6	9.5	70
39. Woollen textiles	230.2	24.8	110
40. Raw silk	103.1	15.2	40
41. Silk textiles	776.8	65.8	100
42. Man-made fibres	105.2	negative	590
43. Artificial silk fibres	55.5	11.7	110
44. Other textiles	114.4	16.1	110
45. Oil seeds	78.2	13.4	70
46. Sugar cane	-0.25	7.5	0
47. Tobacco	120.7	16.6	110
48. Fruits, vegetables	215.7	23.9	201
49. Other crops	-0.01	7.5	0
50. Fertilizers	461.8	42.1	201
51. Ceramics and bricks	62.5	12.2	60
52. Glass and glassware	47.7	11.1	60
53. Wood products	89.3	14.2	80
54. Timber	43.1	10.7	60
55. Chinaware, pottery	125.9	17.5	110
56. Wood (others)	80.0	13.5	80
57. Other forest products	80.0	13.5	80
59. Petroleum products	535.1	47.6	75
61. Rubber footwear	144.9	18.4	110
62. Tyres and tubes	59.7	12.7	75
63. Other rubber parts	135.6	17.7	110
64. Paper and paper products	171.3	20.4	135
65. Plastics	164.2	20.0	150
66. Dyestuffs	126.1	17.0	113
67. Paints and varnishes	141.0	18.1	113
68. Insecticides, pesticides	65.0	12.4	70
69. Drugs and pharmaceuticals	65.5	12.7	70
70. Soap and glycerine	165.8	19.9	110
71. Perfumes and cosmetics	44.3	10.8	100
72. Miscellaneous chemicals	104.1	15.3	89
75. Coal and coke	44.9	10.9	50
76. Matches	124.9	16.9	110
77. Printing and publishing	-21.0	5.9	0

While the differentials in DRCs are considerable even in the latter period, the enormous extremes in DRCs seen in 1963-65 are not as evident in 1968-69 consequent on the significant fall in the import premia after the 1966 liberalization and the recession.

The average DRC also declined in spite of the exchange rate moving from Rs. 4.75 to Rs. 7.50 per dollar. This was due to the fact that value-added, while increasing in domestic prices, increased significantly more at international prices. Implicit tariffs had, in general, fallen more sharply for outputs than for inputs in 1968-1969 and the fall in the import premia, thus, exhibits a negative escalation with respect to processing. This may well have been due to the effects of the recession on the prices of domestic outputs and on continuing import controls which eased pressure on domestic input prices.

ERPs in 1968-69 also demonstrate significant differentials among different activities.[12] For most activities, too, the implicit (nominal) rates of tariff are less than the effective tariffs.

Table 13 presents estimates of the simple and weighted average ERPs and DRCs for 1968-69 by major categories. Value-added at international prices was used as the weights for the weighted averages. Within the major categories, sub-groups with different interactions with international trade have been distinguished: essentially this separates the agro-based industries within each major group.

The ERPs for primary consumer goods are the smallest while those for the non-food consumer goods are the highest. Agro-based intermediate goods (semi-finished/finished) received much higher effective protection than other intermediate goods. Capital goods appear to have received lower effective protection than the other groups (except for primary consumer goods and primary intermediate goods).

The DRCs are 8.38 for primary consumer goods, 19.93 for non-food finished and semi-finished consumer goods and 13.36 for capital goods.

The rather steep protection of the non-food consumer goods and capital goods, which were among the major beneficiaries of the industrial-

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[12] The ERPs have been obtained from the calculations of DRCs on the basis that DRC = (ERP + 1)r where r = number of rupees per $. The calculations treat non-traded goods as part of value-added (the Corden method). The DRC calculations were provided by Dr. V.R. Panchamukhi of the University of Bombay. For the methodology of the calculations, see *Foreign Trade Regimes and Economic Development: India*, NBER, forthcoming, Chapter 13 (Appendix).

Table 13: Sectoral Average Tariff Rates, Effective Rates of Protection and Domestic Resource Cost Estimates, 1968-69

Sector Description (1)	Sector Numbers (2)	Simple Average: Implicit Tariff (3)	Simple Average: Effective Rate of Protection (4)	Simple Average: Domestic Resource Cost per Unit of Foreign Exchange Earned or Saved (5)	Weighted Average: Effective Rate of Protection (6)	Weighted Average: Domestic Resource Cost per Unit of Foreign Exchange Earned or Saved (7)
A. *Consumer goods*						
A.1 Primary	32,15,48,49	81.5	80.2	13.0	11.75	8.4
A.2 Semi finished and finished						
A.2.1 Food and beverages	17,19,21,23,24,25 26,27,28,29,30,31	110.4	201.7	21.6	90.8	14.1
Non-food	14,61,35,39,41,44 52,55,65,71,70,76	107.5	190.8	21.9	165.1	19.9
B. *Intermediate goods* (primary)						
B.1 Agro-based	11,18,33,36,40,45 46,47	48.4	77.2	11.9	33.1	10.1
B.2 Others	7,10,12,54,56,57, 60,75	71.7	62.8	12.7	47.1	11.4
C. *Intermediate goods* (semi-finished and finished)						
C.1 Agro-based	20,34,37,38	82.5	182.8	21.2	142.5	18.2
C.2 Others	5,6,8,9,13,42,43, 50,51,53,59,62,63, 64,66,67,68,69,72	122.5	140.4	18.2	106.0	15.5
D. Capital goods	2,3,4	83.3	89.5	14.2	77.9	13.4

Notes: 1. Negative DRCs have been omitted in making the calculations presented in the table.
2. The weighted averages have been derived by using the value-added at international prices as weights. Where value-added at international prices was negative, value-added at domestic prices was used. In these cases the ERP index was also calculated with value-added at domestic prices in the denominator of the formula for ERP, which puts the increment in value-added (due to protection) in the numerator.

ization process, and their attendant high DRC conforms to the general picture obtainable from other analyses.

The estimates presented are necessarily approximate and are presented in highly aggregated form but are adequate to demonstrate the high coefficient of variation in the returns on different activities.

Capacity Utilization in Industry: Manufacturing industry in India has generally been characterized by considerable excess capacity. The official data on capacity utilization is, however, unsatisfactory for any systematic analysis. The estimates on Table 14 have adjusted the official data to take account of the possibilities of multiple-shift operations.

However, even in the absence of adequate statistical data, it seems clear that certain aspects of the QR regime had adverse effects on capacity utilization.

The allocation of AU licenses on the basis of installed capacity created an incentive to build (unutilized) capacity so as to obtain more premia-yielding imports. Non-optimal increases in capital-intensity were further encouraged by the relative cheapness of capital and of CG imports, in particular. Furthermore, the expectation generally was that the QR regime could only become more severe with time and since capacity licensing was determined by the output targets in the Plan, the creation of excess capacity became a precautionary strategy that also pre-empted capacity increase by competitors.

Capacity utilization was also affected by the QR regime through the delays in the availability of imported inputs, spares and balancing machinery. It is also noted that imbalanced plants were deliberately built so as to claim that such plants could expand capacity by the import only of balancing machinery while new entrants into the industry would need to import the entire plant.

The presence of excess capacity did encourage some industries to export so as to improve capacity utilization but even these desirable tendencies were inhibited by the procedural bottlenecks in the QR regime in providing the necessary inputs.

It would thus seem reasonable to conclude that the foreign trade regime led to a wasteful misallocation of investible resources among alternative industries and also accentuated the under-utilization of investments within these industries.

Table 14: **Estimates of Underutilization of Capacity for Selected Groups of Industries (1961-64)**

Industry group	Underutilization (Per cent)				
	1961	1962	1963	1964	Average (1961-64)
Food products	9.9	9.3	24.4	16.9	15.1
	(7.5)	(6.5)	(21.6)	(15.2)	(12.7)
Tobacco products[a]	10.6	4.4	5.2	12.7	8.2
Textile products	7.0	7.9	9.1	6.3	7.6
	(6.3)	(7.3)	(8.2)	(5.8)	(6.9)
Wood and cork products[a]	35.1	27.1	16.9	16.0	23.8
Paper and paper products[b]	11.2	10.5	7.8	11.7	10.3
Leather and leather products	59.9	57.8	54.4	56.0	57.0
	(27.6)	(24.4)	(17.9)	(21.5)	(22.8)
Rubber and rubber products	16.1	23.1	25.6	26.7	22.9
	(5.7)	(7.1)	(11.2)	(10.6)	(8.7)
Chemicals and chemical products	53.5	56.8	59.3	55.3	56.2
	(29.0)	(23.9)	(21.2)	(30.0)	(26.0)
Non-metallic–mineral products	36.2	34.7	33.0	35.3	34.8
	(22.1)	(20.7)	(19.0)	(21.4)	(20.8)
Basic metals	21.1	11.3	8.8	11.1	13.1
	(13.3)	(4.5)	(5.3)	(7.9)	(7.8)
Metal products	53.9	56.2	54.8	54.2	54.8
	(23.0)	(22.2)	(17.4)	(17.3)	(20.0)
Machinery except electrical machines	26.1	32.1	26.6	37.2	30.5
	(12.7)	(11.4)	(7.3)	(21.1)	(13.1)
Electrical machinery and appliances	39.7	43.6	45.4	41.8	42.6
	(8.3)	(11.7)	(11.7)	(10.6)	(8.1)
Transport equipment	49.3	42.2	41.8	35.7	42.4
	(22.5)	(18.2)	(16.3)	(10.7)	(16.9)

Note: This table is based on both present and desirable working conditions. Figures in parentheses are for present working conditions.

Source: *Underutilization of Industrial Capacity*, National Council of Applied Economic Research, New Delhi, 1966.

a. For present working conditions, these industries show overutilization.

b. The number of shifts working at present and the number considered desirable are the same for industries of this group.

B. Export Policy and Economic Performance

The interaction between export and economic performance is analyzed by assuming that the efficiency and choice of techniques, the available resources and knowhow are given and that the effect of improved export performance can essentially be captured in a planning model framework by reworking the model with a revised export vector. For this purpose the Eckaus-Parikh planning model for the Indian economy is used.[13]

It should be emphasized at the outset that this exercise, is no more than illustrative for a number of reasons, the more important of which are:

(i) The model (in the Guidepath I version used) has no constraint relating savings to income generation except through the mild requirement (the so called monotonicity constraint) that aggregate consumption in each period lies above a geometrically growing floor. Because of this and the postulated high exponential growth rates subsequent to the planning method, the model results in a strikingly high marginal ratio of savings to GNP. An additional consequence is that the GNP growth over a 15-year horizon in the reference and simulation runs exceeds 10 per cent per annum, a rate considerably exceeding the actual performance managed by the Indian economy in recent years.

(ii) The fact that the data of the model, particularly the input and capital coefficients, are not only dated (in relation to estimates which may be made now) but that some of the capital coefficients have turned out to be very optimistic compared with experience (especially in agriculture), also accounts for the high growth rates of GNP which resulted from the model and which exceed the actual performance of the Indian economy.

(iii) The aggregation in the model, resulting in only eleven sectors for the economy, also makes it impossible to draw meaningful comparative advantage implications from the model. Thus, a hypothetical, and very modest, increase in exports which is centered heavily on sectors other than agriculture, food and clothing is postulated. (However, even such a policy, more in keeping with the notions of the planners about the composition and feasibility of India's export performance, is then shown to be productive of a better economic performance).

On balance, we still consider the present exercise to be instructive in its illustration of the growth potentiality of additional exports simply

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13 R. Eckaus and K.S. Parikh, *Planning for Growth*, Massachusetts Institute of Technology Press, 1968.

because any unhappy feature of the model will affect both the simulation and the reference runs; and there seems to be no clear presumption that the difference between the two runs, attributable to the change in the export sector, will be significantly affected. It should, however, be noted that the Eckaus-Parikh model is a planning model and not an econometric (behavioral-predictive) model – hence also the discrepancies between the model's simulation runs and actual developments in the Indian economy.

Among the various models considered by Eckaus and Parikh, their long-term model, called *Guidepath Model I*, is utilized in this analysis. In this model, the time span is stretched to 18 years, aggregated into six periods of three years each. Such aggregation was necessary to stay within the bounds of computational capacity. The terminal conditions of this model are determined by specifying that in the post-terminal periods, the growth rate of various elements of final demand such as consumption, government expenditure, exports, capital replacement requirement, and imports must exceed specified minimum levels. Also, a process of modernization of the agricultural sector was built into the model.

The 18 years covered were from 1966 to 1984; and the six periods were 1966-69, 1969-72, ..., 1981-84. Of the 11 sectors of the model, four sectors (electricity, transportation, construction and housing) produced non-traded goods. Of the seven trading sectors, agriculture and plantations and, to a certain extent, food and clothing produced traditional exportables. (No additional exports were postulated from these sectors). Thus, the exports of the trading sectors were augmented in the simulation (compared to the reference run) as shown in Table 15.

Thus, in the simulation run, total exports in the final period were higher than in the reference run by about six per cent. Of course, the increase in exports of non-traditional sectors was considerably higher than six per cent.

The impact of this order of increase in exports on macro-economic variables such as gross national product (GNP), consumption, investment and the savings/GNP ratio is shown in Table 16. The changes in shadow-price of foreign exchange between the two runs are depicted in Table 17.

The results reported in Tables 15 through 17 are consistent with *a priori* expectations. It turned out that, in the reference run, only the outputs of sectors 1 and 2 were limited by capacity in the first period. As such, when higher export targets are set in the simulation run, including in particular for sector 2, these are met by scaling down consumption. The additional foreign exchange earned by these exports is utilized to increase investment. However, because of the monotonicity constraint,

Table 15: Exports in Reference and Simulation Runs
(Rs. 10 million at 1959-60 prices)

Sector	1966–69			1981–84		
	Reference	Simulation	Difference	Reference	Simulation	Difference
1. Agriculture and Plantations	696.13	696.13	0.00	1236.65	1236.65	0.00
2. Mining and Metals	383.76	401.76	18.00	1705.20	1813.20	108.00
3. Equipment	183.26	219.26	36.00	1065.67	1281.67	216.00
4. Chemicals	64.66	78.16	13.50	725.13	806.13	81.00
5. Cement and non-metals	7.51	16.51	9.00	176.71	230.71	54.00
6. Food, clothing and leather	1337.64	1342.14	4.50	2240.25	2267.25	27.00
7. Electricity	--	--	--	--	--	--
8. Transport	--	--	--	--	--	--
9. Construction	--	--	--	--	--	--
10. Housing	--	--	--	--	--	--
11. Others and Margin	414.61	414.61	--	963.22	963.22	0.00
TOTAL	3087.57	3168.57	81.00	8112.83	8598.83	486.00

Table 16: Macro Variables in Reference and Simulation Runs
(Figures except in row 6 in Rs. 10 million at 1959-60 prices)

	1966–69			1981–84		
	Reference	Simulation	Difference	Reference	Simulation	Difference
1. Gross National Product	77590.1	77647.1	+57.0	310860.5	312593.0	+1732.5
2. Consumption	51061.6	51051.0	-10.6	131388.0	132446.0	+1058.0
3. Investment	18603.6	18671.2	+67.6	156897.5	157571.9	+ 674.4
4. Exports	3087.6	3168.6	+81.0	8112.8	8598.8	+486.0
5. Imports	4587.6	4668.6	+81.0	8112.8	8598.8	+486.0
6. Savings/GNP	0.22044	0.22114	+.00070	0.50472	0.50408	-.00064
7. Sum of discounted consumption				221847.41	222623.87	776.46
8. Sum of undiscounted consumption				521529.44	524253.95	2724.51

Table 17: Shadow Prices in Reference and Simulation Runs

Period	Foreign Exchange		Monotonicity of Consumption	
	Reference	Simulation	Reference	Simulation
1966-69	6.12	9.19	0.00	3.92
1969-72	11.85	2.73	0.03	0.78
1972-75	1.38	1.33	0.01	0.10
1975-78	0.73	0.72	0.00	0.00
1978-81	0.39	0.38	0.05	0.05
1981-84	0.54	0.54	0.15	0.15

Note: Figures represent the change in sum of discounted consumption over six periods per unit in change foreign exchange availability or the lower bound on consumption in any period.

consumption can be pushed down only to its lower bound. For these reasons, an increase of Rs. 810 million in exports during 1968-69 leads only to an increase of Rs. 570 million in GNP and an increase of Rs. 676 million in investment. Also, because the monotonicity constraint on consumption becomes binding, its shadow price goes up from zero in the reference run to 3.92 in the simulation run in the period 1966-69. The shadow price of foreign exchange, reflecting as it does the cost of additional exports, goes up compared with the reference for the reason mentioned earlier that the additional exports are made at the expense of consumption.

However, the increase in investment in 1966-69 made possible by the availability of extra foreign exchange from additional exports, eases the capacity constraints in subsequent periods. Since in subsequent periods, exports are further increased, the question arises whether the extra capacity created by larger investments in earlier periods is sufficient to meet the additional export demands. It turns out that up to and including the period 1972-75 the extra capacity created is not enough and consumption has got to be sacrificed relative to the reference run. This is also reflected in the higher shadow price for monotonicity of consumption (in the simulation run) in these periods.

For the last three periods, extra exports result in extra consumption and investment. Thus in the final period, increase in export is Rs. 4,860

million while the increase in GNP is Rs. 17,325 million, of which Rs. 10,580 million is additional consumption and Rs. 6,744 million is additional investment. With production capacity increasing over time in each sector, it becomes less expensive to raise exports and hence the shadow price of foreign exchange falls below that of the reference run up to 1972-75. It becomes nearly equal in the two runs from 1975-78 on, for the reason that exports do not run into capacity constraints in the simulation run from this period.

In conclusion, we can state that additional exports in earlier years, even if they are made by pushing domestic consumption down, more than pay for themselves by increasing investment and growth in the future. Computable planning models such as the Eckaus-Parikh model are necessarily cumbersome; they build in a number of parametric assumptions and functional relationships that are less than accurate, and work with objective functions and related constraint-specifications that presuppose an accurate reflection of what the planners have in mind. In the nature of the case, therefore, any "runs" with such models can only be broadly suggestive; and, in this case, they do underline rather strongly, given the very moderate nature of the export increase specified, that a policy of promoting exports more energetically would have produced better economic results.

C. Investment, Innovation and Growth

Among the significant, but relatively intractable, issues in the study of QR-regimes is whether such regimes have any discernible impact on the inducement to invest and the inducement to innovate.

The former question is of interest as some developing countries are presumably in a position where the emergence of an adequate number of entrepreneurs to exploit economic opportunities is a prerequisite for industrialization. Hence, if it can be argued that QRs provide the economic framework needed to induce investment and that this inducement could not also be provided by alternative and more efficient policies, that should be considered a merit of the QR-regime.

Closely linked to this is the question whether we can relate QR regimes to the quality of entrepreneurship and the inducement to innovate.

Inducement to Invest: Industrialization in India began in the nineteenth century and developed under moderate (or even negligible) tariffs during the first part of the twentieth century. The leading industrial entrepreneurship tended to be economically rational and even "progressive". Thus, Jamshedji Tata, who in 1913 set up the first successful Indian steel

mill, came from a background and fortune in cotton trade; and he built up an efficient and stable industrial force which was critical to performance in a steel mill. In Tata's case, the entrepreneurial activity even extended to setting up, from the beginning, a school for training Indian technicians to take over from the foreign personnel at the earliest!

Thus, in the Indian context, it is not persuasive to argue that a QR-regime, with its automatic protection for indigenously produced items, was necessary to induce industrial investment. Furthermore, in India, the public sector has been an important investor in industry, thus weakening still further the argument for a QR-regime to provide automatic and indiscriminate protection to induce investment.

Inducement to Innovate: The QR-regime, only served to influence and, in conjunction with the industrial licensing machinery, to determine a pattern of import substitution that certainly appears to have been relatively chaotic and unmindful of economic costs. Did it also influence adversely (i) attention to quality and (ii) technical progress? There is also the related question: does an export orientation produce better results in both these directions?

Unfortunately, no meaningful statistical index of "quality" can be devised. On the other hand, it is manifest that in a regime which grossly reduces competition and creates a captive market for many products due also to the policy of "indigenous availability", it would be "rational" and profitable for an entrepreneur not to pay attention to the quality of production. Thus, it is only the "quality-minded" entrepreneurs (like Tata, Mahindra and Mahindra, and Kirloskars, to take the most noted exceptions) who are known to produce products that approximate international standards of performance for similar products. For the rest, the effects of the economic regime appear to be evident, though impossible to quantify: products with faulty performance because of production defects.

Closely related to the failure of producers (even in the organized sector) to raise their output to satisfactory levels of performance, but shading into the problem of innovation is the phenomenon of "design deficiencies". In the engineering goods industries during the 1960s, Indian designs were fully dominated by other designs, irrespective of the shadow or actual prices of the factors of production (Frankena, *op. cit.*). While it is conceivable that the cost of buying or imitating these superior designs may outweigh the private and social gains, the examples do strongly suggest that the Indian policy environment has produced incentives for a lag in adaptation to more efficient designs.

Recent studies on productivity in manufacturing in India have come to conflicting conclusions, depending primarily on the nature of the adjustments made in the available series on capital. Using the Solow method of estimating Hicks-neutral technical changes, but a capital series that shows a drastic decline in capital productivity from 100.0 in 1946 to 25.4 in 1964, a trend rate of decline in neutral technical change of 1.6 per cent has been estimated.[14]

On the other hand, estimates have been made on adjusted capital series by estimating the purchase value of capital from the available written-down book-value data by more detailed and careful methods of adjusting for the age-structure of capital assets and rate of depreciation. These estimates show an *increase* in capital productivity over the period 1946-64 and lead to a positive Hicks-neutral, overall productivity change at 2.8 per cent annually.[15]

Apart from the adjusted capital estimates used, the latter analysis is, probably, closer to reality because, in spite of the hypothesis that the sheltered-markets led to negligible overall improvements in efficiency of factor use, new investments in the new industries could embody the growth of knowhow abroad. The estimation of (Hicks-neutral) technical progress, using the "disembodied" progress assumption, will thus tend to show positive, and even large, improvements in overall productivity even when there are no such improvements. Unless, therefore the estimation of productivity change is adjusted for "embodied" technical change, a factor of importance where the bulk of capital goods were imported, no firm econometric conclusion can be reached as to whether the framework of policies retarded the growth of overall productivity in the economy.

Yet another approach to the relationship of import substitution and export orientation to technical change is to examine the nature and incidence of research and development (R & D) in Indian industries. There is increasing evidence that R & D expenditures are increasing in a number of import-competing industries; in the very large firms; and in the process of import substitution itself and reflects a quasi-Kennedy-Weizsacker process of search for processes that would avoid the use of scarce, imported materials and develop the use of cheaper, indigenous inputs. Of course, this R & D activity may be expensive in relation to results: but it is certainly there now and is adding to the technological maturity and expertise that the country

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14 A. Banarjee, "Productivity Growth and Factor Substitution in Indian Manufacturing", *Indian Economic Review*, XI (New Series) No.: 1, 1971.

15 S.R. Hashim and M.M. Dadi, *Capital-Output Relations in Indian Manufacturing (1940-1964)*. The Maharaja Sayajirao University Economics Series No. 2, University of Baroda, 1973.

seeks as an objective in itself. Historically, one has only to recall Japan's transition from shoddy manufacture under bad imitation to decent manufacture under good imitation to excellent manufacture under outstanding imitation to innovative manufacture in recent years. In such a historical perspective, it would appear logical to entertain the strong possibility that at least *some* of the inadequacies noted earlier may be due to the difficulties of "first-stage" manufacture in a number of modern industries and that the growth of R & D in recent years may represent a growing transition to decent manufacture.

The bulk of private R & D expenditure is concentrated in the larger companies, and level of such expenditure generally rises with the size of the company. A sample survey[16] was conducted primarily of the chemical and dye (and a few engineering) firms in the Bombay region, owing to limitations of finance and willingness of firms to discuss the issues raised. Of the 18 firms interviewed, four were subsidiaries of foreign corporations, and of the remaining 14, six did not belong to the Large Industrial Houses. Further, of the 14 Indian firms, only four were joint ventures and the remaining were purely Indian in ownership. Thus, the sample managed to straddle all the important types of structure operating in Indian industry. Based on this survey and drawing on the available literature on R & D in India, two principal conclusions emerge: (i) that the import substitution strategy does not eliminate the incentive to conduct R & D but merely imparts a bias toward conducting it in a different direction. The important question, then, is whether the kind of R & D induced by such a strategy of import substitution reduces or increases welfare in relation to the R & D that would otherwise have been conducted; and (ii) that orientation toward export markets does not in itself seem to increase the incentive to conduct R & D, so that it is difficult to sustain the argument that an export promotion strategy is superior to an import substitution strategy because it will lead to greater (and presumably welfare increasing) R & D in the economy.

Origins and Types of R & D in Indian Industry: There are basically three types of activity that seem to have provided the impetus in Indian industry to establish R & D:

(i) Quality Control: Firms that started with quality checks often found that processing costs could be reduced by quality checks at a number of production stages instead of checking it after final manufacture. Thus, quality control led to process control, and process control often extended into a study of processes and possibilities of improving them.

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16 For details, see: Ashok V. Desai, *Industrial Research and Development in India*, mimeo: New Delhi, April 1972.

(ii) Material Adaptation: Often the policy of blanket import substitution forced firms to use indigenous substitutes; and where the domestic and the imported materials differed in quality, processes had to be developed to make the indigenous product useable. Material adaptation should have been a technical service rendered by the supplier of the substitute. But, the principle of banning imports on the principle of "indigenous availability" relieved domestic suppliers of the need to provide sales service; and often the indigenous producers were too small to solve technical problems arising in the use of their products. Thus, many chemical firms had to undertake R & D to standardize properties of indigenously available materials and to improve yields achievable with them. Clearly, the process of import substitution itself led to the encouragement of R & D activity in Indian Industry, primarily through the creation of the need to adapt processes to the use of new, indigenous materials in many cases, thus supplementing the normal establishment of R & D activities for quality control and customer-service operations. In fact, this kind of impetus was also imparted by strict controls over the importation of plant and equipment; and, in some chemical and engineering industries, this led also the creation of special plant-designing skills.

(iii) R & D and Exports: It did seem to emerge from the survey interviews that several of the companies engaged in exporting as a continuous activity did consider that quality improvement was important, whereas those firms that engaged in exporting only as an *ad hoc* activity seemed to think that quality problems were not important and that the better production could be diverted abroad whereas the inferior products could be disposed of on the domestic market. It does seem, therefore, that export orientation did suggest greater preoccupation with quality of production. On the other hand, the survey also showed that this export orientation did not seem to have led to any significant acceleration in R & D expenditures or to a more sharply focused research effort. Some firms even claimed that their need to engage in R & D had been reduced by expansion into export markets because they had had to undertake R & D to supply a variety of products to maintain a large sales volume at home whereas concentration on a few, standard items in the export market had reduced their need for R & D.

R & D and Government Policies: The net effect of government policies on R & D, in the Indian context, also reflected the impact of several other factors: (i) The strict industrial licensing policy meant that, if R & D was used to develop new types of outputs or new uses of given capacity, new licensing would be required, with its attendant delays and new uncertainties as to whether R & D would lead to any economic returns. Thus, the inevitable "excess capacity" that would result from the develop-

ment of R & D activities could not be profitably used to undertake product-diversification research, thus reducing, *ceteris paribus*, the level of R & D expenditure undertaken; (ii) The early industrial licensing policy also had laid great stress on joint ventures with foreign capital. This also frequently led to easy and repeated purchase of foreign technology, reducing, *ceteris paribus*, the need to undertake domestic R & D; (iii) Recently, however, the government introduced liberal R & D incentives. Thus, by 1971, R & D expenditure within the firm earned a 33.33 per cent tax allowance; donations to outside institutions for such research earned a tax allowance of 27.5 per cent; and research contract payments to associations, universities, and government agencies could be written off up to 10 per cent of a year's corporate profit. There were also tax rebates introduced on the sale of know-how: domestic royalties earned a rebate of 40 per cent whereas royalties earned from sales of technology abroad were free from tax.

It is somewhat early to disentangle these different forces at work in determining the R & D efforts in India. But, there is adequate evidence to be skeptical of some of the simplistic hypotheses in support of the export promotion strategy as being R & D-stimulating and the import-substitution strategy as being R & D-inhibiting. Nonetheless, the general incentives to reduce costs and to maintain quality cannot but have been reduced by the sheltered-markets provided by policies of automatic protection and strict control over domestic entry. Thus, in this sense, these policies impaired India's progress toward industrial efficiency at the speed that a framework providing for more effective competition would have made possible.

D. QRs and Domestic Savings

Given the inadequacies in national income estimates in India[17] no attempt was made to build an elaborate simultaneous-equation model of the economy. Instead, single-equation regression relationships were used to obtain some useful insights into overall savings behavior.

In the simplest relationship,

$$S_t = \alpha_0 + \alpha_1 \; Y_t + u_t \qquad (1)$$

where S_t stands for aggregate savings, Y_t for national income and u_t for a random disturbance term, all variables relating to year t.

[17] For a discussion of the limitations of national income and savings data, see: papers by M. Mukherjee and A. Rudra in: C.R. Rao (ed), *Data Base of Indian Economy*, Vol. 1, The Indian Econometric Society and Statistical Publishing Society 1972.

In estimating equation (1), there is a choice in defining savings and income (a) in either gross or net terms, (b) at either nominal or real value, and (c) in either per capita or aggregate terms. Since the basis on which replacement (of capital) expenditures is estimated is extremely weak, variables were defined in gross rather than net terms. Again, the concentration was on the relationship between real magnitudes, though in a more elaborate model the impact of monetary factors should be brought in. Finally, to a limited extent, both alternatives in (c) were experimented with.

The analysis covered the period from 1951-52 to 1969-70. Due to the political and economic changes in India since 1965-66 it has been suggested that the period since then is radically different from the earlier period. However, this contention could not be adequately tested as data was available only till 1969-70. Relationships were estimated for the entire period and for the period 1951-52 to 1965-66 to determine any sharp break in the income-savings relationship.

Since the exchange control regime was relatively more stringent during the 1960s, the income-savings relationship has also been examined as between the decade of the 1950s and that of the 1960s.

Deflators to convert nominal investment into real terms were available from the Planning Commission and the Central Statistical Organization. Where savings are concerned, the following alternate ways were used to obtain real savings as savings were estimated as a residual from investment net of the current account deficit: (i) by deflating merchandise exports and imports by the respective value indices without deflating the net non-merchandise balance, and (ii) by deflating the entire current account balance by the unit value index of imports as, then, the real resource potential of the minimal resource flow is depicted.

The estimate of the marginal propensity to save was not very sensitive to the choice of deflators or to the procedure by which the real external resource flow was calculated: Table 18 contains the results obtained by adopting the first of the two alternative deflators and procedures described above. As is to be expected (given that population, income and savings were rising over time), the marginal propensity to save in each regression involving per capita variables is higher than in the corresponding regression with aggregate variables. The goodness of fit of the per capita relationship is, however, somewhat poorer.

Inter-period comparisons of the marginal propensity to save (from Table 18) suggest little evidence that either the post-1966 liberalization years significantly changed the marginal propensity to save from the preceding period or that the 1960s period of relatively tighter exchange situation was

Table 18: **Savings Regressions**

1951-52 to 1965-66		1951-52 to 1969-70	
$S = -1509 + 0.24\ Y$ (264) (0.02)	$R^2 = .93$	$-1216 + 0.21\ Y$ (207) (0.01)	$R^2 = 0.94$
$s = -68 + 0.33\ y$ (13) (0.04)	$R^2 = 0.85$	$-61 + 0.31\ y$ (10) (0.03)	$R^2 = 0.87$
1951-52 to 1959-60		**1960-61 to 1969-70**	
$S = -532 + 0.16\ Y$ (563) (0;05)	$R^2 = 0.63$	$-834 + 0.19\ Y$ (610) (0.03)	$R^2 = 0.80$

Note: Figures in parenthesis are standard errors.
Per capita variables indicated by s and y.

characterized by a higher marginal propensity to save than the somewhat less stringent period of the 1950s.

Domestic Savings and External Resources: The preceding analysis has been on the basis that savings are a function of income alone. However, it has been suggested that savings are a function of domestic expenditure, rather than income so that relationship would, then, be:

$$C_t = \beta_0 + \beta_1 (Y_t + F_t) \qquad (2)$$

where F_t is the foreign capital inflow, defined as the negative of the balance on current account and C_t is domestic consumption. The following equation, then, results:

$$S_t = \alpha_0 + \alpha_1 Y_t + \alpha_2 F_t + u_t \qquad (2a)$$

It is noted that when $\alpha_1 = (\alpha_2 + 1)$, this equation will correspond to equation (2). A positive (negative) value for α_2 would be consistent with the hypothesis that external resources complement (substitute) domestic resources.

The following version of (2a), with F_t lagged by one year, was also estimated:

$$S_t = \alpha_0 + \alpha_1 Y_t + \alpha_2 F_{t-1} + u_t \qquad (2b)$$

The idea underlying equation (2b) is that, if indeed consumption is related to expected volume of resources available, then it may be reasonable to presume that such expectations for any year are formed on the basis of the actual resources in the previous year. This would suggest that S_t should be related to Y_{t-1} and F_{t-1}. Given that the correlation between Y_t and Y_{t-1} is very high (while that between F_t and F_{t-1} is not), the relation (2b) would do just as well as one with Y_{t-1} instead of Y_t.

The results for both (2a) and (2b) are shown in Table 19. The explanatory power of contemporaneous external resource flow, when used in conjunction with income, in explaining savings is virtually nil: the coefficients on F are statistically insignificantly different from zero. The lagged response equations also perform uniformly badly, with one exception: the coefficients on F_{-1} are also not significantly different from zero. It must, thus, be inferred that domestic savings do not seem to be influenced by external resources.

On the other hand, a mild skepticism relating to this conclusion may be in order. For one thing, the introduction of F_{-1} generally seems to lead to higher (not lower) coefficients on Y than Y_{t-1}, for comparable periods, in Tables 19. In contrast, a different test suggests an opposite inference: i.e. that domestic savings are a function of (Y + F) rather than (Y). Thus, equation (2) is as follows:

$$C = \beta_0 + \beta_1 (Y + F) \qquad (2)$$

and

$$S = Y - C,$$

then:

$$S = -\beta_0 + (1-\beta_1)Y - \beta_1 F$$

so that the coefficient on Y is equal to one plus the coefficient on F (or F_{-1}, if a lagged response is used). It can, therefore, be tested whether the coefficients on Y are indeed significantly different from one plus the coefficients on F and F_{-1} in Table 19. This test indicates that the hypothesis of equation (2) is not rejected by the data on Table 19: thus the possibility

Table 19: Savings Regressions

(1)	1951-52 to 1969-70	(a)	$S = \cdot124 + 0.22\,Y - 0.08\,F$ (0.02) (0.30)	$R^2 = 0.94$
		(b)	$S = \cdot1487 + 0.24\,Y - 0.57\,F_{-1}$ (0.02) (0.33)	$R^2 = 0.95$
(2)	1951-52 to 1965-66	(a)	$S = \cdot1611 + 0.25\,Y - 0.18\,F$ (0.03) (0.45)	$R^2 = 0.93$
		(b)*	$S = \cdot1976 + 0.28\,Y - 0.78\,F_{-1}$ (0.03) (0.38)	$R^2 = 0.95$
(3)	1951-52 to 1959-60	(a)	$S = \cdot553 + 0.16\,Y - 0.02\,F$ (747) (0.06) (0.49)	$R^2 = 0.63$
		(b)	$S = \cdot1262 + 0.22\,Y - 0.70\,F_{-1}$ (665) (0.06) (0.42)	$R^2 = 0.75$
(4)	1960-61 to 1969-70	(a)	$S = \cdot641 + 0.19\,Y - 0.29\,F$ (741) (0.04) (0.57)	$R^2 = 0.81$
		(b)	$S = \cdot862 + 0.21\,Y - 0.49\,F_{-1}$ (626) (0.04) (0.62)	$R^2 = 0.82$

Notes: Figures in parenthesis are standard errors.
*The coefficient on F-1 is significantly different from zero at 5 per cent level; other coefficients on F-1 are not significantly different from zero, in this table.

that external resources substitute for domestic savings cannot altogether be ruled out.

On balance, therefore, it can be concluded that there is not enough evidence, and at best conflicting evidence, on the issue as to whether the absorption of external resources has adversely affected India's domestic savings effort.

The introduction of F or F_{-1} into the estimating equation also does not significantly affect the conclusions reached (*via* inter-period analysis) regarding the impact of the severity of exchange control on the savings effort.

Sectoral Impact: The possibility that, even if the overall impact of the external resource inflow on domestic savings was negligible, the impact on certain components thereof may be rather large was also examined.

From this viewpoint, it is relevant to distinguish between public and private savings, relating the former to public revenues and the latter to private income alone. Since private income as also public revenues (to a smaller extent) were in turn correlated with Y, we used Y as the explanatory variable in addition to the external resource flow to reestimate the equations separately for private and government savings. The results are set out in Table 20 for the period 1951-52 to 1965-66.

As in the case of total savings, the explanatory power of contemporaneous capital inflow is nil in explaining either public or private savings. The lagged capital inflow, however, has a significant negative coefficient in the case of private savings but the marginal propensity to save in the lagged relationship is higher than that in the unlagged one. These results are however difficult to interpret as it would normally have been expected that the external resource inflow would primarily work through the budget – in view of the larger component of foreign aid – by reducing public savings: the significance of the lagged foreign resource inflow in influencing private savings seems to be mainly spurious.

It may, thus, be concluded that the analysis is generally adverse to the thesis that incoming foreign resources have seriously interfered with the domestic savings effort. This is probably not a surprising conclusion as the planning mechanism has, by and large, served to make the domestic tax- and-savings effort to go up in step with the aid flow: both because of internal clarity on this objective and external (aid-donor-induced) pressure-cum-ethos in this regard.

Retained Earnings by Specific Industries in the Corporate Sector: The manufacturing sector as a whole accounted for less than 14 per cent of national income in 1969-70. The contribution of registered factories was around eight per cent. The non-financial private corporate sector which is included in the group of registered factories and is its predominant part, is estimated to have contributed about five per cent of total domestic savings in 1970-72. Thus, this sector is not a major source of savings in the Indian economy. However, since the exchange control regime had a major impact on this sector, it may, nevertheless, be of some interest to see whether the industries favored by the import substitution policies were relatively higher savers.

The Reserve Bank of India publishes financial data relating to large public and private limited companies. The private limited companies account only for roughly 10 per cent of total assets of this group. Since this is a relatively small group, the analysis was confined only to the public limited

Table 20: Private and Governmental Savings Regressions

S_p =	-1135 + 0.19 Y - 0.28 F (304) (0.03) (0.36)	R^2 = 0.91
S_p =	-1433 + 0.22 Y - 0.77 F_{-1} (158) (0.02) (0.28)	R^2 = 0.94
S_g =	-476 + 0.06 Y - 0.10 F (158) (0.01) (0.19)	R^2 = 0.84
S_g =	-543 + 0.06 Y - 0.01 F_{-1} (160) (0.01) (0.18)	R^2 = 0.84

Notes: Figures in parentheses are standard errors.
The subscripts p and g denote private and public savings respectively. For explanation of the regressions, see text.

companies. A number of alternative relationships between retained earnings (RE) and profits after taxes (PAT) were estimated, of which the following are of interest:

$$RE = \alpha + \beta\,(PAT) + u \qquad (3a)$$

$$\frac{RE}{N} = \alpha + \frac{\beta}{N} + \gamma\left(\frac{PAT}{N}\right) + u \text{ (N is net worth)} \qquad (3b)$$

$$\frac{RE}{N} = \alpha + \frac{\beta}{\sqrt{N}} + \gamma\left(\frac{PAT}{\sqrt{N}}\right) + u \qquad (3c)$$

The relationship (3a) is straightforward and needs no explanation. The relationship (3b) was suggested by the fact that the Reserve Bank publishes only pooled data relating to the companies operating in different sectors of the economy and not individual company data. Since the number of companies in each sector has changed over time, it is possible that some heteroscedasticity may be present in equation (3a). Equation (3b), with $\alpha = 0$, would, then, correspond to (3a) with correction for heteroscedasticity if one assumed that the residual variance in (3a) was proportional to the square of net worth. Similarly, equation (3c), with $\alpha = 0$, would be the correct estimation equation if the residual variance in (3a) was proportional to net worth. Similarly, equation (3c), with $\alpha = 0$, would be the correct estimating equation if the residual variance in (3a) was proportional to net

worth. The coefficient α in the equations estimated was not specified to be zero so that the data could determine whether it indeed was significantly different from zero. Also, the positive (negative) α (in 3b or 3c) will imply that for any given level of profits after tax, retained earnings will be higher (lower) the larger the net worth.

The regression results relating to 10 industries, for the years 1950-58, and 1960-61 to 1968-69, are given in Table 21.

The first four industries in Table 21 are, by and large, long-established and "traditional" industries; the first two are also major exporters and none can be considered to have been "assisted" by the foreign trade regime. Industries 5 to 10 did certainly "benefit" from such controls. On the results obtained by estimating equation (3a), it is found that, while two out of four "traditional" industries had marginal propensities to save (MPS) exceeding 0.50, the corresponding figure is four out of six in the case of the remaining industries. The correction for heteroscedasticity (equations (3b) or (3c)) improves the goodness of fit and equation (3c) seems to yield a better fit to a certain extent in almost all cases though, in none of the cases is the increase in R^2 very large.

Confining our attention to estimated equation (3c), in Table 21, it is found that, keeping net worth constant, an increase of a unit in profits after taxes will increase retained earnings by more than 0.75 units in all cases except jute for which the figure is 0.74. Thus our analysis suggests that all the 10 industries considered were good savers.

A number of statistical tests were made to examine more rigorously whether the "non-traditional" industries are (on the average) better savers than "traditional" industries. These tests were performed as follows: a common marginal propensity to save (i.e. β of (3a), γ of (3b) and (3c)) was estimated for the two groups of industries while allowing the other parameters to vary among industries, using an appropriate (slope) dummy variable technique. It turned out that the coefficient of this dummy variable (i.e. a variable which had the value zero for all the observations relating to "traditional" industries and the value of PAT (for (3a)), $\frac{PAT}{N}$ (for (3b)) and $\frac{PAT}{\sqrt{N}}$ (for (3c)) corresponding to each observation relating to "non-traditional" industries) was negative in each case (i.e. for (3a), (3b) and (3c)), suggesting that "non-traditional" industries on the average had a lower, not higher, marginal propensity to save! However, the "t" values of these coefficients turned out to be insignificant so that the average MPS of "non-traditional" industries is not significantly different (at 1 per cent

level) from that of "traditional" industries (except in the case of equation (3a)).[18]

After comparing the average MPS of the two groups of industries, it was further investigated whether there was any significant difference between the MPS of industries within each group. This was done by an analysis-of-variance test which compared the increase (after dividing by the appropriate degrees of freedom) in the residual sum of squares brought about by estimating a common slope for the group in relation to the sum of the residual sum of squares of the industries in the group when a separate regression was estimated for each industry. It turned out that the MPS of the "non-traditional" industries did not differ significantly (in a statistical sense) regardless of the form of the relationship (3a, 3b, or 3c) estimated; the "traditional" industries had, however, significantly different (at 1 per cent level) MPS except in the case of equation (3a).[19]

It must, therefore, be concluded that, on the basis of the available and analysed evidence, there are no systematic differences in the marginal propensity to save by different industries, or by "traditional" as against "non-traditional" industries. In fact, the only significant differences within any group of industries that were observed belonged to the limited group of "traditional" industries: something that yields no comfort to those who look to the efficiency of the trade regime in raising savings as an offsetting argument against those who convincingly demonstrate its inefficiencies in other respects.

Other Links with Savings: In terms of both the average and the marginal propensity to save, the corporate sector was perhaps the best saver. Hence, if the regime led to "additional" industrialization which, in turn, expanded the corporate sector, this could have contributed to greater saving.

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[18] The 't' values were:

Form of Equation	Degrees of Freedom	't'
3a	168	-5.23
3b	158	-0.84
3c	158	-0.19

[19] The 'F' values were:

Form of Equation	Traditional		Non-Traditional	
	Degrees of freedom	'F'	Degrees of freedom	'F'
3a	3,64	1.57	5,96	2.18
3b	3,60	5.92	5,90	2.26
3c	3,60	7.74	5,90	0.32

In turn, if the result was also an expansion of urban incomes, there is the additional evidence, however slight, that urban households have a higher marginal propensity to save (MPS) than rural households. According to the surveys[20] conducted by the National Council of Applied Economic Research, the MPS of rural households was 0.168 when savings in the form of currency, consumer durables and livestock were included and 0.145 if these were excluded. The MPS of urban households was higher at 0.34 but came down to 0.24 if the top and bottom 10 per cent of income groups were excluded on the assumption that their incomes are affected by transitory factors which excessively influence the estimated MPS.

The urban sector is also a better saver, not merely because of the corporate sector and the urban households, but also because the government's tax coverage is more effective in the urban than in the rural sector (to a point where agricultural income has escaped with virtually no taxation so far). On the other hand, one may also argue that the inability to raise enough savings from the urban sector could well have prompted greater efforts in the direction of agricultural taxation; alternatively, a rapidly growing agricultural sector, as seemed likely in the post-Green-Revolution period, could well have led to a better perception of the need to tax this sector and hence perhaps to greater action in that regard. It is noted finally that higher savings rates may still imply lower growth rates if the investment needed to sustain unit growth of income increases sufficiently in the process owing to inefficiencies or misallocation of resources. In particular, in relation to the urban expansion, it is noted that such an outcome of the economic policies – even if it leads to an increase in the savings rate – may well require additional investments in high capital-output-ratio activities such as housing and related infra-structure in the cities and thus slow down economic growth on that account.

In the Indian context, it cannot be contended that a QR-regime encouraged inflationary policies which, combined with low nominal interest rates and by reducing real interest rates, led to falling savings as, until 1962-63, there was only a moderate trend increase in prices. The post-1966 situation had no less price stability, but the period is too short and

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[20] The methodology, sampling design and the detailed results of these surveys are presented in: *Urban Income and Saving*, 1962, and *All India Rural Household Saving Survey*, Vol. I (1964), Vol. II (1965), Vol. III (1966), National Council of Applied Research, New Delhi, India.

The *All India Household Survey of Income, Saving and Consumer Expenditure*, National Council of Applied Economic Research, 1972, also estimates that the MPS of households in the rural sector was, at around 0.34-0.36, lower than the MPS of households in the urban sector (0.39-0.43).

disturbed by the political and economic events of 1971 to make any reasonable evaluation of this hypothesis possible. Needless to say, however, there is nothing about a QR regime which necessarily requires that real interest rates be kept excessively low.

It has also been contended that India's developmental strategy erred in permitting a skewed income distribution which resulted in an unnecessarily import-intensive consumption pattern that increased the foreign exchange constraint and reduced the feasible rate of savings and growth.[21] Admittedly, there is a grain of truth in this; but it may well be contended that this argument is a critique of inefficient and unjust income-distribution policies, rather than of the QR-and-industrial-licensing regime. But there is a connection. It was really the QR-supported, automatic-protection-enjoying growth of consumer industries, often at very low economic priority, which enabled the government to claim that luxury imports had fallen while permitting and encouraging the consumption of similar domestically-produced luxury items in the name of industrialization. An economic policy that would not have permitted the indiscriminate growth of such consumer and allied industries domestically would have made much more obvious the the cost of permitting such luxury consumption by making it feasible only through importation in many cases, and might well have resulted in greater political pressure to pursue income redistribution more energetically.

Finally, attention must be paid to the rents which accrued to those with access to scarce, high-premia imports. An alternative regime, under which these premia were siphoned off into the tax net, would have been productive of more savings. On an average premium of 40 per cent on imports, and on an average import bill of Rs. 18 billion (which is the approximate average import bill for the first four years of the Third Plan), if one-half had been subject to an excess-premium tax, there would have been an annual tax revenue collection of Rs. 3.5 billion: representing nearly 10 per cent of the tax revenue in India during 1969-70 of Rs. 39.9 billion. Thus, even if nothing else had been changed in the Indian economic regime, a shift to an exchange rate regime which eliminated this premium, by devaluation or by the use of adjustable tariffs or exchange auctions would have helped generate greater savings.

Needless to say, all the increase in taxation would not have implied a corresponding increase in savings in the economy. While it is reasonable to assume that the increased government savings would have more than

[21] This argument is elaborated in: *The Approach to the Fifth Five-Year Plan*, Planning Commission, Government of India, 1972.

offset the loss in savings from those deprived of the import premia, the resulting increment in total savings is likely to have been rather small. This is because the bulk of the imports went to the corporate manufacturing sector (through AU import licensing) and the profits of that sector were subject to the 50 per cent corporation tax anyway[22] and the corporate sector had a rather large propensity to save out of incremental retained earnings.

In conclusion, the linkages between India's trade regime and savings performance are many and diverse; they are also difficult to evaluate and quantify with the degree of success that would be necessary to arrive at a reasonably firm conclusion regarding the sign of the net impact. It is clear, enough, on balance, that one cannot really justify, on the available and analysed evidence, any claim that the QR-regime, while it may have led to several "static" inefficiencies and costs, had at least the saving grace to improve the savings performance and thus lead to higher growth in the long run.

VI. CONCLUDING REMARKS

The analysis so far presented points to the conclusion that India's foreign trade regime, in conjunction with domestic licensing policies in the industrial sector, led to economic inefficiencies and impaired her economic performance. This conclusion follows not merely from the static analysis, but also from the analysis of growth effects. The policy framework was detrimental, on balance, to the growth of the economy by adversely influencing export performance, by wasteful inter-industrial and inter-firm allocation of resources, by permitting and encouraging expansion of excess capacity and by blunting competition and hence the incentives for cost-consciousness and quality-improvement. The effects on savings and R & D expenditure were, at best, ambiguous and cannot plausibly be cited as having offset these inefficiencies.

The analysis of the June 1966 devaluation-cum-liberalization policy package, far from showing that exchange rate adjustment is unworkable, suggests the opposite conclusion that such a change is necessary to stimulate the increased efficiency and faster growth of the Indian economy. The analysis has also indicated how such a policy package could be better designed to secure more acceptable and lasting transition to a less restrictive foreign trade regime.

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22 These premia evaded taxes whenever they were illegally transacted in the market.

INDIA

Introduction: T. N. Srinivasan

India had undertaken 'planned' economic development since 1950. The real growth in net national output had been 3.7 per cent per annum during the First Plan (up to 1956): 4 per cent per annum in the Second Plan (up to 1961) and 2.6 per cent in the Third Plan. Following a 'plan holiday' real GNP grew by 2.9 per cent per annum during the Fourth Plan period. So, except, possibly, in comparison to the pre-independence period, the annual rates of growth which had been achieved were hardly impressive as the rate of population growth increased from about 1.5 per cent per annum in the early 1960s to about 2.2 per cent per annum now.

There had been practically no inflation till about 1962/63. Thereafter, prices had been increasing and, more recently, the rate had increased substantially to about 25 per cent in 1973/74.

The agriculture sector was the major source of income generation and employment and its share in domestic product had declined from one-half in the early 1950s to about 41 per cent now.

Phase IV of the Bhagwati-Krueger analytical framework existed from 1950 to 1956 and overlapped the period of the First Plan which was largely a collection of investment projects for Post-War rehabilitation and ongoing agricultural investments. Quantitative restrictions and exchange controls had been carried over from the War period but, with accumulated sterling balances and the surpluses from the Korean boom, were not implemented with the same intensity and purpose as in later periods.

Planned industrialization for capital goods and heavy industry had begun with the Mahalanobis plan-frame for the Second Plan and, except for minor changes in emphasis, has remained basically the same strategy up to the draft of the Fifth Plan issued a year ago. A series of mechanism were developed during that period for the implementation of the Plans. In the industrial sector the basic mechanism was that of investment licensing and control along with foreign exchange controls.

The allocation procedure of foreign exchange began with the preparation of the foreign exchange budget which, having estimated

receipts from foreign assistance, exports, etc., initially allocated resources for priority payments such as for debt service, food, fertilizer, petroleum and defence needs. Thereafter, bulk allocations were made for both public and private sector use and licensed through a number of government agencies. Private sector users were further categorized into established importers; actual users (the authors preferred the term 'apparent users'), newcomer licenses; capital goods, export promotion licenses, etc.

Economic criteria did not appear to determine the allocation of foreign exchange between groups and within groups. The basic consideration was that a fair share should be provided. Thus, allocations were often made on the basis of installed capacity irrespective of efficiency of utilization or the usefulness of the installed capacity.

There were three major rationale adduced for the exchange control system: first, the alleged concern for the smaller entrepreneurs and the weaker groups; second, since foreign exchange was scarce, licensing was required to ensure its use only for priority uses and, third, to ensure a proper regional allocation of the scarce commodity.

In actual practice, the objectives sought had not been achieved. The system of administrative allocations effectively favored the larger business groups and industries who had better access to the bureaucracy. Rather than protecting the smaller trader and industrialist, the system, if at all, assisted the larger firms as against the largest.

The imports of luxury consumption goods had been prohibited. Import substitution was, however, encouraged by incentives such as development rebates being extended to such industries as well. While the direct imported inputs into such industries appeared small, the supposed indigenous inputs frequently consisted largely of imported inputs which had undergone minimal processing.

It was not clear to what extent the system of exchange allocations had affected the regional balance. Most often it appeared to depend on the comparative ability of the regional officialdom in negotiating and using foreign exchange allocations.

Export performance in real terms had not been very significant throughout the entire period surveyed although some relative improvement was evident during the Phase IV period and during the brief period of liberalization.

With the move into Phase II in the early 1960s the bias against exports was recognized and export subsidies through indirect tax exemptions,

direct tax concessions, cash subsidies, freight concessions and import replenishments were initiated. The lack of adequate data on the wide range of subsidies offered had made quantification of the effects difficult but the Study had provided some estimates of whatever was possible.

The common feature of all the incentives offered was that the rates were uncertain in that they could, and were, often changed by administrative fiat. That made future planning difficult for the exporter and the Study had detailed the economic effects of the chaos induced by that system.

The over-invoicing of exports was one of the more obvious results of the system. On the one hand, the value of exports was often inflated so that larger subsidy payments could be obtained while, on the other hand, export earnings were declared even where no exports had actually been made. In both cases the level of the export subsidies made it profitable for exporters to declare as export earnings foreign exchange illegally purchased on the free market abroad. Some part of the fall in export earnings immediately after devaluation was due to the disincentive to such practices caused by the withdrawal of some export subsidies.

Exporters had been granted import entitlements rather than cash subsidies on the ground that such a system effectively made the importer subsidize exports without the need for any financial transactions through the government budget. A wide range of import taxes, however, already existed and a direct cash subsidy from those revenues would have been preferable as the premia on import entitlements, otherwise, tended to fall with an increase in exports and a concurrent increase in the supply of import entitlements. The import entitlement scheme was, thus, self-limiting and effectively penalized increased exports by reducing the premia realizable.

Around 1965 it was being accepted that the policies of export subsidy were not providing a stable environment for export growth. That period coincided with the Indo-Pakistan war and the consequent suspension of foreign assistance. The policies of liberalization adopted in June 1966 were as much due to the pressure from foreign assistance donors as to the realization that the existing export promotion/import substitution regime needed rationalization. The political ramifications of the external pressure for the adoption of more liberal policies were important in that they appeared to have precluded further moves towards parity changes or liberalization.

By the June 1966 reforms, the rupee was devalued by 57.5 per cent; many export incentives were withdrawn and export duties imposed on traditional exports with inelastic world market demand.

Although the nominal devaluation was 57.5 per cent, the removal of export subsidies and the imposition of import duties resulted in a net devaluation of 21.6 per cent on visible exports; of 25.6 per cent on invisible exports; of 22.3 per cent on total exports and of 44.8 per cent on imports. Effectively, then, the bias against exports continued even after the devaluation.

The fact that cash subsidies to selected exports had been considered even at the time of the devaluation indicated that the reforms of June 1966 had not intended full liberalization or the total elimination of bias and irrationality.

Cash subsidies were reintroduced within two months of the devaluation and most other schemes also re-emerged within two years thereafter. Newer schemes included the provision of indigenous materials at international prices; losses on exports being borne by the State Trading Corporation; the preferential licensing of investment in export industry; the authorization of foreign collaboration and approval of foreign investment by domestic entrepreneurs.

The import entitlement scheme was replaced by the import replenishment scheme on the grounds that import entitlement provided an unduly large subsidy. However, the import replenishment scheme also continued to provide a subsidy since imports commanded a premium and such imports were now made available at non-premium prices.

It was difficult to draw any conclusions as to whether liberalization contributed to better economic performance as real liberalization did not take place and most schemes of subsidy were reintroduced within two years thereafter.

Furthermore, following the devaluation of 1966 an inflationary rise in prices resulted. The simple econometric model used in the Study suggested that, to a significant extent, the price increases were due to factors exogenous to the devaluation. The major contributor was the unprecedented droughts of 1965/66 and 1966/67 which led to a severe drop in the output of foodgrains.

The effect of the devaluation on exports had been analyzed also in relation to the effect on domestic output of the droughts and the fiscal and monetary policies adopted to combat inflation. When those factors were also taken into account in the export regressions, the results indicated that the net devaluation had a significant effect on the non-traditional exports while the effects on the traditional exports had been minimal

The Study included calculations of the effective rates of protection and domestic resource costs. While the variance in both measures was large, the Study had not placed much reliance on the conclusions to be derived therefrom.

The effects of export performance on growth had been analyzed through a simulation model based on Eckaus-Parikh planning model for the Indian economy. The effects of liberalization on the manufacture of non-traditional exports had been quantified to demonstrate how that sector could have significantly improved the value of the objective functions of the planning model (i.e., the discounted consumption over the planned horizon).

There was some evidence to suggest that primarily export-oriented industries engaged in more research activity and were more innovative. The evidence was, however, not conclusive as the number of firms surveyed was small. Two alternative estimates of the effects of export orientation on technical change were also inconclusive.

The aggregate marginal propensity to save during periods of strict exchange control had been the same as during periods of relatively easier controls. At the micro level, too, there was no observable difference in the marginal propensity to save as between groups of industries that benefitted from the controls as against groups of industries that did not benefit. While the exchange control regime had not affected savings behavior either negatively or positively, an analysis of whether there had been an acceleration in the savings behavior of particular groups of industries could have usefully supplemented the Study's analysis based on the major source of income of different groups of industries.

On external resource flows, the evidence presented in the Study was not conclusive as to whether those flows had been a supplement or a substitute for domestic savings.

COMMENTS

by

Jean Baneth

The comments on the Study were mainly confined to the period following the 1966 devaluation. The references to the suspension of foreign assistance to India during that period needed further clarification as, in fact, there had been the largest-ever inflow of net foreign assistance.

The period of severe import restrictions in India differed in two major respects from the very restrictive regime that prevailed in western Europe after the war. The Indian system severely restricted the import of current production goods while the western European system discriminated as between import sources but had not restricted the import of current production goods. In the western European system, too, consumption goods whose imports were severely restricted also faced severe restraints in domestic production and consumption as well. As pointed out by the Study, the Indian system, on the other hand, had encouraged the domestic production of consumption goods whose import was severely restricted.

The Study had under-emphasized the phenomenon that import controls shielded domestic manufacturers not only from foreign competition but also from domestic competition. The allocation of scarce current production inputs had acted as a government-enforced cartel to enforce compulsory market-sharing among domestic producers. Prices of domestic manufactures, consequently, had remained at levels that had enabled the least efficient producer to continue to operate: price-fixing by the government had also made for the same result. The most efficient producer, thus, made large profits but could not expand production even with large excess capacity.

Industries were, thereby, shielded from their inefficiency and, particularly, from the inefficiency in using foreign exchange which was the scarce resource that the controls sought to utilize most efficiently. That phenomenon was most pronounced in the pre-devaluation period and in the recent Phase II period.

The self-limiting nature of the export subsidy scheme was not incidental but, probably, designed. The 1965 report of the Ministry of Commerce, for example, had stated that every industry should export, almost as a national duty, with losses incurred thereby being compensated by Government.

The Study had correctly analyzed the impact of devaluation on effective exchange rates. Effective exchange rates for exports had varied from the strongly positive to the strongly negative while the average for industrial exports had been strongly negative. While this commodity-wise average effective exchange rates for traditional commodities improved slightly, the imposition of specific export duties led to the marginal deterioration of effective rates on the lower grades which faced most competition on the world market. Concurrently, also, import costs had increased by 40 per cent in domestic currency terms and the bias reduction, consequently, was effectively negative.

That conclusion was based on the fact that when there is a trade deficit the increase in the rupee value of imports consequent to devaluation exceeds the increase in the rupee value of exports and thus reduces the funds available to finance aggregate domestic demand. However, this analysis is valid only if the trade deficit was financed by drawing down external reserves. In India, the trade deficit was financed by foreign assistance, whose rupee value also corresponds to the budget deficit. Devaluation increases the rupee value of this foreign financing; a reduction of aggregate domestic demand (and the demand-oriented deflationary impact) results from devaluation only if the Government concurrently reduces its reliance on deficit financing of the budget.

Effective devaluation generally increased the domestic currency prices of export goods because of increased foreign demand. That effect was not very significant in India because the effective devaluation for exports was not particularly high. On the other hand, devaluation significantly increased the rupee cost of imports and exerted a substantial cost-push inflationary pressure. Despite that, the prices of manufactures grew at a slower rate in the two years after devaluation than in the two preceding years. Furthermore, despite manufacturing being more import-intensive than the rest of the economy, the ratio of the price index of manufactures to the overall price index also fell after devaluation.

As the Study points out, the drought and the financial policies adopted were important factors in explaining those phenomena.

However, an additional and perhaps more important factor was related to the fact that import controls had earlier imposed a total and important restraint on domestic competition. The import liberalization of current production goods suddenly induced fierce competition on the domestic market.

If there had been reasonably free competition in the domestic market before devaluation, imports would have been distributed according

to the relative productive efficiency of manufacturing units and a cost-push inflation would have followed devaluation. The cost-push inflation would have been even more intense if rigid import controls had prevailed both before and after devaluation.

As it happened in India, devaluation and import liberalization were effected almost simultaneously. Competition intensified and the more efficient units expanded output while the less efficient units had to contract output. In the absence of the cost-push inflation that then prevailed the prices of manufactures could have even fallen. As it was, all the cost increases could not be absorbed by manufacturing industries. Increased efficiency from the redistribution of imports to more efficient users and lower profit margins induced by greater competition did, however, absorb much of the cost increases.

Non-agricultural national product grew slightly faster in the two years following devaluation than in the two years preceding it. Such an acceleration does not correspond to the classic picture of recession. The feeling that there was an industrial recession was in part due to the compression of profit margins which affected the morale of industrialists.

In effect, devaluation combined with import liberalization squeezed some industries between rising costs and increased competition which together pared profit margins. The drought, on the other hand, squeezed other industries between rising costs due to higher agricultural prices and reduced effective demand for their outputs. These trends were further accentuated by the compression of public investment.

In total, industrial investment was compressed and, in relation to GNP, has never again reached earlier levels. The relatively difficult position of the industrial sector eased only very gradually in subsequent years. Industrial production grew very slowly and industrial exports accelerated for a limited period after various new subsidies had offset the losses sustained at devaluation. Along with the drop in net foreign assistance receipts towards the end of the 1960s and the suspension of US assistance in 1971, the limited liberalization of 1966 was gradually eliminated and there was a return to Phase II.

The Study had suggested that the failure of the exercise in devaluation and liberalization was mainly due to the droughts and that devaluation should have been postponed till a good harvest was realized. That would, no doubt, have evaded the coincidence of the drought-created pressure and the devaluation-cum-import liberalization pressure. However, these pressures also controlled import demands; facilitated import liberaliza-

tion and created some favorable conditions for the growth in industrial exports even in the absence of an appropriate exchange rate.

Although the effects of the drought on prices were well documented, the effects of the drought on the physical availability of commodities for export were less certain. In volume terms the only export commodities that had been substantially affected by direct drought-induced supply shortages were jute, cotton and, possibly, oil-cakes. Key exports, including jute and tea, were generally at record values in 1965 and 1966. While exports of cotton textiles fell, the abnormal level of cotton textile inventories at the end of 1966 did not suggest that the shortage of raw cotton had affected exports; raw cotton could also have been imported had there been an export demand for cotton textiles.

The main reason for the failure of the experiment in devaluation and import liberalization was the inappropriateness of the exchange rate. The Study had analyzed the various possible motives for the choice of the rate and had concluded that the objectives had been varied. Yet one should note that the first draft of the Fourth Plan had laid great emphasis on the achievement of an export growth rate of 7 per cent. The exchange rate arrived at was, in a sense, related to that target although the relationship was actually different from that anticipated by the decision-makers.

The detailed export targets of the first draft projected an enormous expansion in the export volumes of tea, jute manufactures, iron ore, cashews and other traditional exports. While the targets themselves were very ambitious, a more favorable exchange rate appeared only marginally relevant to the achievement of these export targets in traditional commodities. Conversely, too, given those ambitious targets, there appeared not much need to spur the rapid growth of industrial exports through a favorable exchange rate. In addition to relating the new exchange rate to such unduly low targets for the growth of industrial exports, policy makers had also underestimated the effect of withdrawing the pre-devaluation export subsidies. Furthermore, the erroneous notion persisted that most industrial exports enjoyed an effective rate slightly better than before the devaluation.

Had the effective exchange rate for industrial exports improved substantially, existing capacities could have been used for production for export and a corresponding increase obtained in import capacity as well. Instead, what actually happened was purely a reallocation of imported inputs from less to more efficient firms. Increased exports would also have obviated the need for an inflationary fiscal stimulus to the better utilization of existing industrial capacity and would have enabled the continuation and expansion of the experiment in liberalization. However, full success

of the devaluation-cum-liberalization program would also have required a drastic modification of many other policies not directly related to trade regimes, such as controls over private investment and the management of the public sector.

The difficulty of repeating the 1966 experiment in the future was not due to the widespread impression that it had been made under foreign pressure.

The real opposition to further devaluation and import liberalization arose because the 1966 experiment had failed. The experiment had failed because the devaluation had been inadequate to provide a stimulus either to exports or to rational import-substitution.

The greater the real or fancied political difficulties in devaluation, the more important it was that a substantial margin of under-valuation resulted after the devaluation. Where the decision to devalue was politically difficult, that should not be undertaken until and unless it could be properly implemented.

COMMENTS

by

Idrak Z. Bhatty

The Study had concluded that a policy of promoting exports more energetically would have produced better economic results. That conclusion, in effect, assumed that the productive capacity in appropriate industries was available and that the products were, in fact, exportable. For, otherwise, there was a time element involved not only in the establishment of industries but also in reaching the stage of being competitive on the export market. In the 15-year period covered by the Study, additional exports of non-food, non-agricultural and non-clothing products would mainly have had to be generated from the engineering and chemical industrial sectors which formed a relatively small part of the total industrial sector.

Data on capacity utilization was inadequate and somewhat unreliable – as the Study had indicated – and the conclusions derived therefrom should be subject to reservations. Also, in a developing economy, technical and managerial problems in some sectors of the economy were

often reflected in the performance of other sectors. An example had been the apparent under-utilization of industrial capacity which had arisen not because of conditions within the industrial and trade sectors but, rather, from peculiar technical and managerial problems in the power sector.

The Study had noted that, while a particular set of policies had been announced for the 1966 episode, those policies had ultimately not been implemented as such. Greater attention should have been paid in the Study to investigating the reasons for the hesitancy, or the inability, of the government to implement the entire set of policies as originally announced. Equally, too, while the Study had carefully documented the movement of the trade and payments regime from Phase I onwards, there had been relatively less attention paid to the processes of, and the reasons for, the movement from Phase IV back to Phase II.

The study had, with reference to the regime of quantitative restrictions, concluded that the economic performance of India during the Plans had been strongly influenced, if not completely determined, by the policies of licensing industries and imports. However, the study had also suggested that the basic developments in the price level, production and investment which followed the 1966 liberalization episode were a product of factors that had been substantially exogenous to the policy changes.

If such exogenous factors had been so important in nullifying the effects of policy changes in exchange control, too much importance had, possibly, been given to that limited area of economic policy. The suggestion that devaluation should have been undertaken only after a good harvest was devoid of realism for good harvests were never delivered as scheduled: that suggestion had recognized the importance not only of a good harvest but also of many related factors in the economy which had little to do with exchange control policies.

The more fundamental factor which had been ignored in the analysis was that India had opted after Independence for directive planning of the economy through physical targetting. That necessarily required the use of controls to ensure that resources would be distributed in a manner which could enable plan targets to be achieved.

But, having accepted the necessity to control, inadequate attention had been paid to developing an appropriate system of controls. The entire network of controls, therefore, had grown in an *ad hoc* manner.

However, the alternative to an inefficient system of controls was not only to discard the principle of using controls: there were many possible alternatives to develop an efficient and appropriate system of controls.

The effort to make the system of controls more efficient had, however, not been made. If that attempt were to be made, the notion that controls *per se* were desirable could be subordinated to identifying appropriate control mechanisms for situations where other directive mechanisms were inadequate. The appropriate role of indirect controls and non-discretionary controls could also then be investigated further. However, while there were legitimate doubts about the efficiency of the bureaucracy in managing the control structure, the important point was that specific social objectives were being sought to be achieved rather than purely market efficiency. Consequently, it was equally questionable whether a free market situation could itself enable the realization of the given social objectives in a necessarily more efficient and less anti-social manner.

Such issues merited greater attention in the Study while the impression given in the Studv of the desirability of a uni-directional movement from Phase I to Phase V needed to be removed from the analysis. It should, in particular, have been specifically recognized that there was the legitimate possibility, under certain circumstances, of regressing in the opposite direction as well.

General Discussion:

Greater attention should have been paid to the overall philosophical approach to development within which the trade and exchange regimes had to function. The attainment of economic efficiency was not the only – or even the principal – objective in development planning in India and systems of quotas and licensing were a manifestation of the basic approach.

The framework of trade and exchange controls and the manner of their evolution and administration had also to be considered in the light of the socio-political circumstances of India. The liberal democratic parliamentary form of government and the diverse political base of the governing party had contributed to various regional and sectional pressures on the governmental and political apparatus.

The 1966 episode of devaluation and the concurrent measures adopted were not specifically designed only to tackle the poor export performance or the growing balance of payments problem. The main intention had been to induce a greater efficiency-oriented approach to the entire framework of development policies. There had been a rapid reversion to Phase II policies as there was no political basis for an efficiency-oriented system and the 1966 episode had basically realized a simplification of procedures and systems of control.

The role of the Aid Consortium in the decision to devalue in 1966 had been over-emphasized. The Consortium had sought an efficiency-oriented approach in general but, even if a devaluation would have ultimately resulted, the implicit pressure from the Consortium for a devaluation as part of more efficient trade policies had resulted in political repercussions thereafter.

The suspension of foreign assistance to India had been over-emphasized as the suspension had been very limited in time; had been restricted to a few donors and had been followed within a year by the largest flow of food aid ever.

The specific circumstances of the domestic market in India merited further consideration. There remained large areas of unsatisfied domestic demand and industrial outputs were readily absorbed by the domestic market with satisfactory returns to industry. The industrial sector, consequently, had no real incentives to move into the export market and tended to remain in the Phase I stage of import-substituting industrialization. With the large, unsatisfied domestic demands there were also political compulsions which had militated against the diversion of available outputs for export. It was noted that, during the 1966 devaluation, there appeared to have been greater concern about the impact of the devaluation on imports rather than in the incentive effect on exports. It was suggested that the most effective solution might lie not in the provision of greater incentives for export but, rather, in more direct control over outputs in agriculture and industry and in their allocation as between the domestic and export markets.

The Study had concluded that better export performance would have led to a better growth performance but had not considered the precise policy options that were feasible in the given socio-political circumstances.

In comparison with many other developing countries the export performance of India had been significantly poor particularly in the light of the potential of the economic structure and the human and material resource endowments of the country. It was suggested that some part of the shortcoming might be due to the over-confidence of the bureaucracy in its ability to manage the economy in the manner in which it had been done. It was, probably, important that considerable reform was required of the form of management and the system of controls even if better results were to be expected under a control regime.

The Study had analyzed the equilibrium rate of exchange and the exchange rate that would have been more appropriate to the expansion

of exports. However, from the policy-making point of view the most important consideration was the determination of that rate of exchange which could be effectively implemented through demand management policies in the light of the political constraints and the distributive impact of the changed exchange rate.

Foreign Trade Regimes and Economic Development

EGYPT

Introduction: **Karim A. Nashashibi**

There had been two distinct periods in the history of foreign exchange regimes in Egypt. During the 1950s, the government had pursued macro-economic and social goals such as full employment, redistribution of income for greater equality and price and income stability within essentially a private enterprise system. The foreign exchange regimes of that era could be appraised in terms of the Project schema since the macro-economic goals had been sought through the market mechanism and the response to prices.

During the 1960s the government had taken direct control over most of the economy both by nationalization and by central directives affecting both production and investments. The role of the price mechanism radically changed and became restricted to an income distribution function while the allocation of resources by direct controls reflected neither the domestic nor the international price structure. The Phases suggested in the Project were, therefore, inapplicable to that period although productive and investment efficiency could be appraised in terms of government policies in agriculture, industry and the foreign trade regime.

Immediately after the War, although the capital stock was largely worn out, Egypt had foreign exchange reserves which had amounted to about two-thirds of national income and to about four years of imports at the 1945 level. The reserves had been mostly blocked in London and released only gradually but from 1945 to 1947 the economy had sustained a Phase V period with minimal restrictions on trade and payments.

From 1947 to 1950 there had been a reversion to Phase I consequent on payments difficulties associated with the dollar shortage and the unavailability of raw material and capital equipment against payment in sterling. Import licensing, export premiums, triangular trade and other policies were introduced to effectively depreciate the currency against the dollar and to increase imports from the dollar area.

The Korean boom from 1950 to 1952 increased export receipts by one-half and enabled widespread tariff reductions and the removal of many trade and exchange restrictions. Imports increased at an even faster rate and the trade balance had continued in deficit. The economy

concurrently had faced a recessionary inflation with declines in agricultural and industrial output and annual price increases of about 7 per cent. Nevertheless, real gross national income rose substantially because of the strong improvement in the terms of trade.

From 1953 to 1960 the trade and payments regime moved into Phase II. With the post-Korean War recession and the sharp decline in export receipts, import licensing had been extended to all commodities; import duties were increased; import entitlements were granted against export receipts; a 10 per cent surcharge levied on remittances and export premiums which varied by commodity and currency were granted. Political factors that had arisen out of the Suez Canal nationalization also influenced economic policies and bilateral trade had been extensively resorted to.

With the resurgence of government investments from 1957 to 1960, aggregate demand increased substantially and resulted in the appearance of some shortages within the economy.

By 1960 the import surcharges and premiums had resulted in an effective depreciation of 19 per cent on imports and 10 per cent on exports.

The cyclical fluctuations in the world economy that had affected the price of cotton exports and the downward trend in cotton prices essentially explained the evolution of foreign trade and exchange regimes in Egypt during the 1950-1960 period. Foreign exchange regimes had been used as the main instruments of counter-cyclical policy to stabilize and insulate the domestic price level, production levels and the balance of payments from the fluctuations in the world economy. The currency had been permitted to appreciate when cotton export prices rose and depreciate when cotton prices fell with an overall movement towards depreciation, as in fact generally happened in a counter-cyclical and counter-trend manner.

With export prices fluctuating more than import prices, the appropriate policy should have been floating exchange rates supplemented by tax and subsidy measures. Rather, an equivalent multiple-exchange system had developed. However, the counter-cyclical policies had prevented the cyclical allocative effect required for productive efficiency. Nevertheless, this price inefficiency had been endured for domestic economic stability and for the achievement of domestic macro-economic goals.

In 1961 an acute foreign exchange crisis developed with the failure of the rice and cotton harvests and with large payments due for capital works and as compensation for nationalized foreign properties. With the

sterling balances almost depleted, IMF credit was negotiated and the Egyptian pound was devalued from 35 to 43 piastres to a dollar. The devaluation was essentially a unification of the multiple-rate system. With an effective devaluation of only about 4 per cent, the impact of that would have been minimal even if the effects of the devaluation had been carried freely through the price mechanism. However, government policies had insulated the domestic price structure from the effects of the devaluation and domestic demand had increased substantially since the government had no intention of sustaining the appropriate demand management policies necessary for an effective devaluation.

Industrial investment by the government increased substantially and, between 1957 and 1964, the highest contemporary growth rate of an annual 6.5 per cent had been recorded. The deficit in external payments, which had hitherto been met by depleting foreign reserves, was now covered by foreign assistance and an increase in foreign debt.

Another acute foreign exchange crisis developed in 1965 and, instead of further devaluation, the government imposed credit restrictions and other demand management policies which had led to recession and stagnant production without the reallocation of resources which would have resulted from a devaluation fully reflected in the price structure.

With the 1967 War, the economy was severely set back. For domestic political reasons private consumption could not be curtailed and the large increases that resulted in public consumption made for sharp cutbacks in investment. Since that time, in fact, investment levels have barely sufficed to replace worn out capital equipment.

The government had always actively intervened in the agricultural sector in administering the irrigation system; in administering the cooperatives created for the implementation of land reform and land consolidation and in assuring crop rotations so as not to exhaust the soil. Governmental intervention increased further after 1961 with the implementation of procurement and sales prices for agricultural crops.

The effective rates of protection for fourteen agricultural crops in 1961 and 1963 and for ten crops in 1974 had varied very widely with negative protection for the export crops and significant protection for most of the food crops. The analysis of DRCs had revealed a similar situation and indicated that the agricultural sector would not have been much affected by a larger devaluation and freer trade in 1962. Indeed, Egyptian agriculture was on the whole competitive enough to have withstood the introduction of free trade in 1962. The wide dispersion in ERPs and

DRCs among agricultural crops was, however, particularly significant as the government had been concerned not only about income disparities between the agricultural and manufacturing sectors but also about income distribution within the agricultural sector and between different regions of the country.

The comparison of international and domestic prices for agricultural products had shown that the taxation of agriculture, which effectively had begun in 1961, had since increased substantially. The attempt to extract the maximum surplus from the agricultural sector appeared to have had adverse repercussions on agricultural exports.

Since there were many problems associated with the estimation and interpretation of DRCs for agricultural crops and since DRCs tell us little about the degree of suboptimability in the allocation of resources, the Study had also analyzed the supply response functions to price, water supply and labor and has attempted to quantify the suboptimability in the cropping pattern by predicting crop areas for major field crops on the alternative assumptions that farmers would follow domestic prices or international prices in the short run or would adjust instantaneously in the long run to international prices. A comparison of the predictions with the actual acreage and cropping patterns for the period 1962-1968 suggested that the suboptimability had been about 8 per cent of the total area studied with half of the distortions due to government interventions. Supply elasticities in agriculture--both in short run and in the long run --had been, however, so low as to afford very few degrees of freedom in the agricultural sector and the reallocation of the cropping pattern toward a more optimal distribution may have required tax and subsidy measures to compensate for undesirable income shifts.

There had been a very wide dispersion of ERPs and DRCs in the industrial sector as well. The cement industry appeared to be the most competitive and efficient industry but had to contend with very low government-fixed prices for its output and with tariffs and restrictions on inputs. Phosphate and nitrate fertilizers and tires were also competitive on the basis of a more realistic rate of exchange of 61 piastres to the dollar in 1961.

The estimation of the DRC and the long-run competitiveness of the sugar industry depended crucially on the assumption regarding international prices, While the analysis had assumed a price of 3.7 cents per pound, the present international price is about 10 times that level. The DRC in the sugar industry had also been overestimated by the wage rate used. The cane-crushing season corresponded with the slack agricultural season in under-developed areas within Egypt and the labor employed had in all likelihood a lower opportunity cost.

The cotton textile industry had faced restrictions since 1916 on the import of short-staple cotton. While that restriction protected the domestic producer of long-staple cotton, the input base of the industry had become too expensive for the production of cheap cloth. The competitiveness of the cotton textile industry improved dramatically in the analysis when the input base had been assumed to be short-staple imported cotton. However, the industry may face severe problems in finding alternative uses for long-staple cotton which faced falling demand on world markets.

On the other hand, steel and the automobile industries had a negative value added at international prices in thatthe value of the traded and nontraded imported inputs exceeded the import price of the commodity. While this was also the case with paper, it was due to low capacity utilization and start-up costs.

While under the Egyptian institutional framework, protection did not necessarily cause resource pulls toward inefficient sectors, the central management of industry and restrictions on agriculture, together with the price and allocative distortions caused by the successive exchange regimes, have considerably weakened Egypt's foreign trade sectors and set back potential growth. Overall, the share of exports had declined from 21.2 per cent of GNP in 1952 to 14.3 per cent in 1970 with exports increasing at an annual rate of only 3 per cent. While exports had been affected by the downward trend in cotton export prices and by the limited degrees of freedom in the agricultural sector, exports could have been expanded much faster by a more optimum cropping pattern in agriculture and by exploiting the considerable potential in industry.

While exogenous factors such as the wars and declining cotton export prices had affected development, better management of the economy in general and of exports in particular could have enabled much better overall performance. While policies were being reappraised at present, exogenous factors such as the unresolved political situation in the Middle East would play an important role in the future as well.

COMMENTS

by

Mohamed Ariff

Southeast Asian countries also had, like Egypt, a heavy reliance on a narrow range of primary export commodities which had exposed these economies to the vagaries of external fluctuations. Thus, although the economic system and the role of the export sector had been somewhat dissimilar in Egypt, the Southeast Asian countries could benefit from Egypt's experiences and experiments with the policy instruments of import licensing, import entitlement, export premium, bilateral trade and the nationalization of foreign trade and industry.

There had been interesting contrasts in the policies used to adjust to balance of payments fluctuations. Till 1961 Egypt had adopted counter-cyclical trade and exchange policies to stabilize domestic prices and production and to adjust the disequilibrium in foreign payments. Trade and exchange policies in Malaya during the 1950s and the 1960s had, however, remained neutral to fluctuations in the balance of payments and instability within the domestic economy was permitted as part of the adjustive process. The commodity price boom during the Korean War had, consequently, resulted in an economic boom in Malaya while the trade and exchange policies adopted in Egypt had resulted in stagflation within the domestic economy.

The Study had been over-critical about the economic policies followed by Egypt. While some relatively inferior policy-mixes had, no doubt, been adopted, there had been important politico-economic circumstances which had to also be taken account of. Generally it had been true that the international political situation had greatly constrained and influenced domestic economic policies. The adverse reaction from the traditional trade partners to the expansion of trade with the centrally-planned economies had, for instance, necessitated even tighter trade and exchange controls.

Direct governmental intervention in the economic system had apparently led to progressively greater intervention. Such intervention had not necessarily led to greater distortions as some direct controls had a built-in tendency towards equilibrium. The export bonus and import entitlement schemes had, in effect, floated the exchange rates and made for a depreciation of currency. Effective depreciation had also resulted from

the bilateral trade with the centrally-planned economies. The actual distortions of direct controls could, thus, have been considerably less than what appeared at first analysis.

Apart from the effects of exchange rate adjustments on allocative efficiency and savings, the mechanism of adjustment deserved greater attention in the Study not only in terms of the supply and demand elasticities for exports and imports but also in terms of the impact on real incomes and on income distribution.

Given the limited role of the price mechanism in the domestic economy, foreign exchange policies had played only a very restricted role and had not been very effective in easing the external payments problem mainly because of the very inelastic supply response of primary export commodities. The devaluation of 1962 had, consequently, only increased production costs, inflated import payments and worsened the balance of payments. It was, consequently, difficult to accept the conclusion of the Study that a sharper devaluation would have been more effective.

The Study had correctly suggested that a shift in the raw material base of the Egyptian textile industry from domestic medium and long staple cotton to imported short staple cotton would have rendered the textile industry more competitive. (The situation was similar to that of Malaysia exporting the more expensive high-sulphur content petroleum and importing cheaper petroleum for domestic consumption.) However, the Study had also recommended a sharp devaluation which would have significantly affected the situation by greatly reducing the price differential between domestic cotton and imported cotton.

The Study had not adequately analyzed the factors which had contributed to the upsurge in industrial activity in 1967/68 (immediately after the Six-day War) even though capital and raw material imports had remained at only one-third of the 1965/66 level. During that period, too, there had been no significant increase in export receipts nor even large-scale foreign assistance for reconstruction which could have stimulated industrial growth. The main factor was, probably, that the Egyptian economy performed best when under pressure. Domestic output, for example, had stagnated and imports had risen when trade and payments had been liberalized during the Korean boom.

The Study had provided evidence of misallocation of resources in terms of deviations from optimality. While some such inefficiencies could be traced to governmental interventions which had not permitted the price mechanism to operate freely, optimality could hardly be achieved when prices oscillated frequently and widely.

The absence of perfect rank correlation between ERPs and DRCs had been partly attributed to the inclusion of non-traded inputs. While perfect correlation was not to be expected anyway, the exclusion of non-traded inputs could have increased ERPs without changing the relative ranking unless non-traded inputs varied widely between industries. An analysis excluding the non-traded inputs would have been useful in the Study.

The apparent paradox of the nitrogenous fertilizer industry being competitive abroad while requiring protection on the domestic market was explainable as a price discriminating monopoly industry which was in a position to take advantage of differences in domestic and external demand. Otherwise, heavy protection on the domestic market should have introduced a bias against exports.

The Study had concluded that the export tax on cotton effectively amounted to an appreciation of the currency and had, thereby, added to the existing exchange distortions. However, as with the Malaysian export tax on rubber, an export tax could play a stabilizing role when prices fluctuated if the tax were levied on a sliding scale, *ad valorem* basis. Such stabilization measures did, however, obstruct supply responses and while earnings fluctuated less, there could be reduced income over time. Given the 12.7 per cent export tax on rubber from Malaysia in 1963, a supply elasticity of 0.4 and a demand elasticity of 2.0 would have led to a loss in foreign exchange of M$31 million. In the Egyptian experience, too, it would have been pertinent to investigate what the real cost of the increased stability of export earnings had been.

The studies in the Project had produced conflicting evidence of the effects of liberalization. While some countries (e.g. Republic of Korea) had successfully liberalized and moved from Phase II to Phase III, in other countries (e.g. Egypt) liberalization had not produced the expected results and had forced a reversion to Phase II. It had, therefore, been concluded that the failure of liberalization in some cases had been because of inadequate effort or mismanagement. It could be equally well argued that the failure of a given control regime was not an argument against control regimes as such but could have been due to that particular control regime being ill-conceived or inefficiently managed. The alternative would then be a better control regime rather than necessarily a more liberal regime.

While there were valid arguments in favor of liberalization they were not, thereby, arguments in favor of *laissez faire*. Given the imperfections of the market, some control was better than no control. But, whether less control was better than no control or whether one particular form of control was better than another or whether indirect controls were better than direct controls remained unanswered questions.

COMMENTS

By

Michael Dakolias

There were a number of general issues which arose from the analyses in the Project and the Egypt Study in particular:

The Project had generally tended to use changes in the stock of money as an indicator of monetary expansion. It might, however, have been more appropriate to have used changes in credit as the indicator as holdings of money in the "open" economies (studied in the Project) were influenced not only by bank credit but also by the surplus/deficit in the balance of payments. The desired balance of payments outcome was a policy objective which was, in effect, sought by policy-mixes which included credit policies.

In analyzing the effect of a floating exchange rate in insulating the domestic price level from external price fluctuations the Study had correctly stressed the important point that, if the prices of exports and of imports did not move in concert, the floating rate of exchange could not stabilize the domestic price level unless it was supplemented by fiscal measures such as taxes on exports.

An appropriate rate of exchange had to be determined in the light of the overall competitiveness of the economy rather than because of the particular circumstances of any single sector or activity. Exchange reforms necessarily, therefore, had differential effects on individual sectors and activities in the economy and whether or not non-competitive activities were thereafter maintained was an issue of tax and subsidy policies rather than exchange rate policy.

In many devaluation episodes – including the Egyptian experiment of 1962 – the reasons often adduced for the failure of the devaluation to produce the desired effects were that the change in the exchange rate had not been allowed to reflect itself fully in the domestic price structure or that the change in the exchange rate had been inadequate. It is noted that credit and demand management policies had often been used to partly substitute for the required adjustment in exchange rate policies. While such policy substitution could temporarily improve the balance of payments, no adequate re-allocation of resources would result and such policies could not be indefinitely continued because of their adverse effects on economic growth. Also, since it was not normally

politically feasible to continue with restrictive demand management policies, the tendency has been to revert to quantitative import restrictions and other control measures and, thereby, return to the pre-devaluation situation. Therefore, where balance of payments difficulties arose from an over-valued rate of exchange, it was all the more important that there should be an adequate adjustment in the exchange rate rather than to partly rely on other substitute policies whose effects on the balance of payments were only temporary. However, even where the need for devaluation had been both apparent and recognized, domestic political considerations had often weighed against a devaluation or led to a smaller devaluation than was required. In some cases, too, devaluation had been postponed or not undertaken at all in anticipation of exogenous increases in foreign exchange receipts from oil exports, increased capital flows etc. The important point was that while such exogenous flows and policies other than exchange rate policies might ease the immediate balance of payments difficulties, the continued maintenance of an over-valued exchange rate would affect overall growth through, particularly, a progressive decline in the traditional trade sector.

It has been contended that, in small economies dependent on primary exports, devaluation only affected domestic prices as international prices had to be taken as given. Devaluation would, then, neither affect the foreign demand for the country's primary export commodities nor affect the level and composition of imports which would already be at minimum levels.

However, a devaluation would, by increasing the domestic prices of imports, rationalize the allocation of imports within the economy and, thereby, contribute to greater efficiency. On the side of exports, too, the decision-making process at the producer level cannot but be affected by the significant price change in domestic currency that would result from an adequate devaluation. Historical experience suggests that the supply of primary agricultural export commodities had been responsive to such price changes. In addition, realistic price changes effected by devaluation have also induced a greater diversification of exports.

General Discussion:

Egypt had followed socio-political goals which had consciously traded some economic efficiency to achieve a substantial re-distribution of income, relative stability in domestic prices, greater job security and less fluctuations in national income. Pricing and procurement policies and state ownership or direction of the major economic sectors had been the main instruments for the realization of the desired goals.

It did appear that the same socio-political goals could have been achieved with better growth performance, greater economic efficiency and larger export earnings with a more flexible management of the economy and with somewhat greater reliance on the price mechanism. While the supply response of the agric ltural sector was low, cropping patterns had responded to price incentives: considerable opportunities for increased output and greater exports from the industrial sector could also have been better exploited.

It was noted that the balance of payments crises had resulted, as in some other developing countries, in initial reductions in investment rather than in consumption. With increased flows of foreign assistance after 1967 industrial production had increased rapidly largely due to the greater utilization of existing capacity. Economic recovery had been, at that stage, also assisted by the large increase in rice and corn acreage that the Aswan High Dam hade made possible. The industrial recovery had, however, encountered problems by about 1972/73 as export earnings had become insufficient to sustain the import requirements of continued expansion of industrial output and investment.

The devaluation of 1962 had followed on the severe balance of payments difficulties which had been accentuated by the crop failures in rice and cotton. That devaluation had not been primarily intended to regulate demand and the balance of payments but, rather, to rationalize the price structure and to influence the allocation of resources through somewhat greater reliance on the price mechanism. The effectiveness of the devaluation had, however, been tempered by other concurrent measures which had restricted the effects of the devaluation from being felt in full.

The Study had implicitly noted the important role of the bureaucracy in enabling the achievement of the socio-political goals. The bureaucratic and entrepreneurial classes in Egypt had developed from the early 1900s and, given the firm sense of political direction and social purpose, the required skills and experience were available at all levels to enable the achievement of the socio-political goals.

SECTION 4:

GENERAL BACKGROUND PAPERS

General Background Paper: A

"Projections and Analysis of Trade Development in Selected Developing Countries in the Asian Region, 1974 and 1975"

by

Perry P. Chang and A.I. Aminul Islam

I. INTRODUCTION

Factors influencing international trade have undergone major changes during the last few years with far-reaching implications for trade and payments of countries which have been affected, both directly and indirectly, by these changes. The changes refer not only to the exchange rate realignments which took place in 1971 and 1973, but also to changes in the structures of production and demand on the one hand and terms of exchange on the other which have affected, or are expected to affect, the nature of complementarities in the world economy. The structure of production and terms of exchange have been influenced, *inter alia*, by both physical and monetary factors characterized by strong inflationary pressures and sharp increases in prices of primary commodities, crude petroleum and products thereof in the world market. These changes are expected not only to influence the balance of payments and terms of trade but also the patterns of resource allocation and the rates of economic development of the countries concerned.

Some of the major developments, having relevance for the trade and payments of the affected countries, during the past two years have been the following:

(i) Inflation gathered unprecedented momentum on a global scale since late 1972. For 1973 and 1974, GNP deflators of the industrialized developed countries[1] have been estimated[2] to have increased by 19.5 per cent and 14.0 per cent, respectively.

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[1] Refers to the OECD countries.

[2] According to detailed projection of prices made by the IBRD in June 1974.

(ii) In 1972 and 1973, imbalance in the current account balance of payments of some of the major industrial countries and the failure of the capital account flows to adequately offset these imbalances continued. As a result, there has been a recurrence of currency problems necessitating further major exchange rate readjustments.

(iii) An unprecedented increase in petroleum prices[3] – nearly threefold – from $2.70/barrel in 1973 to about $10/barrel[4] in June 1974 occurred. The increase would seem all the more spectacular in the light of the fact that these prices were only about $1.90/barrel, or even less, till the end of 1972.

(iv) As a result of high rates of growth of GNP in the industrial countries in 1972-1973[5] coupled with fluctuations in major exchange rates, mounting inflation and some commodity speculation, there has been a boom in primary commodity prices. The prices of primary products in the international market began to record marked increases from the middle of 1972, and continued to climb in 1973 and early 1974.

(v) The rapid growth of demand placed pressure on supplies of a number of commodities which was aggravated by failures of crops, particularly foodgrains, in many countries. On account of lagging investment in fertilizer capacity during the last few years, supplies of this strategic input were scarce, threatening a continuance of worldwide foodgrain shortages. The food situation in the Southeast Asian region is particularly serious with a set-back of agricultural production in 1972 and consequent depletion of stock and widespread damage to standing crops during the current year on account of drought and floods in a number of major producing countries.[6] The problem appears to have been aggravated, and will continue in the foreseeable future, by sharp increases

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3 These refer to market prices which are usually about 25 per cent lower than posted prices.

4 There is a wide divergence both in the quality and price of crude petroleum supplied from the various sources. For the purpose of this paper, Saudi Arabian light crude (34°) has been taken as the representative product; prices refer to its unit value per barrel f.o.b. Ras Tanura.

5 GNP in the OECD countries grew at 5.8 per cent in 1972 and 6.7 per cent in 1973 compared with an average of 4.9 per cent during 1960-1970.

6 For example, Bangladesh, Burma, India and Thailand.

in the price of fertilizers and the inability of many of the countries in the region to procure and/or make use of such an expensive input.

The purposes of this paper are: *first*, to examine the nature, and assess the implications, of recent increases in petroleum prices; *second*, to discuss the trends and prospects of primary commodity prices in the international market; *third*, to review the situation pertaining to fertilizer supplies in the developing member countries (DMCs)[7] of the Bank; *fourth*, to discuss the foodgrains availability, and prospects thereof, in the DMCs; *fifth*, to assess the projected effect of price changes as well as of food and fertilizer requirements on the balance of payments, capital requirements and terms of trade of the DMCs;[8] and *finally*, to indicate, in general terms, the implications of these effects for trade and development in the DMCs.

II. RECENT INCREASES IN PETROLEUM PRICES AND THEIR IMPLICATIONS

The recent and continuing developments in the world petroleum market have far-reaching implications for the global energy-petroleum situation in general and for economic activity and growth potential of countries affected thereby in particular. The main development is essentially an unprecedented price increase in the order of about 270 per cent between 1973 ($2.70/barrel) and June 1974 ($10.00/barrel), with wide fluctuations during the period. Although the price outlook still appears rather uncertain, it appears likely that it will continue to remain at its present high level, or even increase. Supply on the other hand, may not be expected to suffer serious shortages in the foreseeable future.

The higher price of petroleum and its products will bring about significant structural changes in the world economy; and depending on whether the countries are petroleum-importing or petroleum-exporting, such changes will vary widely between individual countries. In the short-run, when equilibrating adjustments in response to increased prices of petroleum and derivatives are unlikely to materialize, at least in full, a redistribution of gains from trade will take place to the advantage of the exporting countries, and at the cost of the importing countries. This will take the form of a transfer of resources from the petroleum-importing to the

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7 All the DMCs, except India which is not a borrowing member of the Bank.

8 In the face of major uncertainties in the world economy and the continued high level of inflation, forecasting is an extremely hazardous exercise. Of necessity, therefore, this has to be carried out, as has been done in this paper, under simplified assumptions.

petroleum-exporting countries. The extent to which the individual importing countries will be affected will depend on the relative shares of petroleum as a source of energy, the degrees of dependence on imported petroleum and the roles petroleum play in the structures of production in these countries.

What the effects will be in the long-run will depend on the dynamics of the adjustment mechanism, the nature of which is rather premature at this stage to try to ascertain. The increased price of petroleum will affect the levels and patterns of investment, product-mix of GDP and the levels and composition of exports. Insofar as there will be a tendency towards shifting from petroleum-based to other industries and to the extent technologies will be developed towards substituting petroleum by other sources of energy, the structures of world production and trade will differ from that in the past.

The energy crisis is essentially a phenomenon of increased prices rather than of reduced supply. Although some countries in the Organization of Petroleum Exporting Countries (OPEC) had earlier instituted some cut-backs in production and selective restrictions were imposed on supply to certain countries, the supply in global terms was not substantially changed. Even in the short-run, due to the higher price of petroleum in the international market, some of the producing countries will try to stretch their resources as far as possible so as to enhance levels of domestic production either to reduce imports and thereby save foreign exchange (by petroleum-producing countries who are net importers of petroleum) or to take advantage of the international market situation and thereby gain additional earnings of foreign exchange (by net exporters of petroleum). In any case, in the absence of a drastic production cut-back by some of the major producing countries, the possibility of a global supply shortage of any significance may be reasonably ruled out for the foreseeable future.

The hypothesis outlined above is based on the fact that the elasticity of demand for petroleum in the world market, at least in the short-run, is extremely low implying the following:

(i) high degree of dependence of the economies of the petroleum-importing countries on imported petroleum; and

(ii) low elasticity of substituting petroleum by alternative sources of energy with given technology and the cost of producing such alternatives.

In such a situation, the recent increases in the price of petroleum by the exporting countries are equivalent, from an analytical point of view, to raising the supply schedule upwards. The effect of this, in conjunction with low elasticity of demand, is an increase in the revenue from petroleum for the exporting countries. This may appear to be an expedient way for the exporting countries to raise the relative gains from trade, at least in the short-run. In contrast, the long-run gains and which countries will gain relatively more, are extremely difficult to determine. Selective use of petroleum through rationing and the possibilities of substitution *inter alia* will determine if, and by how much, a long-term shift in demand will take place. Such a shift in demand, if any, may not be favorable to the exporting countries either in terms of prices received for petroleum or in terms of revenues earned therefrom.

III. PETROLEUM SITUATION IN THE DMCS OF THE BANK[9]

A. Production

Of the DMCs of the Bank, only five countries (viz. Burma, Republic of China, Indonesia, Malaysia, and Pakistan) are petroleum producing. As shown in Table 1, the output of crude petroleum in these countries has been estimated at 68.5 million metric tons in 1973 which represents an increase of about 21 per cent from the 1971 level. Indonesia, accounting for about 91 per cent of output in the DMCs, is by far the major producing country.

Aside from Indonesia, which is more than self-sufficient in petroleum production, all the other DMCs depend, in varying degrees, on imported petroleum. For the other four petroleum-producing DMCs, the degree of self-sufficiency in 1972, i.e., total domestic production as percentage of total domestic consumption, is estimated to be rather insignificant for the Republic of China (1.4 per cent), moderate for Pakistan (10.6 per cent) and quite high for Burma and Malaysia (about 80 per cent or above). The rest of the DMCs depend entirely on imported petroleum.

B. Imports

The imports of petroleum and petroleum products of the DMCs depend not only on the degree of self-sufficiency, but also on other factors such as the stages of economic development, the availability of domestically located alternative energy sources, the capability of re-export based on

[9] The discussion is carried out in terms of all the DMCs of the Bank except India unless otherwise specified.

Table 1. Crude Petroleum Production in DMCs
('000 metric tons)

	1971	1972	1973[a]
Burma	876	968	1,028
Republic of China	112	129	143
Indonesia	51,778	62,739	62,504
Malaysia	3,269	4,428	4,401
Pakistan	488	466	466
Total DMCs	56,523	65,730	68,542

a Estimated on the basis of part-of-the-year reports, and for Pakistan, it is assumed to be the same as in 1972.

refining facilities, and the practice of exporting higher grade domestically produced petroleum and importing lower grade and refined petroleum and petroleum products. Consequently, even the major petroleum-producing countries, such as Malaysia, may have considerable imports. On the other hand, the non-producing countries, notably Singapore, may need to import more than domestic requirements for the purpose of re-export. The gross imports of petroleum and petroleum products of selected DMCs in 1973 are shown in Table 2. The total payments of these countries were about $1.6 billion in that year, which accounted for some 5.2 per cent of their total merchandise imports.

For most countries, the gross imports as shown in Table 2 can be generally taken as their net imports despite the fact that there may be some re-exports in certain cases. However, there are three important exceptions, namely, Indonesia, Singapore and Malaysia. For Indonesia, exports largely in the form of crude oil, exceeded imports by about $827 million in 1973. Singapore's exports of petroleum and petroleum products were also larger than imports because of value-added to its exports, the excess being about $83 million in 1973. Malaysia exported some $102 million worth of petroleum in 1973; its net imports were then only about $43 million.

Table 2. Gross Imports of Petroleum and Petroleum Products of Selected DMCs in 1973[a] ($ million)

	Petroleum Imports	Total Merchandise Imports	Petroleum Imports as % of Total Merchandise Imports
Bangladesh	35.0	616	5.7
British Solomon Islands	0.8	16	5.0
Republic of China	118.1	3,797	3.1
Fiji	14.6	218	6.7
Hong Kong	113.6	5,637	2.0
Indonesia	2.8	2,256	0.1
Republic of Korea	260.8	4,219	6.2
Laos	13.0	60	21.7
Malaysia	144.9	2,402	6.0
Papua New Guinea	7.0	316	2.2
Pakistan	85.0	981	8.7
Philippines	150.8	1,773	8.5
Singapore	390.2	5,063	7.7
Thailand	178.7	2,058	8.7
Republic of Viet-Nam	61.3	621	9.9
Western Samoa	0.6	20	3.0
Total	1,577.2	30,052	5.2

[a] Projected on the basis of part-of-the-year data.

C. Price of Petroleum in the World Market

The trend of petroleum prices in the international market is shown in Appendix 1. From the relatively stable position till early 1971 – of $2.18/barrel for Iraq Gulf oil to $2.73/barrel for Venezuelan oil – the prices had increased to $5.12/barrel (for Iraq Gulf oil) and $4.69/barrel (for Venezuelan oil) by November 1973 representing an increase of 135 per cent and 72 per cent, respectively. By January 1974, it had risen to $11.65/barrel for Iraq Gulf oil and about $15/barrel in some cases.

Although petroleum prices have been steadily on the increase since 1971 and are currently in a state of flux with rather uncertain prospects, it appears reasonable to presume that market prices in 1974, on the average, will be around $9.60/barrel, representing an increase of approximately 255 per cent over those in 1973.[10] This is based on the posted price of $11.65/barrel effective since January 1974, the share of equity of foreign companies at 40 per cent under the new participation arrangements introduced early this year and the "buy-back" provision enabling the foreign companies to buy crude oil from the government at higher prices. On these bases, the actual f.o.b. market price for this type of crude oil, weighted by the relative export sales of foreign oil companies and the government oil company, works out to about $9.60/barrel in the current year; this is projected to hold through the end of 1975.

D. Effects of Oil Crisis: Some General Observations

The sharp discontinuity in the world energy-petroleum situation has made predictions of future demand for petroleum in the less developed countries (including the DMCs of the Bank) extremely hazardous. Forecasting by simple extrapolation of past growth rates of their energy and petroleum consumption and the relationship between GNP and energy demand does not appear adequate, or meaningful, under the changed circumstances. The crisis, however, will have a far-reaching effect on the patterns of their economic development and consequently on their energy-petroleum needs. Some effects will be direct through steeply rising costs and tightening supplies. The indirect effects will come about through changes induced by the energy crisis in other commodity markets and in the industrial structures of the developed countries.

From an analytical point of view, the increased petroleum prices in the world market, other things being equal, imply, at least in the short-run, the following for the petroleum-importing countries:

(i) a deterioration in terms of trade with import prices rising faster than export prices, and consequently, a relative loss of gains from trade vis-a-vis the petroleum-exporting countries;

(ii) adverse changes in the balance of payments and pressures on foreign exchange reserves; and

(iii) depending on the magnitude of (ii) above, a possible deceleration in rates of economic development either on account

[10] Average market price for 1973 has been estimated at $2.70/barrel.

of reduced use of petroleum and/or reduced ability to import other investment goods.

The above effects will tend to be all the more pronounced for the less developed petroleum-importing countries for the following reasons:

(i) higher price/reduced availability of petroleum, having unfavorable implications for economic activities in the industrialized petroleum-importing countries may adversely affect the price of traditional primary products exported, and the volume of intermediate/capital goods imported, by the less developed countries;

(ii) the petroleum-importing industrialized countries, having difficulties of their own (e.g., recession, dwindling export surplus, etc.) may be constrained to cut-back on development assistance to the less developed countries.

Developments which may be expected, in the longer-run, as a result of the energy crisis are indicated below:

(i) Sharp increases in energy-petroleum and transportation costs, as well as the uncertainty of future petroleum supplies, will tend to favor location of processing and other energy and material intensive industries as close as possible to energy sources and mining sites, mostly in the less developed countries.

(ii) A shift in technology against the energy-intensive techniques which will generally favor the more labor-intensive ones insofar as energy-intensive technology is usually the more capital-intensive. Such a shift will be more favourable to the less developed countries with abundant labor supply and well-developed infrastructure.

(iii) Sharp price increases of various petroleum-based synthetic products including fertilizers which will improve the competitive position of industries producing natural products.

(iv) The requirement of external capital assistance will decline for the petroleum-exporting countries.

(v) The decline in exportable capital in petroleum-importing industrialized countries will be roughly equivalent to the

increase in the volume of exportable capital in the major petroleum-exporting countries. Whether, in fact, there will be a corresponding re-direction in the sources of foreign assistance[11] will depend on political and institutional considerations, the nature of which is beyond the scope of this paper to examine.

For the DMCs of the Bank, the import of petroleum will depend on considerations referred to in the preceding paragraphs. In view of the complexities of issues involved, it is extremely difficult to attempt to make realistic estimates; the need for petroleum, as well as the ability to import, will vary from country to country at any point in time and also over time. Temporal variation of need and the ability to import will be determined by the nature of adjustments and re-allocation of resources within the petroleum-importing DMC' as well as by the terms and volume of external capital inflow to meet the underlying financing requirements. In view of the absence of necessary data, and considering the fact that the focus of this paper is essentially on the short run[12] the volume of petroleum imports for DMCs has been assumed to decline by 5 per cent in 1974 from the level in the preceding year;[13] for 1975, it has been assumed to be at the same level as in 1973. Projected payments for petroleum imports by the DMCs of the Bank in 1974 and 1975 are given in Appendix 2.

IV. PRICES OF PRIMARY PRODUCTS IN WORLD MARKET

Since the boom in the primary products market associated with the Korean hostilities in early 1950's, a stable trend of primary commodity prices was registered during the last two decades. During the last two years, however, the world market prices of these commodities, in general, increased sharply on account of steady increase in demand consequent upon high level of economic activity and rising real incomes in the industrial countries. It was further intensified by general inflationary tendencies, expectations about additional price and income increases and currency instability causing movements, in some cases, from liquid assets into commodities.

The increase in prices of some of the major commodities exported by the DMCs of the Bank is shown in Tables 3 and 4.

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[11] Increased bilateral assistance from petroleum-exporting (net) countries, re-cycling of petro-dollar, etc. are some of the possibilities.

[12] The period up to December 1975.

[13] Such a decline is considered feasible through rationing and selective use with a view to minimizing consumption for non-essential purposes.

Table 3. Prices of Major Primary Commodities Exported from the DMCs of the Bank (in current $)

Commodity	Unit	Actual Prices		Indices (1967-69 = 100)		
		1967-69 Average	June 1974	1972	1973	June 1974
Rice	$/MT	198.1	596.3	76	177	301
Maize	$/MT	50.9	116.6	110	192	229
Sugar (world)	¢/lb	2.5	23.6	173	224	944
Cocoa	¢/lb	36.4	103.2	89	178	284
Tea	¢/lb	49.7	64.5	96	97	130
Copra	$/MT	212.7	750.0	66	166	353
Palm Oil	$/MT	191.2	603.4	114	197	316
Cotton	¢/lb	30.1	63.4	125	207	211
Jute	$/MT	282.3	341.0	106	102	121
Rubber	¢/lb	19.3	33.9	78	160	176
Logs	$/MT	39.5	79.4	103	172	201
Copper	¢/lb	58.1	110.7	84	139	191
Tin	¢/lb	149.5	409.7	114	146	274

As shown in Table 3, most of the major export commodities of the DMCs have experienced substantial increases in prices since 1969; the prices in 1973 have more than, or nearly, doubled compared with levels in 1967-1969 for such items as maize, sugar, palm oil, and cotton. On the

Table 4. Index of Prices of Major Primary Commodities Exported from the DMCs of the Bank

Commodity	Indices (with preceding year base) 1973 (1972 = 100)	1974 (June) (1973 = 100)
Rice	233	170
Maize	175	119
Sugar (world)	129	421
Cocoa	200	160
Tea	101	134
Copra	252	213
Palm Oil	173	160
Cotton	166	102
Jute	96	119
Rubber	205	110
Logs	167	117
Copper	165	137
Tin	128	188

other hand, prices actually declined for tea, remained about the same for jute and increased roughly by about one-half for copper and tin. Rice, cocoa, copra and rubber have increased by nearly two-thirds compared with average levels during 1967-1969. The sharp increases in price, except for tea and jute, have been particularly remarkable in view of the fact

that prices of some of the major commodities (e.g., rice, cocoa, copra, rubber, and copper in addition to tea) had actually been declining[14] till 1972.

The increase in prices was particularly sharp during 1973[15] (see Table 4). While the upward trend continued through June 1974, there are already signs of considerable softening for all the commodity prices except sugar, tea, tin and jute. As may be seen from Table 4, the increase nevertheless has been quite substantial during the first half of the current year for all the commodities except cotton and rubber. In the light of past price trends and anticipated demand, the prices of cotton and rubber are expected to increase further during the second half of 1974 before levelling off or even declining in 1975. Similarly, during the second half of 1974, a peak in prices is expected to be reached for tea, logs, and copper. For all the rest of the commodities, the peaks have already been reached mostly in early 1974; these prices will tend to decline during July-December 1974 and will continue to do so through 1975.[16]

The forecast prices for 1974 are based on actual monthly prices up to June and the expected prices for the second half of the year. Prices of some of the commodities (e.g., copra and palm oil) have already started to decline since the first quarter of 1974, while others (e.g., rice, cocoa, jute, and tin) have begun to decline during the second quarter. Forecasting for the second half of 1974 has essentially been done by extrapolating the trend on the premise that the ceilings for all the commodities specified here had been reached by June 1974. Prices, in general, are expected to decline during the rest of 1974 through 1975. Prices of the primary commodities have been projected for 1974 (average for the year) and 1975 on the bases discussed in this and the preceding paragraph; the projections have been presented in Appendix 3.

The indices of projected prices, with 1973 as base, for all these commodities are estimated to be more than 100 in 1974 with a range of more than 170 for tin, sugar and copra and less than 110 for jute and maize. On the other hand, except for maize, jute and tea, prices of all the other commodities are projected to decline in 1975 from their levels in 1974; the impact of booming activity in the industrial countries on primary commodity prices are, for all practical purposes, over. Prices have reached their peak and will gradually level-off or more probably,

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[14] By about one-quarter or more for rice, copra and rubber from the level of prices during 1967-1969.

[15] Except for jute and tea.

[16] With depletion of stocks of feedgrains during the latter part of 1974, the price of maize is likely to increase in 1975.

settle at lower levels. For certain commodities (rice, copra, palm oil, cotton and rubber), prices are expected to decline to levels recorded during the third quarter of 1973, while for the others (sugar, cocoa and logs), the projected prices in 1975 are expected to correspond to levels recorded during the last quarter of 1973 and/or the first quarter of 1974. Regarding metals and minerals (copper and tin), the projected prices in 1975 are expected to be roughly the same as experienced in the second quarter of 1974; while for jute it is to be projected the same level as in 1972 when it had the most favorable terms in the recent past.

The importance of sharp increases in primary commodity prices in the world market for the economies of some of the DMCs may be seen in the light of a heavy dependence on the export of these items (see Appendix 4). For many of the DMCs (e.g., Bangladesh, Burma, Fiji, Laos, Malaysia, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand, Republic of Viet-Nam and Western Samoa), some of these commodities account for nearly one-half or more of total exports. It is in the light of the relative weight of these primary commodities and their forecast prices that the export earnings and the terms of trade of the DMCs in 1974 and 1975 have been estimated (see Section VII).

V. FERTILIZER SUPPLIES IN THE DMCs

Fertilizer is crucial to most of the DMCs for increasing their food production and for expanding the output of cash crops. This is all the more crucial because the scope of increasing output through extension of cultivable areas is rather limited and additional output has to be secured through increase in yields by, *inter alia*, the application of fertilizers. The importance of fertilizer in agriculture is increasingly being recognized in DMCs. This is evident from the sharp increase in consumption of fertilizers in terms of nitrogen (N), phosphate (P) and potash (K) nutrients from 1,0 million tons in 1964 to 3.15 million tons in 1973 or by about 13.5 per cent a year.[17] Consumption of NPK nutrients in the DMCs has still remained quite low except in the Republic of China, Republic of Korea and Singapore; the average for the DMCs at about 20 kg/ha. is approximately 20 per cent less than the average consumption in Asia as a whole. In certain countries (e.g., Afghanistan, Bangladesh, Burma, Khmer Republic, Laos and Thailand), consumption at less than 8 kg/ha. is far from adequate. Programs for increased agricultural production necessitated by recent shortages of foodgrain supplies will substantially increase fertilizer requirements in these countries in the coming years.

[17] Based on data for 16 countries excluding India. Including India, the consumption increased from 1.61 million tons to 5.58 million tons, or by an average of 14.8 per cent during the 10-year period.

While the DMCs have been expanding their domestic production[18] to meet their growing needs they continue to depend on imports from developed countries to meet nearly half of their total consumption requirements. This was relatively easy until 1971, when the developed countries – more particularly U.S.A. and Japan – had enough surplus to meet the needs of the developing countries. Since then, the prices of different types of fertilizers have shown a rapid increase as may be seen from Table 5. This increase had taken place even before the increase in petroleum prices and was caused by the growing demand for fertilizers both in the developed and developing countries and lack of expansion in output in industrially advanced countries since late 1960's. The increase in the prices of feedstock has further aggravated the problem, and in the first quarter of 1974 the prices of urea and phosphate fertilizers increased to levels about 4-5 times those in 1971. These prices are projected to continue through the end of 1975.

Not only are the fertilizer prices at record levels, but it is becoming increasingly difficult, particularly for the developing countries, to secure the required quantities even at these prices. Maximum attention needs to be given in the short-run to ensure that adequate supplies of fertilizers become available to developing countries to meet the production needs in agriculture. In the long-run, however, the solution will lie in expanding production, especially based on domestic sources of coal and gas. The petroleum exporting countries also should be encouraged to establish large scale nitrogenous fertilizer projects based on natural gas which at present is being flared in these countries.

The fertilizer imports in 1973 by nutrients, products and value (in current prices) for some of the DMCs of the Bank are shown in Appendix 5. For the 16 countries, the imports in 1973 of N, P and K were about 0.85 million tons, 0.29 million tons and 0.80 million tons respectively, together costing about $308 million. Extrapolating the past trend, imports of N, P and K in 1974 (and 1975) have been estimated at 0.90 million tons (1.0 million tons), 0.31 million tons (0.34 million tons) and 0.85 million tons (0.96 million tons) respectively (see Appendix 6). Because of increased requirements and higher prices, the costs of fertilizer imports are estimated to increase to $734 million in 1974 and $726 million in 1975.

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[18] Production of fertilizers in the DMCs (excluding India) increased from about 0.3 million tons in 1964 to about 1.6 million tons in 1973; i.e., by about 20 per cent a year. Nitrogenous fertilizers account for about 80 per cent of regional production, the rest being accounted for by phosphate fertilizers. The major producing countries are Republic of Korea, Republic of China, Pakistan and Bangladesh, although smaller quantities are produced also in the Philippines, Malaysia, Indonesia, Burma and Thailand.

Table 5. Prices of Fertilizers and Phosphate Rock: 1971-1974

	Unit	Prices				Percentage Increase in Prices (1971-1974)			
		1971	1972	1973	1974 (Est.)	1971	1972	1973	1974 (Est.)
Diammonium phosphate (DAP)	$/MT	62	91	119	250 (239)	100	147	192	403 (385)
Urea	$/MT	46	59	95	250 (246)	100	128	207	543 (535)
Muriate of potash	$/MT	33	34	43	52 (53)	100	103	130	158 (161)
Phosphate rock	$/MT	12	12	14	43 (42)	100	100	117	358 (350)

Note: Figures in parenthesis are for January-March 1974 actuals.

Source: Based on detailed price forecasts made at the IBRD in June 1974.

Although nine of the countries (see Appendix 5) are fertilizer producing, only three countries (i.e., Burma, Republic of Korea and Republic of China) are net exporters of nitrogenous fertilizers and only two (i.e., Philippines and Republic of China) are net exporters of phosphate fertilizers. The foreign exchange earnings of these countries from the export of urea and/or DAP amounted to only $16 million in 1973 which is estimated to increase to $43 million in 1974 and $42 million in 1975. In other words, for the DMCs taken together, net imports of fertilizers in terms of value constituted about 95 per cent of gross imports of fertilizers in 1973. The ratio is projected, in the light of existing production capacities of fertilizers in these countries and tightening supplies in the world market, to decline – although marginally – in 1974 and 1975.

It should be noted that the projection of fertilizer imports by the DMCs in 1974 and 1975 (see Appendix 6) is based on the assumptions that the required quantities will be available in the world market and that these countries will be able to arrange the necessary external capital financing for their fertilizer imports. If the projected increase in imports does not materialize, the foodgrain deficit in these countries is estimated to increase by about 2 million tons in 1974 and by a further 1.5 million tons in 1975. In face of serious foodgrain supply shortages in the DMCs and the prohibitively high prices of foodgrains in the world market, any shortfall in fertilizer supplies could create a critical food and/or balance

of payments situation for the DMCs. In the absence of accelerated construction of new fertilizer capacity, the medium and long-term fertilizer situation looks even more bleak for the DMCs.

VI. AVAILABILITY OF FOODGRAINS IN THE DMCs

The shortages and high prices of fertilizers have already resulted in a set-back to agricultural production in some countries. The main concern is rice and, to a lesser extent wheat, as these are the principal foodgrains in the region. The serious floods in recent months in several countries – particularly in Bangladesh, Burma, Philippines and Thailand – and drought conditions in some others have dimmed the earlier prospects of good food crops in 1974/75.

Since foodgrains constitute the principal diet in most of the DMCs, inadequate supply of cereals could have serious social and political consequences in these countries. Recognizing these possibilities, the developing countries in the region – excluding Thailand, Pakistan and Burma which produce in excess of their needs – have been and will continue to spend valuable foreign exchange for food imports. However, the foreign exchange burden of such imports has increased considerably due to the large increase in world prices of foodgrains. The increases have been particularly large in the case of rice, for which the current international price (as of June 1974) is as high as about $600 per ton compared with $130 per ton in 1971.

The main foodgrains produced and consumed in the region are rice, wheat and maize. During 1964-1973, total production of these crops in the 23 DMCs of the Bank grew at annual average rates of 2.2 per cent (rice), 3.4 per cent (wheat) and 0.5 per cent (maize).[19] Production of rice (paddy) and wheat in the DMCs of the Bank amounted to 157 million metric tons[20] and about 38 million metric tons[21] respectively in 1973 constituting about 54 per cent and 42 per cent of production in Asia and 49 per cent and 10 per cent of total world production.

There was a set-back in agricultural production in the region in 1973 due to bad weather. The food situation in many of the countries was serious because of a fall in supplies, inadequate stocks and poor

[19] For Maize, the figure refers to growth in 17 DMCs of the Bank.

[20] Rice is produced in all DMCs except Afghanistan, British Solomon Islands, Fiji, Hong Kong, Papua New Guinea, Singapore, Tonga and Western Samoa.

[21] Produced in Afghanistan, India, Republic of Korea, Pakistan and in small quantities in Bangladesh and Nepal.

availability of substitutes. The region continues to remain a net importer of foodgrains and such imports have been rendered quite difficult in recent years on account of global scarcity. Stocks of foodgrain in the region were reduced to extremely low levels in 1972 and, after a slight recovery in 1973, deteriorated further in the current year. In the face of widespread natural calamities in some of the major producing countries in the region, the over-all foodgrain supply deficiencies are expected to be aggravated in the current year. Imports are expected to be substantially higher in 1974 for purposes of rebuilding depleted stocks and to re-coup production shortfalls.

The output of rice declined by about 6 per cent in 1972 due both to a fall in yield and a reduction of area planted. The scope for increasing acreage under the major food crops (viz., rice, wheat and maize) is extremely limited; during the period 1963-1972 the acreage under these crops increased only marginally. Although the output of rice increased by about 8.8 per cent in 1973, the prospects for rice crop in the current year are not good for reasons discussed later.

The quantity and value of rice import and export by the DMCs of the Bank in 1973 are shown in Appendix 7. Total rice import by the ten major importing countries[22] amounted to 4.3 million tons in 1973 costing $1.51 billion. In contrast, the export of rice by the three major exporting countries[23] was 1.8 million tons for $0.63 billion. On the basis of a detailed review of crop prospects and foodgrain requirements,[24] the net import of rice in the region is estimated to increase by about 12 per cent in 1974 to 2.8 million tons and by 10.7 per cent in 1975 to 3.1 million tons (see Appendix 8). At projected world market prices (see Appendix 3), the rice import bill for the ten importing countries will increase by more than a billion dollars during 1974/1975. For the region as a whole, after having made adjustments for export by some countries, the net import bill on account of rice is projected at $1.54 billion in 1974 and $1.43 billion in 1975.

It should be noted, however, that the projected increase in import needs is estimated on the assumption that the required quantum of fertilizer (as shown in Appendix 6) will be forthcoming, and made use of by the DMCs, to enable regional output to increase by about 2 million tons in 1974

[22] Bangladesh, Indonesia, Khmer Republic, Republic of Korea, Malaysia, Philippines, Sri Lanka, Republic of Viet-Nam, Singapore and Hong Kong.

[23] Burma, Pakistan and Thailand.

[24] Projected total requirement has been estimated on the basis of constant per capita consumption and growth of population at 2.5 per cent per annum.

and further by about 1.5 million tons in 1975. Given the high prices and tight supplies of fertilizer in the world market, it is however doubtful if regional output could be raised by such amounts, particularly in 1974 when there has been substantial damage to standing crops. If the regional output increases at slower rates because of a fertilizer constraint, or not at all on account of recent damages to standing crops in some countries, the overall global scarcity in the supply of foodgrains, particularly rice, will make it extremely difficult for the countries to import substantially more than what has been projected in this paper. The conclusion, therefore, would seem inevitable that any failure in regional output would cause a corresponding decline in per capita consumption of rice; failure in any one particular country could cause a far more serious condition and possible famine.[25]

VII. IMPLICATIONS FOR BALANCE OF PAYMENTS AND TERMS OF TRADE

A. Short-Run Effects on Trade Development

As noted earlier, the increased petroleum and commodity prices will have far-reaching effects on the world economy and trade development, the nature and directions of which defy prediction at present. Even in the short-run, during which the basic economic structure of the DMCs is expected to remain largely unchanged, trade development in these countries will be determined not only by their individual requirements in the importation of petroleum, fertilizers and rice as analyzed earlier, but also by factors affecting their other imports and exports. In this connection, the relative increases in the payments for the three specified items will by itself emerge as a most important factor, for other things being equal, the larger the increase in the payments for these items relative to a DMC's total imports, the less would be the country's ability to pay for other imports. In addition, the past trend of the country's import performance, its foreign exchange reserve position, and the trends and prospects of both short-term and long-term capital movements will be important factors.

On the export side, an important factor is whether a country is an exporter of petroleum and/or rice. Besides, since most DMCs are exporters of primary commodities, price movements of these commodities, as analyzed earlier in Section VI, will greatly affect their export earnings. In addition, the general economic conditions in the developed countries, which are an important influence in the price movements of primary

[25] As has been reported to have occured in Bangladesh in the second half of 1974.

commodities, would tend to affect even more seriously the export performance of these DMCs where manufactured products have become an important, if not a major, component of exports.

While there are great uncertainties regarding all these factors, an attempt has been made to estimate the rates of growth of the merchandise import and export (other than the three items estimated separately) for 21 countries and territories in the region during 1974 and 1975. This is based partly on monthly reports of the 1974 performance wherever the data are available, and partly on the 1964-1972 trends modified by the various other factors mentioned earlier. The results, which reflect largely the judgments of the writers on the effects of these factors, are given in Appendix 9.

Based on these estimates, together with the estimates made of the requirements for petroleum, fertilizers and rice imports in the various DMCs, an attempt has been made to project the balance of trade of these countries in 1974 and 1975. Details are given in Appendixes 11 and 12.

B. An Analysis of the Projected Balance of Trade

The projected balance of trade shows that, compared with 1973 (see Appendix 10), the basic division between surplus and deficit countries in the region will remain unchanged. Of the 21 countries and territories under study, 6 countries are projected to record surpluses in their trade accounts while the remainder will continue to have deficits. However, in terms of value, the improvement in the balance of trade of the surplus countries is estimated to be much less than the deterioration in the trade balance of the deficit countries. The former is projected to increase from $2,145 million in 1973 to $3,863 million in 1974, and $4,344 million in 1975; and the latter is projected to increase from $4,832 million in 1973 to $8,796 million in 1974 and $9,206 in 1975. For the region as a whole, the total trade deficit will increase from $2,687 million in 1973 to $4,933 million in 1974 and $4,862 million in 1975. The factors behind these changes are shown in Table 6.

The following observations can be made on the projections given in Table 6. First, for the region as a whole, merchandise exports other than petroleum, rice and fertilizers will continue to increase in current prices at about the rate of 16 per cent in 1974 and 14 per cent in 1975 compared with the preceding year. But this is much lower than the 1964-1972 trend, which was approximately 25 per cent per year.[26]

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[26] See ADB, *Key Indicators*, Vol. V, No. 2, pp. 19-20.

Table 6. Deficit in Merchandise Account of DMCs: Actuals for 1973 and Projections for 1974 and 1975
($ million)

	1973	1974	1975
Surplus Countries[a]			
1. Merchandise exports excluding rice, petroleum and fertilizer	9,271	10,856	12,428
2. Merchandise imports excluding rice, petroleum and fertilizer	7,896	9,451	10,678
3. Surplus (1 minus 2)	1,375	1,405	1,750
4. Net import of petroleum	1,438	3,560	3,610
5. Net import of rice	(-) 560	(-) 825	(-) 736
6. Net import of fertilizer	(-) 108	(-) 277	(-) 280
7. Over-all surplus in merchandise account	2,145	3,863	4,344
Deficit Countries[b]			
1. Merchandise exports excluding rice, petroleum and fertilizer	16,074	18,541	20,623
2. Merchandise imports excluding rice, petroleum and fertilizer	19,377	22,761	25,010
3. Deficit (1 minus 2)	(-) 3,303	(-) 4,220	(-) 4,387
4. Net import of petroleum	(-) 1,050	(-) 3,460	(-) 3,733
5. Net import of rice	(-) 315	(-) 715	(-) 690
6. Net import of fertilizer	(-) 164	(-) 401	(-) 396
7. Over-all deficit	(-) 4,832	(-) 8,796	(-) 9,206
All Countries			
1. Merchandise exports excluding rice, petroleum and fertilizer	25,345	29.397	33,051
2. Merchandise imports excluding rice, petroleum and fertilizer	27,273	32,212	35,688
3. Deficit (1 minus 2)	(-) 1,928	(-) 2,815	(-) 2,637
4. Net import of petroleum	388	100	123
5. Net import of rice	(-) 875	(-) 1,540	(-) 1,426
6. Net import of fertilizer	(-) 272	(-) 678	(-) 676
7. Over-all deficit	(-) 2,687	(-) 4,933	(-) 4,862

[a] Burma, Republic of China, Gilbert and Ellice Islands, Indonesia, Malaysia, and Papua New Guinea.

[b] Includes all the following countries: Afghanistan, Bangladesh, British Solomon Islands, Fiji, Hong Kong, Khmer Republic, Republic of Korea, Laos, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Republic of Viet-Nam, and Western Samoa.

Note: Minus (-) means deficit.

Secondly, total merchandise imports excluding petroleum, rice and fertilizers will continue to increase in current prices at about 18 and 9 per cent respectively in 1974 and 1975 over the preceding year. This rate is also, especially for 1975, lower than the trend (21 per cent) during 1964-1972.[27]

Thirdly, since there are considerable increases in both export and import prices, these predictions imply that there will be, in real terms, relatively little increase, if not a decrease in the region's exports and imports excluding petroleum, rice and fertilizers, and that the projected increases in trade values are due largely to the price increases discussed earlier. For the DMCs as a whole, the trade deficit on account of petroleum, rice and fertilizers is projected to increase from about 23 per cent of the total in 1973 to about 43 per cent in 1974 and 46 per cent in 1975. For the countries having deficits in balance of trade, the net import of petroleum, rice and fertilizers will increase from about 32 per cent of total imports in 1973 to about 50 and 52 per cent respectively in 1974 and 1975.

Fourthly, while the increase in petroleum prices is undoubtedly the most important underlying factor of the increase in trade deficits of the deficit countries, the increase in the prices of rice and fertilizer will affect the region as a whole. The total rice imports are projected to be $1,540 and $1,426 million, respectively, in 1974 and 1975 as shown in Table 6, compared with $875 million in 1973; the fertilizer requirements will increase from $272 million in 1973 to around $680 million in 1974 and 1975.

Finally, it must be noted that the foregoing analysis is based on the overall situation of the surplus and deficit countries as groups and also for the region as a whole. The situation varies greatly among individual countries. For instance, as shown in Appendices 11 and 12, more than 85 per cent of the projected trade surplus is accounted for by Indonesia and Malaysia due to their petroleum exports and, in the case of Malaysia, also because of relatively favorable primary commodity prices. On the other hand, there are countries, notably Bangladesh, Sri Lanka and the war-torn countries in Indo-China, for which the export earnings are far less than the projected requirements for the import of rice and fertilizers, let alone other imports. The financing of trade in these countries must, therefore, come from other sources.

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[27] See ADB, *Key Indicators*, Vol. V, No. 2, pp. 19-20.

C. Trade Deficits and External Capital Requirements

For the deficit countries as a whole, the financing of the large increase in trade deficits will indeed be a most serious problem. However, since the projections are based on the assumption that not only the import requirements for petroleum, rice and fertilizers will be met, but also that the other imports will continue to increase at the expected rates, such deficits will have to be balanced by various means. The question, of course, is what would be the likely sources of funds for meeting these deficits.

In theory as well as in practice, trade deficits may be financed by surplus in the services account, drawing from the IMF, transfer payments and capital movements in both short- and long-term. The possibility of drawing down a country's own reserves, which are precariously low, except in a few countries, may be ruled out as a source for financing deficits for most of the deficit countries in the region.

In the light of past trends, it is assumed that the deficit countries included in this study will, as a group, continue to have a surplus in invisibles. This amounted to, not including Hong Kong for which no data are available, $517.3 million in 1972 and $721.7 million in 1973 (see Appendix 13). Assuming that Hong Kong, which has a similar economic structure, will have the same amount of surplus as Singapore, and that there will be moderate increases in such surpluses for the group as a whole in 1974 and 1975, this particular source may provide some $1.2 to $1.5 billion for the financing of the projected trade deficits of the group.

Drawing from the IMF by the deficit countries in the region is dependent on their Fund position. As shown in Appendix 14, out of a total amount of $951.4 million, available for drawing, an amount of $632.3 million had already been drawn by these countries as of 30 September 1974. The balance, together with reserve draw-down in certain countries (notably Thailand and the Philippines) will provide not more than $500 million in 1974 and $1 billion in 1975 even if countries draw from the IMF to the limits of their respective quotas and draw reserves down, wherever possible, to their barest minimum.

If these estimates are correct, the total trade deficits to be financed by capital flow and transfer payments in the deficit countries of the region would be approximately $7 billion in both 1974 and 1975.

Judging from the fact that the developed countries are facing serious economic problems of their own, it is unlikely that transfers and

capital flows from both official and private sources into the region will be greatly increased. The total of transfers and long-term capital received by the deficit countries, excluding Hong Kong, amounted to some $2.9 billion in 1973 (see Appendix 13). Even allowing the amount received by Hong Kong to be about the same as Singapore's, and that a limited amount (on disbursement basis) will also be received from the members of OPEC, it is unlikely that the total will exceed $3.7 billion in both 1974 and 1975 for the region as a whole. The remaining deficits amounting to approximately $3.3 billion, therefore, must be financed by short-term capital.

In the past, the net short-term capital received by these countries had been relatively small. The total was, excluding Hong Kong, $354.6 million in 1972 and $432.6 million in 1973. With the same assumption made for Hong Kong, the additional short-term capital needed to sustain the projected trade in the deficit countries in the region would then be about $2.6 billion above the 1973 level. This large increase in short-term capital appears to be a most striking feature in the prospects of balance of payments adjustments in the region.

In this connection, it should be noted that Singapore and Hong Kong are traditionally deficit countries, and their combined trade deficits are projected to be about $2.9 billion in 1974 and $3.3 billion in 1975, which are, respectively, about $900 million and $1.3 billion higher than the 1973 total. Based on the assumptions made on invisibles, reserve requirements and long-term capital movements mentioned earlier, it is estimated that additional short-term capital needed in these two countries would be from between $1.5 to $1.7 billion in both 1974 and 1975. This reduces the additional short-term capital needed by other deficit countries in the region to about $1 billion in both years.

To sum up: The projected trade deficits in the deficit countries under study will be financed by surpluses in the service accounts, drawings from the IMF and possible reserve draw-down in only a few countries, transfer payments and short- and long-term capital movements. While there are uncertainties governing all these factors, it is expected that there will be no substantial increases in all these items except short-term capital, and that in order to finance the projected increase in trade deficits, which are estimated to be some $4.0 billion in 1974 and $4.4 billion in 1975, these countries would need additional short-term capital of about $2.6 billion in both years. Of this amount, Singapore and Hong Kong together would need about $1.5 to $1.7 billion.

D. Terms of Trade and Capacity to Import

The analysis of the effects of changed price structure and trade development on the terms of trade and capacity to import of the countries in the region has been carried out only with reference to a few DMCs of the Bank;[28] the availability of relevant and up-to-date data has been the criterion in selecting these countries. The indices are computed on the basis of base year quantities.

Terms of trade, as estimated (see Appendix 15) for the purpose of this analysis, highlight only the prices of those commodities which have been specifically considered in this paper. In the absence of detailed data on the remaining commodities, a 5 per cent average annual increase in prices has been postulated. To the extent the weight of the specifically considered commodities is substantially higher for the export trade[29] of the DMCs than for their import trade,[30] the computed export price indices may be taken to reflect a much more detailed consideration than the computed import price indices. In addition, since the prices of the specific commodities have increased at substantially higher rates than the 5 per cent assumed for the other commodities not specifically considered and to the extent the assumed 5 per cent annual price increase for the other commodities may indeed turn out to be an under-estimate, the computed indices of terms of trade are likely to be biased on the high side. Therefore, they should be viewed with caution.

With 1973 as the base, the export price index is estimated to increase for all the countries; the projected increase in 1974 will range between 5 per cent for Bangladesh and 137 per cent for Indonesia. The significantly lower rate of increase for Bangladesh is due to the preponderance of jute and jute manufactures (about 90 per cent of total exports) in its export trade, the prices of which are projected to be only about 5 per cent higher than 1973 prices. For Indonesia, the significantly higher increase in the export price index is due to the high share of petroleum, timber and rubber constituting about 50 per cent, 15 per cent and 10 per cent, respectively of total exports; prices of these commodities

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[28] These are Bangladesh, Burma, Republic of China, Fiji, Indonesia, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand and Republic of Viet-Nam.

[29] Ranging between 28 per cent for the Republic of Viet-Nam (rubber) and more than 50 per cent for Bangladesh (jute and jute manufactures), Sri Lanka (tea, rubber and copra), Burma (rice and timber), Philippines (copra, sugar, copper, and timber), Indonesia (petroleum and rubber), Pakistan (cotton and textiles) and Fiji (sugar).

[30] Ranging between less than 10 per cent for Papua New Guinea, Republic of China and Thailand (petroleum) and about 30 per cent or more for Sri Lanka and Bangladesh (rice and petroleum).

have been projected to increase by 256 per cent, 38 per cent and 23 per cent respectively since last year. The improvements in export price indices for the other countries, particularly Burma, Fiji and the Philippines have also been projected to be quite significant[31] in 1974. Except for Bangladesh, export price indices for all the other countries in 1975 are projected to deteriorate from their 1974 levels[32] on account of the projected decline in prices of primary commodities, other than jute, petroleum, maize, and tea, exported by these countries. The export price index of Bangladesh is estimated to increase by about 8 per cent in 1975 on account of a projected 10 per cent increase in the price of jute in the world market.

Increases in the import price index for all the countries[33] are predominantly determined by the sharp increase in petroleum and rice prices and the relative importance of these commodities in the imports of these countries. The increase has been estimated to be relatively small for Republic of China, Papua New Guinea (in both cases due to low weight of petroleum imports), and Indonesia (accounted for by absence of petroleum import and relatively smaller increase in price of rice). For all the other countries, the increase in the import price index is estimated to be about 25 per cent or more which, however, is projected to decline in 1975 by about 4 per cent or less for the rice importing countries (Bangladesh, Indonesia, Philippines and Sri Lanka).

On the basis of the indices of import and export prices, as computed, the commodity terms of trade in 1974 are estimated to deteriorate substantially[34] for those countries which are projected to face the worst balance of payments difficulties in 1974 and 1975.[35] To a smaller extent, the terms of trade are also projected to deteriorate for Pakistan and Thailand. Mainly on account of petroleum, Indonesia is expected to have almost a doubling of her terms of trade in 1974. The increased international price of rice will also cause a substantial improvement in the terms of trade of Burma; a similar improvement, only in 1974, will also be experienced by Fiji due to sharp increase in sugar prices in 1974. The rest of the countries

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[31] More than 30 per cent.

[32] The deterioration is projected to be nominal for Indonesia, Sri Lanka (both 1 per cent), Republic of China and Papua New Guinea (3 per cent or less), moderate for the Republic of Viet-Nam, Thailand, Pakistan and the Philippines (4-8 per cent) and quite substantial for Fiji and Burma (10 per cent or more).

[33] Except Burma whose dependence on imported oil, food and fertilizer is negligible.

[34] By more than 10 per cent.

[35] These are Bangladesh, Sri Lanka and the Republic of Viet-Nam.

will have negligible to moderate improvements[36] in terms of trade in 1974. The terms of trade in 1975, with 1974 as the base, are projected to increase for Bangladesh (increased price for jute exports and reduced price for rice imports), Indonesia and Sri Lanka (both on account of reduced price for rice imports). For all the other countries, these are projected to decline, particularly sharply for Fiji, Philippines and Burma due to the relatively substantial fall in the prices of sugar (Fiji and the Philippines), copra (Philippines) and rice (Burma) that have been envisaged.

Given the export projections and the computed indices of export price and terms of trade, the capacity to import[37] in real terms (see Appendix 16) is expected to increase for Burma, Indonesia, Papua New Guinea, Thailand and the Republic of China. As shown earlier, with the exception of Thailand, all these countries are also projected to have surpluses in their balance of trade. In contrast, as a result of the changed terms of exchange in international trade, imports in real terms would be most adversely affected[38] for Sri Lanka, Republic of Viet-Nam, and Bangladesh, which are also projected to suffer the most serious balance of payments difficulties; and, to a lesser extent, for Pakistan and Philippines as well.

VIII. IMPLICATIONS FOR TRADE STRATEGIES AND ECONOMIC DEVELOPMENT

A. Trade Strategies

Recent changes in the international economic scene have significantly altered, in ways described earlier, the context for trade and development policies. While it is still too early to predict what these longer-run implications will be on a country by country basis, it is perhaps safe to say that for the deficit countries in the region as a whole, some modifications in their trade strategies will be made along the following lines.

First, in view of the shortage of food and high prices of petroleum and petroleum products, there is likely to be a new wave of "import substitution" for these items. The basic objective of this new import substitution, however, is not to promote industrial development through protection as in the past, but rather to meet the urgent need to increase those commodities which are in world short supply, and to develop locally available energy sources as a result of the high petroleum prices.

[36] Ranging between 4-6 per cent.

[37] This is equivalent to the income terms of trade defined as commodity terms of trade multiplied by the index of export volume.

[38] By about 15 per cent or more.

Secondly, as quantitative restrictions and exchange controls have long been used in several countries in the region, it is likely that greater reliance on those measures, including multiple exchange rates, will be made in these countries as a means to curtail imports and encourage exports on a selective basis. This would be particularly true in countries where the elasticities of supply of their major exports are low, the rates of inflation have been high in the recent past, and certain industries have been developed under protective barriers. On the other hand, many other countries will continue to follow more liberalized trade and exchange policies. In such cases, the possibility of a formal or *de facto* devaluation cannot be ruled out.

Finally, there is no doubt that export promotion will continue to be a main feature of the trade policies in practically all developing countries in the region. But its success will depend not only on the ability to cope with the changing patterns of comparative advantage brought about by the recent changes in the international economy, but also, perhaps more importantly, on the inflow of long-term capital that is needed to finance such long-term adjustments.

B. Short- vs. Long-Term Capital

As noted earlier, the projected increase in the trade gap of deficit countries in the region during 1974 and 1975 is expected to be filled largely by short-term capital. To the extent that this is true, it will help resolve the difficulties in the short-run, but it will contribute little to long-run adjustments. This is not only because the interest paid for such short-term capital will further aggravate the balance of payments difficulties, but also because the needed long-run adjustments, such as the new "import substitution" and the continued need for export promotion mentioned above, will require substantial increase in long-term investment, without which the countries concerned can hardly sustain the trade deficits in the long-run.

In this regard, it will be noted that the developed countries have been traditionally the major, if not the sole, source of long-term capital, and they are likely to remain a major source for years to come. However, in view of their own needs to pay for still higher petroleum imports, which are expected to continue even when the current recessionary developments in their economies are reversed, it is unlikely that they will be able, at least in the foreseeable future, to increase their capital exports, including development assistance, in sufficient quantities to meet the growing needs of this region.

In the meantime, a great shift in the distribution of the gains from trade, effected basically by the higher petroleum prices, has taken, and will continue to take place. This will enable the petroleum exporting countries, including those located in the region, to become not only a new market for world trade, but also an important supplier of long-term capital for world development.

The channelling or recycling of the petroleum earnings into long-term capital for the development of this region, therefore, will be a most crucial problem of the time. There are indications that recycling in the form of short-term capital has been very well underway, but the real need of recycling, it seems, is more in long-term rather than in short-term capital. A modest beginning appears to have been made in this regard.

C. Prospects for Economic Development

In an aggregative sense, a growing merchandise account deficit is roughly equivalent to a growing inadequacy of domestic savings to finance investment requirements in countries concerned. In such a situation, inflow of external capital, of the same order as the deficit in the current account balance of payments, will be required to supplement domestic savings so as to meet the saving-investment gap. Even if the quantum of required external capital becomes available, it is highly unlikely for the rates of investment to increase in the DMCs in the foreseeable future due to global economic instability and recessionary tendencies. For this reason, as well as because of inflationary pressures, domestic consumption is also likely to increase in these countries. The conclusion is inevitable that the rates of domestic savings in these countries will tend to fall causing a slow-down in economic activities. The rates of growth of GDP may, therefore, be expected to decline; for some countries, the possibility of negative growth of GDP cannot be ruled out.

On the other hand, the surplus countries, especially the petroleum-exporting countries in the region, are expected to fare better. However, since they are equally affected by the world-wide inflation and recessionary tendencies, the chances are – with few exceptions – that the rates of growth of GDP will also be lower.

For the region as a whole, the long-run prospects would seem to depend greatly on the success or failure of the efforts for restructuring the economy, especially in regard to export promotion. This, in turn, will depend, on the one hand, on the speed of economic recovery in the developed countries, and, on the other, the extent to which the surplus of the petroleum-exporting countries may be effectively recycled to meet the growing need for long-term capital in the region.

APPENDICES

Appendices

1 Crude Petroleum Prices, 1969-1974

2 Projected Payment for Petroleum Imports by the DMCs, 1974 and 1975

3 Projected World Market Prices of Selected Commodities, 1974 and 1975

4 Commodity Concentration of Export Trade in Selected DMCs, 1973

5 Import of Fertilizers by DMCs, 1973

6 Projected Import of Fertilizers by DMCs, 1974 and 1975

7 Import and Export of Rice, DMCs, 1973

8 Projected Import and Export of Rice, DMCs, 1974 and 1975

9 Projected Rates of Growth of Imports and Exports, DMCs, 1974 and 1975

10 Balance of Trade of DMCs, 1973

11 Projected Balance of Trade of DMCs, 1974

12 Projected Balance of Trade of DMCs, 1975

13 Components of Balance of Payments, Selected DMCs, 1972 and 1973

14 IMF Members' Fund Positions, DMCs, 1974

15 Estimated Indexes of Export/Import Prices and Terms of Trade; Selected DMCs; 1974 and 1975

16 Estimated Index of Capacity to Import; Selected DMCs; 1974 and 1975

Crude Petroleum Prices, 1969-1974
(Posted Prices in $/barrel)

Month/Year		Source of Supply	Persian Gulf (Port)	Iran (Port)	Venezuela (Port)	Nigeria (Port)	North America (at field)	Indonesia
January	1969		1.80	1.79	2.73		2.80	
March	1971		2.18	2.17	2.73	2.42	3.10	
July	1971		2.29	2.27	2.73	3.20	3.44	
February	1972		2.48	2.47	3.17	3.18	3.44	
January	1973		2.59	2.58	3.31	3.56	3.44	2.96
April	1973		2.74	2.73	3.72	3.79	3.44	3.73
August	1973		3.07	3.05	3.72	4.29	4.07	4.13
November	1973		5.12	5.09	4.69	4.29	4.07	6.23
January	1974		11.65	11.88	11.16	14.69	5.07	10.80

Source: Petroleum Press Service

Projected Payment for Petroleum Imports by the DMCs, 1974 and 1975 (Million $)

DMCs	Projected Import	
	1974	1975
Afghanistan	neg.	neg.
Bangladesh	118	125
British Solomon Islands	3	3
Burma	n.a.	n.a.
Republic of China	399	420
Fiji	49	52
Gilbert and Ellice Islands	neg.	neg.
Hong Kong	384	404
Indonesia	10	10
Khmer Republic	n.a.	n.a.
Republic of Korea	1,099	1,157
Laos	44	46
Malaysia	490	516
Pakistan	288	303
Papua New Guinea	24	25
Philippines	896	943
Singapore	1,320	1,389
Sri Lanka	169	178
Thailand	609	641
Republic of Vietnam	207	218
Western Samoa	1	1

Note: "neg." stands for negligible.
"n.a." stands for not available.

Projected World Market Prices of Selected Primary Commodities, 1974 and 1975

Commodity	Unit	Projected Prices (in current $)		Indexes (1973 = 100)	
		1974	1975	1974	1975
Rice	$/MT	550	460	140	118
Maize	$/MT	107	112	109	115
Sugar	¢/lb	10	7	171	125
Cocoa	¢/lb	84	72	129	111
Tea	¢/lb	67	67	140	140
Copra	$/MT	602	536	170	152
Palm Oil	$/MT	545	465	145	123
Cotton	¢/lb	76	73	123	117
Jute	$/MT	302	329	105	115
Rubber	¢/lb	38	35	123	113
Logs	$/MT	94	93	138	137
Copper	¢/lb	119	114	147	141
Tin	¢/lb	390	343	179	157

Commodity Concentration of Export Trade in Selected DMCs, 1973

DMCs	Major Export Commodities	Share in Total Export (in %)
Bangladesh	Raw Jute	37
	Jute Manufactures	52
Burma	Rice	36[a]
	Teak/Other Hardwood	29[a]
Republic of China	Textile Products	29
	Plywood/Lumber/Timber Products	14
	Sugar	2
Fiji	Sugar	43
Indonesia	Crude Petroleum	15
	Timber	18
	Rubber	12
Pakistan	Raw Cotton	14
	Textiles (Yarn and Thread)	23
	Rice	13
Papua New Guinea	Coconut/Copra Products	13[a]
	Cocoa	9[a]
Philippines	Copra	9
	Sugar	16
	Copper	16
	Logs/Lumber	19
Sri Lanka	Tea	50
	Rubber	24
Thailand	Rice	11
	Rubber	14
	Maize	9
	Tin	6
Republic of Viet-Nam	Rubber	21
	Wood/Manufactures	11

[a] 1972.

Source: Asian Development Bank, *Key Indicators*, October 1974.

Import of Fertilizers by DMCs, 1973

	Nutrients (000 tons)			Products (000 tons)			Value (Million $)		
	N	P	K	Urea	DAP[a]	MP[b]	Urea	DAP	MP
Fertilizer Producing[c]									
Bangladesh	46.[illegible]	40.2	10.8	101.5	89.3	18.0	9.6	10.6	0.7
Burma	(3.7)	10.0	1.5	(8.4)	22.2	2.5	(0.8)	2.6	0.1
Indonesia	287.5	66.8	384.3	625.0	148.8	640.5	59.4	17.7	27.5
Malaysia	40.6	13.2	88.4	88.3	29.3	147.3	8.4	3.5	6.3
Pakistan	120.6	43.7	1.4	262.2	97.1	2.3	24.9	11.6	0.1
Philippines	59.1	(1.9)	38.8	128.5	(4.2)	64.7	12.2	(0.5)	2.8
Republic of Korea	(45.9)	9.1	104.2	(99.8)	20.2	173.7	(9.5)	2.4	7.5
Republic of China	(16.0)	(5.7)	72.0	(38.8)	(12.7)	120.0	(3.3)	(1.5)	5.2
Thailand	54.3	55.9	42.0	118.0	124.2	70.0	11.2	14.8	3.0
Non-Fertilizer Producing									
Afghanistan	10.0	5.2	0.3	21.7	11.6	0.5	2.1	1.4	0.02
Khmer Republic	1.0	1.1	0.1	2.2	2.4	0.2	0.2	0.3	0.01
Laos	0.1	0.1	–	0.2	0.2	–	0.02	0.02	–
Sri Lanka	56.8	9.7	35.1	123.5	21.6	58.5	11.7	2.6	2.5
Singapore	1.0	1.0	1.0	2.2	2.2	1.7	0.2	0.3	0.07
Republic of Viet-Nam	150.0	30.0	16.0	326.1	66.7	26.7	31.0	7.9	1.1

[a] Diammonium Phosphate
[b] Muriate of Potash
[c] Figures in parenthesis refer to exports.

Projected Import of Fertilizers in DMCs, 1974

DMCs	Nutrients (000 tons)			Products (000 tons)			Value (Million $)		
	N	P	K	Urea	DAP	MP	Urea	DAP	MP
Fertilizer Producing[a]									
Bangladesh	50.0	43.0	11.6	108.7	95.6	19.3	27.2	23.9	1.0
Burma	(4.0)	10.7	1.6	(8.7)	23.8	2.7	(2.2)	6.0	0.1
Indonesia	307.6	71.5	411.2	668.7	158.9	685.3	167.2	39.7	34.3
Malaysia	43.4	14.1	94.6	94.4	31.3	157.7	23.6	7.8	7.9
Pakistan	129.0	46.8	1.5	280.4	104.0	2.5	70.1	26.0	0.1
Philippines	63.2	(2.0)	41.5	137.4	(4.4)	69.2	34.4	(1.1)	3.5
Republic of Korea	(49.1)	9.7	111.5	(106.7)	21.6	185.8	(26.7)	5.4	9.3
Republic of China	(17.1)	(6.1)	77.0	(37.2)	(13.6)	128.3	(9.3)	(3.4)	6.4
Thailand	58.1	59.8	44.9	126.3	132.9	74.8	31.6	33.2	3.7
Non-Fertilizer Producing									
Afghanistan	10.7	5.6	0.3	23.3	12.4	0.5	5.8	3.1	0.03
Khmer Republic	1.1	1.2	0.1	2.4	2.7	0.2	0.6	0.7	0.01
Laos	0.1	0.1	—	0.2	0.2	—	0.05	0.05	—
Sri Lanka	60.8	10.4	37.6	132.2	23.1	62.7	33.1	5.8	3.1
Singapore	1.1	1.1	1.1	2.4	2.4	1.8	0.6	0.6	0.09
Republic of Viet-Nam	160.5	32.1	17.1	348.9	71.3	28.5	87.2	17.8	1.4

[a] Figures in parenthesis refer to exports.

Projected Import of Fertilizers in DMCs, 1975

DMCs	Nutrients (000 tons)			Products (000 tons)			Value (Million $)		
	N	P	K	Urea	DAP	MP	Urea	DAP	MP
Fertilizer Producing[a]									
Bangladesh	56.0	48.2	13.0	121.7	107.1	21.7	26.8	22.5	1.1
Burma	(4.4)	12.0	1.8	(9.6)	26.7	3.0	(2.1)	5.6	0.2
Indonesia	345.0	80.2	461.2	750.0	178.2	768.7	165.0	37.4	38.4
Malaysia	48.7	15.8	106.1	105.9	35.1	176.8	23.3	7.4	8.8
Pakistan	144.7	52.4	1.7	314.6	116.4	2.8	69.2	24.4	0.1
Philippines	70.9	(2.3)	46.6	154.1	(5.1)	77.7	33.9	(1.1)	3.9
Republic of Korea	(55.1)	10.9	125.0	(119.8)	24.2	208.3	(26.4)	5.1	10.4
Republic of China	(19.2)	(6.8)	86.4	(41.7)	(15.1)	144.0	(9.2)	(3.2)	7.2
Thailand	65.2	67.1	50.4	141.7	149.1	84.0	31.2	31.3	4.2
Non-Fertilizer Producing									
Afghanistan	12.0	6.2	0.36	26.1	13.8	0.6	5.7	2.9	0.03
Khmer Republic	1.2	1.3	0.12	2.6	2.9	0.2	0.6	0.6	0.01
Laos	0.12	0.12	—	0.3	0.3	—	0.07	0.06	—
Sri Lanka	68.2	11.6	42.1	148.3	25.8	70.2	32.6	5.4	3.5
Singapore	1.2	1.2	1.2	2.6	2.7	2.0	0.6	0.6	0.1
Republic of Viet-Nam	180.0	36.0	19.2	391.3	80.0	32.0	86.1	16.8	1.6

[a] Figures in parenthesis refer to exports.

Import and Export of Rice, DMCs, 1973

DMCs	Quantity (million tons)		Value (million $)	
	Import	Export	Import	Export
Bangladesh	0.4	–	140	–
Burma	–	0.1	–	35
Hong Kong	0.4	–	140	–
Indonesia	1.4	–	490	–
Khmer Republic	0.2	–	70	–
Republic of Korea	0.4	–	140	–
Malaysia	0.3	–	105	–
Pakistan	–	0.8	–	280
Philippines	0.4	–	140	–
Singapore	0.2	–	70	–
Sri Lanka	0.3	–	105	–
Thailand	–	0.9	–	315
Republic of Viet-Nam	0.3	–	105	–
Total	4.3	1.8	1,505	630

Projected Import and Export of Rice, DMCs, 1974 and 1975

DMCs	Quantity (million tons)				Value (million $)			
	Import		Export		Import		Export	
	1974	1975	1974	1975	1974	1975	1974	1975
Bangladesh	1.0	1.2	—	—	550	552	—	—
Burma	—	—	0.2	0.2	—	—	110	92
Hong Kong	0.4	0.4	—	—	220	184	—	—
Indonesia	1.5	1.6	—	—	825	736	—	—
Khmer Republic	0.2	0.3	—	—	110	138	—	—
Republic of Korea	0.4	0.5	—	—	220	230	—	—
Malaysia	0.2	0.2	—	—	110	92	—	—
Pakistan	—	—	0.6	0.6	—	—	330	276
Philippines	0.5	0.5	—	—	275	230	—	—
Singapore	0.2	0.2	—	—	110	92	—	—
Sri Lanka	0.3	0.4	—	—	165	184	—	—
Thailand	—	—	1.4	1.7	—	—	770	782
Republic of Viet-Nam	0.3	0.3	—	—	165	138	—	—
Total	5.0	5.6	2.2	2.5	2,750	2,576	1,210	1,150

Projected Rates of Growth of Imports and Exports;[a] DMCs: 1974 and 1975

DMCs	Projected Rates of Growth (in %)			
	Imports		Exports	
	1974	1975	1974	1975
Afghanistan	7	7	6	5
Bangladesh	7	7	10	7
British Solomon Islands	10	10	15	15
Burma	b	5	8	5
Republic of China	28	16	20	20
Fiji	10	10	15	6
Gilbert and Ellice Islands	12	12	15	15
Hong Kong	12	8	10	9
Indonesia	15	15	16	6
Khmer Republic	5	5	5	5
Republic of Korea	23	12	28	20
Laos	7	5	10	8
Malaysia	8	6	16	9
Pakistan	9	9	12	12
Papua New Guinea	11	11	20	20
Philippines	20	8	14	10
Singapore	25	10	15	8
Sri Lanka	5	5	18	6
Thailand	15	15	11	8
Republic of Viet-Nam	5	5	6	6
Western Samoa	6	5	9	6

[a] The projected rates of growth are for all the commodities in the merchandise trade account except petroleum, rice and fertilizers.

[b] Imports (except petroleum, rice and fertilizers) of Burma in 1974 have been taken at the same level as the average import of such commodities during 1970-72.

Balance of Trade of DMCs, 1973
($ million)

DMCs	Merchandise Imports	Merchandise Exports	Balance of Trade[a]
Surplus Countries			
Burma	96	110	14
Republic of China	3,797	4,378	581
Gilbert and Ellice Islands	8	9	1
Indonesia	2,256	3,062	806
Malaysia	2,402	2,950	548
Papua New Guinea	316	511	195
Sub-Total	8,875	11,020	2,145
Deficit Countries			
Afghanistan	115	90	(-) 25
Bangladesh	616	317	(-) 299
British Solomon Islands	16	14	(-) 2
Fiji	218	86	(-) 132
Hong Kong	5,637	5,051	(-) 586
Khmer Republic	180	10	(-) 170
Republic of Korea	4,219	3,200	(-) 1,019
Laos	60	7	(-) 53
Pakistan	981	961	(-) 20
Philippines[b]	1,773	1,788	15
Singapore	5,063	3,605	(-) 1,458
Sri Lanka	421	388	(-) 33
Thailand	2,057	1,584	(-) 473
Republic of Viet-Nam	621	60	(-) 561
Western Samoa	20	4	(-) 16
Sub-Total	21,997	17,165	(-) 4,832
Overall Total	30,872	28,185	(-) 2,687

[a] Exports minus imports.

[b] Since the surplus of Philippines is projected to turn into deficit in 1974 and 1975, it has been shown in the group of deficit countries.

Source: ADB, *Key Indicators*

Projected Balance of Trade of DMCs, 1974
(million $)

DMCs	Merchandise Imports	Merchandise Exports	Balance of Trade[a]
Surplus Countries			
Burma	167	192	25
Republic of China	5,108	5,264	156
Gilbert and Ellice Islands	9	10	1
Indonesia	3,006	5.718	2,712
Malaysia	2,944	3,667	723
Papua New Guinea	367	613	246
Sub-Total	11,601	15,464	3,863
Deficit Countries			
Afghanistan	128	95	(-) 33
Bangladesh	1,169	349	(-) 820
British Solomon Islands	20	16	(-) 4
Fiji	272	99	(-) 173
Hong Kong	6,633	5,556	(-) 1,077
Khmer Republic	225	11	(-) 214
Republic of Korea	5,939	4,110	(-) 1,829
Laos	94	8	(-) 86
Pakistan	1,320	1,093	(-) 227
Philippines	2,833	2,068	(-) 765
Singapore	7,184	5,286	(-) 1,898
Sri Lanka	637	458	(-) 179
Thailand	2,803	2,179	(-) 624
Republic of Viet-Nam	914	64	(-) 850
Western Samoa	21	4	(-) 17
Sub-Total	30,192	21,396	(-) 8,796
Overall Total	41,793	36,860	(-) 4,933

[a] Exports minus imports.

Projected Balance of Trade of DMCs, 1975
($ million)

DMCs	Merchandise Imports	Merchandise Exports	Balance of Trade[a]
Surplus Countries			
Burma	175	178	6
Republic of China	5,882	6,313	431
Gilbert and Ellice Islands	10	12	2
Indonesia	3,207	5,894	2,687
Malaysia	3,091	3,982	891
Papua New Guinea	406	736	330
Sub-Total	12,771	17,115	4,344
Deficit Countries			
Afghanistan	134	100	(-) 34
Bangladesh	1,207	373	(-) 834
British Solomon Islands	22	18	(-) 4
Fiji	297	105	(-) 192
Hong Kong	7,099	6,056	(-) 1,043
Khmer Republic	259	12	(-) 247
Republic of Korea	6,561	4,926	(-) 1,635
Laos	99	9	(-) 90
Pakistan	1,417	1,131	(-) 286
Philippines	2,965	2,270	(-) 695
Singapore	7,810	5,574	(-) 2,236
Sri Lanka	678	485	(-) 193
Thailand	3,152	2,304	(-) 848
Republic of Viet-Nam	919	68	(-) 851
Western Samoa	22	4	(-) 18
Sub-Total	32,641	23,435	(-) 9,206
Overall Total	45,412	40,550	(-) 4,862

[a] Exports minus imports.

Components of Balance of Payments, Selected DMCs, 1972 & 1973

DMCs	Net Invisibles		Short-Term Capital (Net)[a]		Long-Term Capital (Net)		Transfers (Net)	
	1972	1973	1972	1973	1972	1973	1972	1973
Afghanistan	-29.8	-36.0	n.a.	n.a.	n.a.	n.a.	63.4[b]	63.6[b]
Bangladesh	-50.0	-9.0	n.a.	n.a.	—	41.0	261.0	367.0
British Solomon Islands	n.a.	n.a.	n.a.	n.a.	-4.9	n.a.	1.2	n.a.
Fiji	25.7	40.5	13.0	-4.9	25.2	64.0	7.9	5.7
Hong Kong	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Khmer Republic	-14.7	-15.9	8.9	-0.5	0.2	-1.2	104.0	34.1
Republic of Korea	33.5	67.7	-16.3	84.0	493.9	694.7	169.8	190.1
Laos	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pakistan	-191.3	-149.6	-7.5	14.5	224.7	357.1	173.7	194.2
Philippines	-55.0	-30.0	125.9	-4.2	117.3	134.9	188.0	231.0
Singapore	283.4	366.3	128.4	241.1	262.5	253.3	-6.7	-8.1
Sri Lanka	-2.3	8.6	-3.6	-26.4	47.6	85.2	7.7	13.4
Thailand	316.4	335.9	94.0	129.0	161.8	69.8	39.0	68.0
Republic of Viet-Nam	199.2	142.1	9.8	0	19.1	-15.2	541.4	515.2
Western Samoa	2.2	1.1	2.0	n.a.	7.5	7.2	4.5	8.3
Total	517.3	721.7	354.6	432.6	1,354.9	1,690.8	1,554.9	1,682.5

[a] Including non-monetary and monetary sectors.

[b] Official loans and grants.

Sources: IMF, *Balance of Payments Yearbook*, 1974 and country reports.

IMF Members' Fund Positions, DMCs
($ million; as of 30 September 1974)

DMCs	Gold Tranche Position[a] (1)	Credit Tranche Position (2)	Amount Available for Drawing (3) = (1)+(2)	Drawing[c] Outstanding (4)
*Afghanistan	0	35.9[b]	35.9	19.0
*Bangladesh	0	24.7[b]	24.7	127.8
*British Solomon Islands	Not IMF member		—	—
Burma	0	68.3[b]	68.3	46.3
Republic of China	0	653.0	653.0	71.0
*Fiji	0	15.3	15.3	3.1
*Hong Kong	Not IMF member		—	—
Gilbert & Ellice Islands	Not IMF member		—	—
India	0	837.0	837.0	443.0
Indonesia	22.4	308.9	331.3	0
*Khmer Republic	0	15.1	15.1	22.7
*Republic of Korea	0	95.0[b]	95.0	48.7
*Laos	4.0	15.7	19.7	0
Malaysia	56.1	221.0	277.1	0
Nepal	3.7	14.7	18.4	0
*Pakistan	0	131.0[b]	131.0	225.0
Papua New Guinea	Not IMF member		—	—
*Philippines	1.6	184.0[b]	185.6	79.0
*Singapore	11.2	43.9	55.1	0
*Sri Lanka	0	79.0[b]	79.0	107.0
*Thailand	40.4	159.0	199.4	0
Tonga	Not IMF member		—	—
*Republic of Viet-Nam	18.7	74.0	92.7	0
*Western Samoa	0.5	2.4	2.9	0
Sub-Total (country with * mark)	—	—	951.4	632.3
Total	—	—	3,136.5	1,192.6

[a] A member's quota minus the IMF's holdings of its currency, if the amount is positive.

[b] Stand-by arrangements + other.

[c] Drawings - repayment by repurchase; drawings include ordinary drawings, compensatory drawings, oil facility drawings and buffer stock drawings.

Source: IMF, IFS November 1974.

Estimated Indexes of Export/Import Prices and Terms of Trade; Selected DMCs; 1974 and 1975

DMCs	Estimated Indexes (1973 = 100)					
	Export Prices		Import Prices		Terms of Trade	
	1974	1975	1974	1975	1974	1975
Bangladesh	105	114 (+ 9)	128	123 (-4)	82	93 (+13)
Burma	147	133 (-10)	105	105 (0)	140	127 (- 9)
Republic of China	117	114 (- 3)	113	113 (0)	104	101 (- 3)
Fiji	138	115 (-17)	123	123 (0)	112	93 (-17)
Indonesia	237	236 (0)	113	108 (-4)	210	219 (+ 4)
Pakistan	124	117 (- 6)	128	128 (0)	97	91 (- 6)
Papua New Guinea	117	113 (- 3)	110	110 (0)	106	103 (- 3)
Philippines	135	124 (- 8)	130	129 (-1)	104	96 (- 8)
Sri Lanka	128	126 (- 2)	144	138 (-4)	89	91 (+ 2)
Thailand	123	117 (- 5)	128	128 (0)	96	91 (- 5)
Republic of Viet-Nam	112	107 (- 4)	130	130 (0)	86	82 (- 5)

Figures in parenthesis refer to percentage increase/decrease during 1974-75.

Estimated Indexes of Capacity to Import; Selected DMCs: 1974 and 1975

DMCs	Index of Capacity to Import[a] (1973 = 100)	
	1974	1975
Bangladesh	86	96 (+12)
Burma	167	155 (- 7)
Republic of China	107	127 (+19)
Fiji	94	99 (+ 5)
Indonesia	166	180 (+ 8)
Pakistan	89	92 (+ 3)
Papua New Guinea	109	131 (+20)
Philippines	89	98 (+10)
Sri Lanka	82	90 (+10)
Thailand	108	113 (+ 5)
Republic of Viet-Nam	82	88 (+ 7)

[a] Defined as commodity terms of trade multiplied by the index of export volume.

Note: Figures in parenthesis refer to percentage increase/decrease during 1974-75.

"Projections and Analysis of Trade Development in Selected Developing Countries in the Asian Region, 1974 & 1975"

Introduction: **Perry P. Chang**

The Paper had the limited purpose of projecting the expected course of trade development in the region consequent on recent shifts in world trade and of assessing the implications of such developments. In the absence of adequate data and lack of knowledge of the functional relationships between the many variables, the estimates and the projections given in the Paper were essentially indicative in character. They did, however, provide some estimate of the probable magnitudes involved as to enable assessment, in a less than precise manner, of possible consequences.

Twenty-one developing member countries were included in the analysis. The projections indicated that, in the past, six countries would continue to have trade surpluses in 1974 and 1975 while the remaining countries would remain as deficit countries; the magnitude of these deficits, however, is estimated to increase substantially during 1974-1975.

In spite of variations in the magnitude of deficits among countries in light of their common characteristics pertaining to trade development, these countries were treated as a group in the Paper. Total trade deficit of fifteen deficit countries, which was $4.8 billion in 1973, was projected to reach $8.8 billion in 1974 and increase further to $9.2 billion in 1975. The magnitude of the problem for these countries was clearly evident from these projections.

The massive increases in the trade deficit were mainly due to the increase in oil prices. From a level of about $1 billion in 1973, payments for oil are projected to increase to $3.5 billion in 1974 and further to $3.7 billion in 1975.

Payments on account of rice imports were estimated to increase from $300 million in 1973 to around $700 million in 1974 and 1975 due to the increased price of rice on world markets. If the required imports of fertilizers necessitated for boosting regional production of foodgrains did not materialize for any reason, the import bill for rice would have to increase further.

A closer analysis of the balance of payments implications of the projected trade deficits suggested that net invisible earnings, drawings down available external reserves, wherever possible, and accommodation by the IMF could meet part of the deficit.

Net long-term capital inflows have averaged $3-3½ billion annually in the past. Given the international economic situation, it was unlikely that there would be any substantial increase and, consequently, the balance of the deficit would need to be financed by short-term capital.

The group of deficit countries included Hong Kong and Singapore which had traditionally run large trade deficits financed by substantially short-term capital flows; these countries would continue to attract short-term capital on commercial terms. For the countries projected to have deficits in trade balance, excluding Hong Kong and Singapore, the required inflow of short-term capital would amount to about $1 billion in both 1974 and 1975. The striking feature of trade development, as highlighted in the Paper, was the emergence of increased need for short-term capital flow in those countries which, in the past, did not rely substantially on such flows.

If trade and the balance of payments developed along the projected lines, there was the possibility that the terms of trade and the ability to import would worsen in most of the deficit countries. And, if the trade deficits had to be largely met out of short-term capital, that could only be a temporary and costly expedient at a period when constraints on import ability are also affecting growth. Short-term borrowings also became all the more difficult to negotiate where economic conditions weakened.

The urgent need, therefore, appeared to be substantial increases in the inflow of long-term capital which would enable the development of domestic energy resources, expand export capacity and generally stimulate quicker socio-economic development. From that point of view, the possibilities of recycling petro-dollars into long-term investments rather than to meet only the short-term balance of payments needs merited serious consideration.

While the deficit countries might be able to attract the required short-term capital to meet the immediate need, such inflow would not go very far in resolving the basic problems and laying the foundations of long-term growth. Given the time-lag for capital investments to fructify, it was vitally important that the long-term capital flow increase at the earliest possible time. Otherwise future development could be even more critically constrained by the balance of payments situation.

COMMENTS

by

Sheng-Yi Lee

The Paper had illustrated the adverse effects on growth and balances of payments of countries in the region consequent on deteriorating terms of trade and sharply increased payments for oil, fertilizer, rice and other commodities. A greater reliance on short term financing was to be expected along with more recourse for financial assistance from the oil-exporting countries of the Middle East. With the unfavorable prospects for trade and development, the Paper had also correctly anticipated the possibility that many countries might impose Phase II policies of exchange control and quantitative restrictions.

Prospects of assistance from the developed countries were uncertain on account of recessionary and balance of payments problems of their own. In regard to assistance from the oil-exporting countries in the Middle East, while some long-term capital flow was expected into a few DMCs, the tendency was for most of the long-term petrodollar investments to be in the developed countries. The situation was similar with short-term capital flows from the Middle Eastern countries. To the extent the increased import demand of the oil-exporting countries consisted largely of commodities like capital goods, foodstuffs and armaments, there was also not much prospect of increased exports of DMCs to these countries.

Some DMCs have availed of the IMF oil facility to cover part of their immediate requirements. However, the OPEC countries have been reluctant to channel any significant part of their surplus funds through the IMF. In addition, the developing countries have considered the interest rates of 6-7/8 to 7-1/8 per cent levied by the IMF to be too high while the OPEC countries consider the interest rate to be too low in the context of generally high interest rates on world markets.

Other possible sources of capital include the Islamic Development Bank and the longer-term prospect that there would be a link between SDRs and development assistance.

Generally, therefore, it appeared that the prospects for an increased capital flow to the DMCs to ease the balance of payments constraints and to accelerate development were uncertain and precarious.

Consequently, the only real option for the DMCs to meet the balance of payments problems and to accelerate growth was to rely on greater self-reliance by restraining consumption and increasing savings and investment through greater social discipline. Such an orientation of policies could necessitate some lowering of the standard of living in terms of foregoing consumption of imported products and the maintenance of industrial peace to increase productivity. Foreign capital and technical know-how would, then, become a useful marginal input rather than an indispensable resource.

Although export prices of primary commodities generally increased from 1972 through the first half of 1974 there have been marked decline in export prices thereafter except for petroleum and other foodstuffs. That had further aggravated the problems caused by the rise in import prices. In this respect the price expectations for the projections in the Paper appeared too optimistic. For example, the Paper had projected a trade surplus for Malaysia in 1974: the sharp falls in the export prices of rubber, tin, timber and palm oil had, however, made for a deficit in the trade balance in 1974.

The Paper had not analyzed possible trade developments in the exports of manufactured goods although export diversification in that form was sought by many DMCs. With the projected balance of payments deficits in most DMCs there was the possibility that protective tariffs and quantitative restrictions could intensify. The increased export of manufactures could, therefore, depend on greater regional cooperation in trade and improved access to the markets of the developed countries, Africa and the Middle East.

Among the DMCs, too, there were significant differences in the circumstances of their trade, payments and economic development and generalizations could provide inadequate results. Indonesia, Malaysia, Burma and Singapore stood to benefit from petroleum and ancillary industries; Singapore and Hong Kong from their unique economic situation while many DMCs such as India, Indonesia, Pakistan, Philippines and Thailand could respond to high food prices with increased output. Bangladesh, in particular, appeared the worst affected by the projected trends.

A problem general to all DMCs was the continued rapid increase in population and success in slowing the rate of population growth could be an important factor in their economic prospects.

The Paper had made the interesting observation that the oil crisis could benefit the developing countries by inducing the shift of industries to proximity to domestic energy and raw material sources. Also that there

could be an added incentive to move from energy-intensive technologies to energy-economizing or labour-intensive technologies. These expectations, of course, depended on a re-structuring of international complementarities and the accelerated flow of foreign investment to the developing countries.

COMMENTS

by

V.R. Panchamukhi

The projections presented in the Paper were, except for the estimated imports of foodgrains, essentially the extrapolation of past trends which did not explicitly incorporate policy variables and the interaction between policies and economic entities.

A more rigorous and systematic framework within which all interconnected projections could have been worked out would have been more desirable. Such a disaggregated macro-model based on behavioral and technical relationships - would have given a better insight into the interrelationships between the major sectors. The projected import demand for fertilizers in 1975, for example, appeared too low: a better estimate would have been possible if that had been related to the desired or feasible rate of growth in agricultural output.

A quantitative estimation of the indirect effects on other sectors of the increase in petroleum prices could have been done through the input-output tables available for some DMCs. The demand for petroleum imports could, then, have been made a function of the desired rate of growth in output in user industries or sectors.

The use of a macro-model could also have better illustrated the relationships between the *ex ante* and *ex post* savings and trade gaps, the effects on the growth rate of GDP and the probable process of adjustment. The inclusion of behavioral parameters such as the marginal propensity to import could also have influenced the projections. If the marginal propensity to import was, for example, assumed to remain constant, the projected growth of imports could have implied growth of GDP different from the desired rate of growth. Given the rigidities in the import content of production in developing countries, the projections of imports presented in the Paper implied a growth rate of GDP which would be smaller than that postulated in the Paper. That implication seemed

to arise because the marginal propensity to import or the import content of production had not been explicitly introduced and considered as a rigid parameter in the projections.

The Paper had suggested that commodity prices had reached a peak in late 1973 and early 1974 and that there would be a falling trend in the immediate future. In the absence of an analysis of the seasonal and cyclical fluctuations in prices and of demand and supply factors, seasonal or cyclical price peaks could not be isolated from longer term trends.

The increases noted in the export prices of many primary commodities and petroleum had been a desirable development in reversing the continuing improvement in the terms of trade of the developed countries. The Paper could have also paid attention to the feasibility and the desirability of measures to improve – or, at least, prevent the further deterioration in – the terms of trade of the developing countries.

The projected foreign capital inflow had been specifically related in the Paper to the trade gap. However, in most DMCs, the savings gap was the dominant factor and *ex ante* estimates of foreign capital requirements should have been related to the savings: investment gap instead. The process of adjustment referred to in the Paper was derived only in relation to the *ex ante* estimates of the trade gaps considered in the Paper.

However, where, as in most DMCs, the *ex ante* savings gap were the dominant gap but the capital inflow were equal to the *ex ante* trade gap, then the adjustive process would have to be through an increase in *ex ante* savings or a decrease in *ex ante* investment (i.e., a decline in GDP growth given a constant capital: output ratio). If the capital inflow were equal to the *ex ante* savings gap the adjustment would be through an increase in *ex ante* imports and/or a decline in *ex ante* exports.

The Paper had implicitly assumed that the decline in the exportable capital from the industrialized countries would be equal to the increase in the exportable capital of the oil-producing developing countries. The increased demand for imports by the oil-producing developing countries could, however, reduce their exportable surplus and the total availability of foreign capital funds could become smaller.

The projections in the Paper had suggested that individual DMCs would continue in trade deficit/surplus during 1974 and 1975 as in 1973. As there seemed to be no correspondence between the type of trade regime adopted by countries and the magnitude of trade surplus/deficit projected, it appeared that either the effect of particular trade regimes on trade had

not been incorporated in the projections or that it had been assumed that the adoption of particular trade regimes made no significant difference in the existing international context. The favorable results anticipated from more liberal regimes were affected not only by natural factors such as droughts but also by other factors in both the domestic and international fields. The choice, anyway, was not purely between a liberal trade regime or a control regime: there were many in-between policy-mixes which could better suit the circumstances of particular countries.

General Background Paper: B

"Development in Trade and Trade Policies in the Developing ESCAP Countries"

by

Shoji Nishimoto

I. INTRODUCTION

The developing ESCAP region consists of more than twenty countries with wide variations in their geographic characteristics, cultural backgrounds and levels of political and socio-economic development. Moreover, member countries of the region also differ in size, resource endowments and economic structures. The regional countries range in size from China with a population of some 800 million to small island countries in the Pacific with populations of a few thousands. The region contains highly industrialized countries as well as predominantly agricultural countries. The region also includes a country with such an open economic policy as Hong Kong and with such a closed one as Burma. While the region includes such countries with higher *per capita* income as Singapore and Hong Kong, it also contains the poorest of the poor. It is, therefore, only natural to observe a wide range in growth performance among the countries in the region.

Irrespective of the heterogenity of the economies and the widely varied growth performance among the developing ESCAP countries, however, the role of international trade, in particular exports, in over-all development has been generally emphasized in their respective national development plans. It is also advocated in such international development efforts as envisaged in the International Development Strategy for the Second United Nations Development Decade.[1] While there is no doubt about the vital role of international trade and finance for development in general, some of the important changes in the international situation and resultant problems have made it necessary to reconsider various aspects of the trade-oriented approach to development.

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[1] The International Development Strategy for the Second United Nations Development Decade, United Nations, 1970.

In the following chapters, major trade issues and trade policies of the developing ESCAP countries will be discussed in the light of recent changes and developments in international trade and finance.[2]

II. TRADE CHARACTERISTICS

A. Growth Trend

Trade performance, in terms of growth in exports, of the developing ESCAP region as a whole has been improving.[3] Between 1960 and 1970, the region increased its exports at an annual compound rate of 5.7 per cent. This, however, was lower than the export growth rate of all developing countries as a group, not to mention that of developed countries. Therefore, the share of exports from the developing ESCAP region in total world exports recorded a declining trend. In recent years, however, this trend has been reversed. That is, the region improved its export performance toward the end of 1960s and further upgraded it in the early 1970s, especially in 1973 when a record rate of more than 50 per cent per annum was attained.

The export performance varied widely from country to country.[4] Such countries as Hong Kong, Indonesia, and the Republic of Korea, expanded exports toward the latter half of the 1960s and accelerated their growth of exports during 1972 and 1973. Other countries including India, Iran, Philippines, Singapore and Thailand, joined the high export growth countries in 1971 and 1972, and improved their performance in 1973. In Pakistan and Sri Lanka rapid export expansion did not occur until 1973. Others, such as Bangladesh, Burma, Fiji, did not record much improvement and the growth performance was slower, even in 1973, than that of others in the region. The war-ravaged countries in Indo-China, i.e. Laos, Cambodia and South Viet-Nam, have had declining export trend. South Viet-Nam, however, showed a moderate recovery in recent years.

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[2] Trade policies discussed in the following sections are mostly of direct control in nature, while those related to macro-price and income adjustments are referred to only briefly. The period discussed in this paper is from 1960 to early 1974.

[3] Table 1.

[4] Table 2.

Table 1. Growth of World Trade in Different Regions[a]
(percentages)

		Annual Compound Rate			Percentage Change Over Previous Year		
		1960-70	1970-72	1970	1971	1972	1973
World Total	Exports	9.4	15.4	14.4	11.8	19.0	38.1[b]
	Imports	9.3	14.4	14.6	11.4	17.5	37.1[b]
Developed Countries	Exports	10.1	15.2	15.3	11.8	18.9	36.7
	Imports	10.2	14.8	15.3	11.2	18.3	37.6
Developing Countries	Exports	7.4	16.5	11.9	13.8	19.4	43.8
	Imports	6.6	12.6	12.4	13.4	11.7	34.6
Africa	Exports	10.0	8.0	11.5	3.4	12.7	38.8
	Imports	5.8	11.5	16.4	14.6	8.5	29.7
Latin America	Exports	5.5	10.6	10.4	4.8	16.6	40.8
	Imports	6.1	12.6	14.3	13.5	11.7	27.0
Developing ESCAP	Exports	5.7	13.0	11.5	7.8	18.4	55.9
	Imports	6.1	9.6	9.2	10.1	9.2	42.9
Middle East	Exports	8.8	31.9	12.1	41.1	23.4	39.8
	Imports	7.7	16.5	6.5	17.6	15.5	39.8
Centrally Planned Economies	Exports	9.7	12.9	12.3	8.3	17.7	...
	Imports	9.3	14.9	14.3	8.3	21.9	...

a Value in current US$.

b Excludes Centrally Planned Economies.

Table 2. Growth of Foreign Trade in Selected Developing ESCAP Countries[a]: 1960-1974
(percentages)

		Annual Compound Rate			Percentage Change from Preceding Year				
		1960-1965	1965-1969	1969-1974	1970	1971	1972	1973	1974
Burma	Exports	-0.1	-12.5	5.1	-18.9	16.8	-2.4	-9.8	53.6
	Imports	-1.0	-9.6	-13.9	-6.1	9.0	-20.1	-28.9	-18.8
Cambodia	Exports	8.5	-17.8	-47.4[c]	-18.8	-61.5	-53.3	...	...
	Imports	1.6	-6.7	0.9[c]	-30.8	44.4	2.6	...	...
Fiji	Exports		3.1	8.5[c]	18.0	-1.4	9.9	...	...
	Imports		5.1	21.1[c]	16.8	23.1	23.4	...	...
Hong Kong	Exports	10.6	17.5	20.6	15.5	14.2	21.2	48.2	10.2
	Imports	8.9	11.9	20.9	18.2	16.6	15.2	44.5	12.5
India	Exports	4.9	2.1	12.5[d]	10.5	1.7	16.5	22.5	...
	Imports	4.9	-6.7	7.9[d]	-4.0	14.0	-6.6	33.8	...
Indonesia	Exports	-3.4	4.8	21.6[c]	36.0	10.1	20.1	...	...
	Imports	3.9	3.0	23.1[c]	28.3	10.1	32.2	...	...
Korea, Republic of	Exports	39.6	37.4	45.2	34.0	27.9	52.1	97.0	25.7
	Imports	6.1	40.9	25.8	8.8	20.7	5.3	67.3	36.2
Laos	Exports	0.0	41.4	-9.2[c]	75.0	-14.3	-50.0	...	...
	Imports	20.5	25.9	-19.1[c]	37.3	28.1	-46.3	...	...
Malaysia	Exports	0.8	7.5	21.4	2.1	-3.0	4.9	71.9	47.4
	Imports	3.8	1.8	24.9	19.9	1.6	14.1	46.6	49.1
Pakistan	Exports	6.1	6.6	3.2	6.0	7.9	2.1	41.3	17.1
	Imports	9.9	-0.3	6.0	11.2	-20.3	-27.3	47.1	40.9
Philippines	Exports	6.5	2.7	22.2	24.2	6.2	-2.0	61.8	30.3
	Imports	6.2	8.8	17.2	-3.5	9.6	3.0	29.8	54.3
Singapore	Exports	-2.9	12.1	29.2	0.3	12.9	24.3	65.3	54.9
	Imports	1.4	13.2	29.5	20.6	15.0	19.6	49.6	46.9
South Viet-Nam	Exports	-16.5	-30.9	17.6[c]	0.0	0.0	62.5	...	...
	Imports	8.3	6.1	16.0[c]	-17.7	32.4	43.1	...	...
Sri Lanka	Exports	2.4	-5.8	5.0	6.2	-4.4	-4.3	24.0	8.9
	Imports	-5.6	8.3	-4.3	-9.1	-13.9	-0.3	26.4	-18.8
Thailand	Exports	8.6	3.3	22.3[d]	0.3	17.0	30.1	46.4	...
	Imports	10.5	14.0	13.5[d]	4.1	-0.5	15.3	38.6	...
Western Samoa	Exports	...	0.0	0.0[c]	-16.7	20.0	0.0	...	...
	Imports	...	2.7	26.0[c]	40.0	-7.1	53.8	...	...

a Exports (f.o.b.) and imports (c.i.f.) in current US $.
b Estimated.
c 1969-1972.
d 1969-1973.

Source: International Monetary Fund (IMF): *International Financial Statistics*, February 1974 and August 1974.

Table 3. Commodity Composition of International Trade in the Developing ESCAP Region[a]
(percentages)[b]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Composition of Imports													
Consumption goods	36.2	35.1	32.8	34.2	34.7	34.2	36.8	35.0	32.4	32.1	30.5	29.3	30.1
Food	18.2	17.0	16.3	18.6	19.9	19.7	20.4	19.9	17.8	16.0	14.9	14.0	14.1
Others	18.0	18.1	16.5	15.6	14.8	14.5	16.4	15.1	14.6	15.6	15.6	15.3	16.0
Materials chiefly for consumption goods	25.4	25.0	25.9	23.7	22.6	22.9	23.8	24.7	26.8	26.2	27.7	28.1	28.4
Materials chiefly for capital goods	10.0	9.4	9.1	9.2	8.3	8.0	7.5	7.7	7.5	7.3	8.2	7.6	7.4
Capital goods	28.4	30.5	32.2	32.9	34.4	34.9	31.9	32.9	33.3	34.3	33.6	34.8	34.1
Composition of Exports (by SITC Section and Selected Commodity Group)													
Food, beverages and tobacco (0+1)	25.3	25.0	25.6	27.8	28.8	27.8	26.8	25.6	23.5	20.8	19.8	19.7	18.8
Mineral fuels and related materials (3)	5.8	6.5	6.1	6.1	5.4	5.2	5.8	6.4	6.9	6.6	6.9	7.4	7.0
Crude materials, local fuels; and oils and fats (2+4)	41.4	37.0	35.5	33.4	31.8	31.8	31.7	27.9	26.9	26.6	24.9	21.8	22.2
Chemicals (5)	1.4	1.7	1.7	1.8	1.9	2.0	1.9	2.2	2.3	2.4	2.2	2.4	2.6
Machinery and transport equipment (7)	1.4	2.0	2.3	2.3	2.1	2.5	3.0	3.5	4.0	4.8	5.4	6.7	8.4
Other manufactured goods (6+8)	24.7	27.8	28.8	28.6	30.0	30.7	30.9	34.4	36.4	38.7	40.8	42.0	41.0
Textile yarn and fabrics (65)	10.5	11.4											
Iron and steel (67)	—	—	1.1	1.3	2.0	1.7	1.6	1.7	1.8	1.6	1.9	1.8	1.9
Non-ferrous metal (68)	—	—	3.3	2.8	2.9	3.4	3.3	3.3	3.3	3.3	3.2	2.7	2.4

a Comprising Burma, Cambodia, Hong Kong, India, Indonesia, the Republic of Korea, Laos, Malaysia, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand and the Republic of South Viet-Nam.

b Based on value figures in current US$.

Source: *Statistical Yearbook for Asia and the Far East*, 1971, 1972 and 1973.

Table 4. Direction of Trade of Developing ESCAP Countries[a]
(percentages)[b]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Imports from													
ESCAP countries	39.2	35.8	35.3	35.8	35.7	36.5	38.4	39.0	41.3	42.1	42.2	43.5	45.2
Developing ESCAP countries	25.8	22.6	22.2	22.2	20.7	19.9	21.1	19.1	18.3	19.2	18.8	18.4	19.2
Western Europe (including United Kingdom)	38.9	41.3	37.6	35.3	34.9	35.8	33.2	31.5	29.5	30.7	29.4	29.7	29.0
Europe occidental	28.2	28.9	25.9	24.6	24.8	25.9	24.3	23.7	23.5	23.5	22.4	22.3	22.1
United Kingdom	10.7	12.4	11.7	10.7	10.1	9.9	8.9	7.8	7.0	7.2	7.0	7.4	6.9
USSR and Eastern Europe	1.6	2.3	4.3	3.2	3.6	3.5	3.5	3.2	3.5	4.0	3.2	2.7	1.6
North America	16.5	16.3	19.2	22.2	22.0	20.5	21.2	21.9	20.2	18.6	20.0	18.4	17.8
United States	15.3	15.2	18.2	20.8	20.1	19.2	19.5	20.0	18.6	17.1	17.9	16.6	16.5
South America	0.1	0.2	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.3	0.5
Middle East and Africa	3.7	4.0	3.3	3.3	3.5	3.4	3.3	3.9	5.1	4.1	4.6	5.4	5.9
Export to													
ESCAP countries	36.3	35.9	34.9	35.9	36.6	36.5	38.0	38.6	39.7	40.8	40.4	40.7	40.1
Developing ESCAP countries	25.3	24.6	23.3	23.0	22.3	22.0	22.4	20.8	21.6	21.5	19.0	19.2	18.3
Western Europe (including United Kingdom)	39.7	39.0	38.9	38.4	36.4	34.3	32.6	33.7	30.6	29.0	29.3	28.1	30.8
Europe occidental	27.0	26.9	26.7	26.7	25.3	24.5	23.5	22.7	21.0	21.8	22.3	21.4	24.4
United Kingdom	12.7	12.1	12.2	11.7	11.1	9.8	9.1	11.0	9.6	7.2	7.0	6.7	6.4
USSR and Eastern Europe	3.6	4.1	4.8	5.0	4.7	5.1	5.2	4.7	4.8	4.5	4.5	4.1	3.7
North America	14.6	14.9	15.1	14.8	15.6	16.8	17.5	16.5	18.7	19.8	19.4	20.9	20.4
United States	12.6	13.0	13.2	12.8	13.9	14.9	15.2	14.8	16.9	17.8	17.4	18.7	18.1
South America	1.0	0.9	0.9	0.7	0.8	0.8	0.8	0.6	0.6	0.7	0.7	0.6	0.4
Middle East and Africa	4.9	5.3	5.4	5.2	5.9	6.5	5.9	5.9	5.6	5.2	5.7	5.6	4.6

a Comprising Brunei, Burma, Cambodia, Fiji, Hong Kong, India, Indonesia, Iran, the Republic of Korea, Laos, Malaysia, Pakistan, Papua New Guinea, the Philippines, Singapore, Sri Lanka, Thailand, the Republic of South Viet-Nam and Western Samoa.
b Based on figures in current US$.

Source: ESCAP, *Statistical Yearbook for Asia and the Far East*, 1971, 1972 and 1973.

Total imports by the developing ESCAP region grew at a slightly higher rate than total exports during 1960-1970, i.e. at 6.1 per cent per annum. The import growth rate increased in early 1970. The rate was, however, slightly lower than for the developing countries as a group and for the developed countries in 1971 and 1972.

As observed for exports, import growth differed substantially among the countries in the region. Such countries as Hong Kong, the Republic of Korea, Malaysia, Singapore and Western Samoa recorded considerable increases in imports. Other countries such as India and Pakistan, increased their imports at moderate rates while such countries as Burma, Cambodia, Laos and Sri Lanka, often recorded reductions in imports.

Although situations differ among the countries in the region, it is observed that the balance on current accounts of many developing ESCAP countries has shown an improving trend because of high growth in exports and somewhat lower increase in imports. This favourable trend concurred with an increase in net inflow of foreign resources, through private direct investment and official aid in particular; these all added to a surplus in the over-all balance of payments. As a result, the international reserves of many countries in the region have increased considerably after a declining trend in the 1950s.

B. Commodity Composition

Significant changes can be observed in the composition of commodities traded in the region (Table III). In exports, two traditional groups, i.e. crude materials, local fuels, and oils and fats; and food, beverage and tobacco, which together occupied a dominant 66.7 per cent of total exports in 1960 and remained relatively stable up to 1965 started to decrease in importance steadily thereafter to 41.0 per cent in 1972. On the other hand, total manufactured goods, i.e., machinery and transport equipment and other manufactured goods which occupied a minor 26.1 per cent in 1960 grew rapidly to take over the dominant position of 49.4 per cent in 1972. In imports also, although the changes were somewhat slower than in exports, important changes occurred. The relative importance of consumption goods in total imports decreased from 36.6 per cent in 1960 to 30.1 per cent in 1972. This ratio, like that of the two traditional groups in exports, followed a stable trend up to 1967 and then gradually became smaller. The notable change is attributed to the reduction in relative importance of food imports whereas other consumption goods showed rather stable trend.

C. Direction of Trade

As shown in Taole 4, significant changes occurred in the direction of trade. The relative importance of the developed market economies, especially the United States, the EEC and Japan, as trade partners further intensified. On the other hand, the high level of intraregional trade,, which distinguishes this region from others, showed a persistent declining trend, i.e. from 25.5 per cent in 1950 to 18.7 per cent in 1972. The relative importance of the USSR and Eastern Europe, which showed an increasing trend in early 1960s, turned into a declining trend.

As importers from the developing ESCAP region, the relative importance of Europe, which showed a declining trend through 1960s, started to recover in 1970s. The positions of the United Kingdom and South America, on the other hand, deteriorated throughout the period, while those of the USSR and Eastern Europe and the Middle East and Africa started to decline after having an expansional trend in the early 1960s. Throughout the period, the relative importance of developed ESCAP countries, Japan in particular, and that of the United States increased constantly to take up the dominant share in the total. As exporters to the region, again, the relative importance of the developed market economies dominates. It is, however, the position of the developed ESCAP countries that recorded a rapid increase, while the positions of South America, Middle East and Africa showed a moderately rising trend. On the other hand, the relative importance of the United States, the USSR and Eastern Europe, which showed increasing trends towards the end of 1960s, started to decrease in early 1970s. The shares of Europe occidental, United Kingdom and intraregional trade of the region fell steadily throughout the period.

D. Country Groups

There are several characteristics in regard to trade, in particular exports, among the developing ESCAP countries which are of relevance to trade policies. Some countries, including the Republic of Korea, Hong Kong and Singapore, have been quite successful in export expansion despite their basic lack of natural resources. They are, however, well endowed with skilled and semi-skilled labour. Their rich endowment in educated and trained labour, therefore, is considered to give a comparative advantage in labour- and skill-intensive light-manufactures and semi-manufactures. The limited size of domestic markets naturally led the industries to export. The dependence on foreign demand for their products and on foreign supply for the raw materials is the crucial factor in determining their trade policies.

Another group of countries, such as Indonesia, Malaysia, Philippines, Thailand and Iran, has been also increasingly successful in achieving export expansion of their raw material exports, and to a certain extent has attained import-substitution, especially of the major consumption goods. The population pressures on natural resources, with a possible exception of Indonesia, are not very acute among the countries in this group. Also, they have not been generally troubled with balance-of-payments difficulties because of recent price rise in the raw materials they specialize in and the inflow of foreign private capital. Naturally the export promotion policies in this group are still at their early stage, especially for light-manufactures and semi-manufactures. They have become, however, increasingly aware of the limits in their import-substitutive industries and the natural resources exploiting export orientation, so that major emphases in their trade policies have shifted toward export promotion of light-manufactures and semi-manufactures.

In a third group, including India, Pakistan, Bangladesh and Sri Lanka, there is a quite different situation. Although the levels of industrial development differ among these countries, it is evident that acute population pressure on natural resources (including vital foodstuffs) has had detrimental effects on their over-all development efforts. Their traditional export commodities, with the exception of cotton exported by Pakistan, are unfortunate to be left behind in the price boom for general primary commodities because their low demand elasticities and have met stiff competition with products from developed countries, especially synthetics. Because of the limited convertible foreign exchange earnings from exports, imports are heavily restricted and controlled.[5] The resultant administrative complexity has led sometimes to inefficient utilization and misallocation of limited imports which have an adverse effect on their exports of light-manufactures and semi-manufactures.

Another group of countries, such as Afghanistan, Cambodia, Laos, Nepal and the Republic of South Viet-Nam, and developing island countries of the Pacific, has special problems either because of war or because of their very low level of development aggravated by land-locked or sea-isolated characteristics. In most of the cases, both their industrial bases and agricultural production capability are too limited to allow a rapid export expansion.

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[5] Pakistan which has lessened import restrictions in recent years may be an exception.

III. TRADE ENVIRONMENTS

A. International Market Situation

It is a current trend that the trade dependence of the developing ESCAP countries on developed market economies is high and increasing. Regarding export, high dependence makes the export performance of the region subject to particularly the growth fluctuation of the developed market economies. A good example can be found in the buoyant demand of the United States and Japan for the light-manufactures and semi-manufactures exported from the East Asian countries and the over-all increase in demand and, thus, higher prices for raw materials exported from the Southeast Asian countries and Iran during 1971, 1972 and 1973. It is, however, the sharp increase in the prices of petroleum in 1973 that warned the world of the need of flexibility in trade-oriented development.

The prices of raw materials started to move upward towards the end of 1971. They accelerated in 1972, and during the 18 months from the latter half of 1972 to the end of 1973, the Reuter's Index increased 2.5 times. This, in terms of an average monthly increase rate of 5.1 per cent, is even higher than the one recorded during the Korean conflict when the demand for strategic commodities soared. The short-term reasons for this boom are: (i) an upward growth trend in developed market economies; (ii) a shortage of agricultural products due to natural hardships during 1972 and 1973; (iii) an increase in speculative trading due to instability in the international monetary situation; (iv) an increase in demand for goods as an inventory investment to facilitate a hedge against worldwide inflation; and (v) an increase in prices of petro-chemical products due to price rises in petroleum (e.g., synthetic fibre and synthetic rubber). More importantly, the long-term reasons are: (i) a slow-down in non-ferrous metal production due to environmental problems; (ii) a food shortage in developing countries due to population expansion; (iii) increases in nationalistic feeling for natural resources which led to price increases or support policies (e.g., for copper, tin, coffee and bauxite). However, as a large portion of price rises of raw materials cannot be explained reasonably by the industrial production rise and food production failure alone and, as the long-term reasons naturally have slower effects, speculative trading is considered to have performed an active role in the current price rise.[6] It is, therefore, uncertain whether this trend would continue for some time. Already prices of some commodities have shown a weakening tendency.

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[6] International Monetary Fund, *Annual Report*, 1974.

B. Exchange Rate Alignment

The floating of major currencies from August 1971 was terminated in December 1971 through a realignment which, above all, resulted in the adoption of the wider band for maximum fluctuations. The international monetary uncertainty was temporarily lifted under the revised IMF system. The abolishment of the import surcharge and lessening of other protective measures by the United States after the realignment showed a favourable sign of development for the expansion of international trade. This did not, however, mean that all the related problems had been solved. In particular the long-term problems arising from inconvertibility of US dollar to gold, those related to the compensation of the US dollar balance held before the devaluation and those related to the new role of gold and SDR under revised IMF system, were left unsolved. Along with these monetary problems, the difficulties in international trade resulted from instability and uncertainty of the international currency situation were feared strongly among the countries in the region.

The realignment of major currencies in December 1971 had three major effects on the external account of the developing ESCAP countries. One was the expansionary effects through the expected stabilization of currencies and the recovery of economic activities in the major developed market economies. There was also an additional inflow of private capital from many developed market economies to developing ESCAP countries in order to take advantage of the increased competitiveness of the latter. The other is the deterioration in the terms of trade due to the rise in import prices and the third is the increase in the foreign debt balance, especially debt held in Japanese yen and some European currencies which had a significant revaluation.

The extent of effects for individual developing ESCAP countries is not clear, depending on their trade and financial link with specific developed market economies. It is, however, generally believed that the benefit from trade has lessened due mainly to the worsening of the terms of trade. For those countries, which have strong trade and financial ties with Japan, the terms of trade effect and debt balance effect may even be aggravated by the income effect from the slowing down of the Japanese economy which is expected to continue for some time.

Starting in June 1972 the Smithsonian Agreement met a strong challenge and finally collapsed in early 1973 when all major international currencies shifted to the floating rate system. The US dollar was again devalued. The foreign exchange markets in many countries, when reopened, saw reinforced control measures against the inflow of short-term capital.

The exchange rates of major international currencies thereafter followed a wide fluctuation. The Group of Twenty of the International Monetary Fund produced a report in March 1973 which indicated a general direction for international monetary reform, although practical implementation did not gain consensus among the member countries. Although a major step was taken recently when the SDRs were linked to a basketful of major international currencies, the international monetary situation is still full of uncertainties, especially in view of the high inflation and mounting threat of recession in the major developed market economies.

C. Foreign Financial Resources

It has been noted that the inflow of financial resources from developed countries to the developing ESCAP region, both on official and private basis, has increased steadily during the period under review.[7] For example, the total official development assistance from the member countries of the Development Assistance Committee (DAC) of the OECD to the developing regions increased from $4,665 million in 1960 to $8,649 million in 1972. The developing ESCAP region received 51.8 per cent of it in 1970 and 46.2 per cent in 1972. The total inflow of private financial resources from the DAC countries to the developing regions on the other hand, increased rapidly from $3,150 million to $8,420 million during the same period. Of particular relevance to trade are the increases in direct investment and suppliers' credit.

Increase in private direct investment is one of the most outstanding international financial developments in the recent years. For example, the total private direct investment from the DAC countries increased from $1,767 million in 1960 to $4,152 million in 1972. The developing ESCAP region attracted 15.5 per cent of it during 1969-1970 and 30.4 per cent during 1971-1972.

Whatever the motivations behind this increase, the relevant aspects to trade and development are generally envisaged as follows: (i) private direct investment has generally contributed to the expansion of trade between the developed countries and the region; (ii) private direct investment has contributed to a considerable extent to the industrialization of the region; (iii) private direct investment has brought forth a complication in the international price mechanism, especially when the investment originates from multinational corporations; (iv) private direct investment

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[7] However, the weighted average of ratios of official development assistance to GNP in DAC countries showed a steadily declining trend, i.e. 0.52 in 1960 to 0.34 in 1972.

has added complexity, both in the unilateral policy measures and the international arrangements, and (v) increased private direct investment implies increased economic dependence of the region on developed countries on a commercial basis. This tends to aggravate the economic disparity between the rich and poor in the region, all the more since the investments are often geared to the resource-exploitation type of industries.

Suppliers' credit has important implications for the balance of payments of many of the developing ESCAP countries. The DAC countries extended $546 million in total suppliers' credit in 1960, expanded it to $2,724 million in 1971 and then reduced it to $1,429 million in 1972. The developing ESCAP region received 24.6 per cent of the total in 1970 and 16.9 per cent in 1972.

The provision of suppliers' credit among some developing ESCAP countries has changed in recent years. In Thailand, for example, suppliers' credit grew steadily from 1968 to record $158.6 million in 1970, declined slightly to $131.8 million in 1971, fell to $102.5 million in 1972 and amounted to only $67.2 million in 1973. The major part of this decline is attributable to a reduction in inflow of suppliers' credit from Japan, which accounted for more than 50 per cent of the total in 1972 but less than 30 per cent in 1973. Besides Thailand, such countries as Burma, Iran, Pakistan and Singapore also showed declining trends in the inflow of suppliers' credits from Japan. There are several factors to which this decrease can be attributed: (i) uncertainty in the international monetary situation which deterred importers from entering into long-term debt, especially with Japan and the Federal Republic of Germany, (ii) general balance of payments constraints in developing countries, (iii) a slow-down of industrial investment, due to the accumulation of production capacity especially in import substitution industries, (iv) increase in the role of private foreign direct investment in financing imports of capital goods, and (v) Japan's policy to curb exports whose high levels had been embarrassing Japan's trading partners.

IV. POLICY DEVELOPMENT

A. Trade-Oriented Development Strategy

Trade policies are only a part of a development strategy, although an important one.[8] As strategy for development differs from one country

[8] The International Development Strategy for the Second United Nations Development Decade, United Nations, 1970

to another in terms of their specific requirements and conditions, the trade policies for each country should reflect the basic characteristics of the economies and the vision for development. Although it is obvious, it should be recalled that trade policies are valid only if they serve to strengthen the strategy and to enhance the capability of a country both in production and adjustment. There have been, however, many other considerations introduced into development strategies which tend to make it difficult to assess the pros and cons of certain trade policies. Among such considerations are employment creation, income distribution, and social and political effects of two major trade policies, i.e. export expansion and import substitution. It is apparent that possible weighting of trade-offs among the above considerations rest with the individual country. Suffice here to say that a common concept of export-oriented growth in terms of GNP is now undergoing a general reconsideration.

In the 1960s, the historical trade orientation in the development strategy was criticized as not realistic for developing countries because of large discrepancies between the developed and the developing countries, especially in production technology. Instead, the main emphasis shifted to "import-substitution policies". While this approach did contribute to industrialization and is still pursued in many of the developing ESCAP countries, its limits became clearer than its success in many countries. There are several reasons for this. First, countries tended to establish many import-substitution industries without paying due consideration to and studying the economic validity of such industries, viz. production efficiency and comparative advantage. A limited sized domestic market often forced the adoption of small sized factories which could not benefit from the economies of scale, resulting in misallocation of resources. Second, the linkage effects were neither recognized nor given due attention, resulting in bottlenecks. Third, the tariff concession on imports of industrial raw materials and intermediate goods tended to encourage assembly operations, which lack not only linkage effects but also positive external economies, especially to the main sector of the economy, i.e. the primary sector. Fourth, the import content of industries was usually very high and was not easily replaced due to general low level of domestic technology. In other words, the domestic value added remained low. This increased the import bill to such an extent that the foreign exchange saved by not importing final goods was offset by large imports of intermediate goods and capital goods. This is particularly so in case of intermediate goods and capital goods. Fifth, high protection needed for establishing such industries tended to cause a general loss to the national economy. Sixth, employment creation effects were minimum, despite the unemployment problem in the developing ESCAP countries. And lastly, the often over-valued exchange rate penalized the export earnings of primary commodities to the benefit of imports

of capital goods and raw materials. At the same time, the partiality found in the tariff structure sometimes made agricultural inputs costly resulting in the lessened competitiveness in the exports of agricultural products both in unprocessed and processed forms.

Most of the above-mentioned reasons are concerned with inefficiency in production side of import substitution. This is natural because the policy orientation of import substitution rests primarily on this and not on consumption. In other words, domestic demand existed. It was only needed to replace foreign with domestic supply. It was, however, a critical mistake on the part of policy makers to treat the demand as ever expanding. The limit of import substitution emerged when the domestic market on which it solely relied failed to grow due partly to poor or lack of promotion measures on agricultural production and to partial income distribution which failed to increase the purchasing power of the mass of the peoples in the developing ESCAP countries.

Lately it has been increasingly recognized, through reflecting on the limited performance of import-substitution approach, that industrialization is costly when it depends heavily on the domestic market, especially when its size is small and not expanding rapidly.[9] The alternative, however, means a rather classical idea, viz. to take the advantage of international division of labour. And this is done by promoting such industries that have a potential comparative advantage in the international market. Few manufacturing industries in the developing ESCAP countries at present have such a comparative advantage without protection and promotion. However, the so-called "infant industry" should be protected and promoted only under specific conditions, although some of the conditions are concerned with the future and thus difficult to foresee. Above all, the industry concerned should be able to attain international competitiveness on certain time horizon in terms of foreign exchange. This depends, most importantly, on the cost of production and on the exchange rate. The former is a result of combination of production factors and their prices, with domestic net value-added is the index to be examined. The latter, on the other hand, is difficult to manipulate independently under the IMF system. Among some developing ESCAP countries, however, it is used as an additional protective measure – and thus as a policy rather than an economic variable – especially for "infant industry". If protective and promotive measures are employed to generate "infant industry" for imports, it is all the more necessary to evaluate the total effects of various policies on commodity

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[9] It should be noted that the size of domestic market is misleading if measured by macro-economic indices, especially in this region where income distribution is very uneven.

basis and to examine the degree of distortion caused in resource allocation and the effect on competitiveness in terms of foreign exchange.

As was emphasized earlier, the success of export promotion also crucially depends on supply efficiency and market development. In this connection, the following are found important for market development, viz. sound access to foreign markets (in terms of quality, design and size of products), study of existing sales networks and the advertisement method including trade fairs. The economies of scale operate for these policy ingredients and they can be best carried out with the help of governments in implementation.

B. Unilateral Policy Measures

Under the two major trade policies of export promotion and import substitution, there are a host of promotive and restrictive measures adopted in the developing ESCAP countries. These can be classified in three categories: (1) those related to foreign exchange control on current accounts, (2) those related to export control and promotion and (3) those related to import control and restrictions. It has been noted that the complexity of the above-mentioned measures is most apparent in the second group, followed by the third and the first. This tends to show the difficulties in promotion of exports. On the other hand, restrictions on foreign exchange and imports are, by and large, simpler in nature although complexity could be introduced for specific reasons as found in some countries. It is, however, a promising trend that complex promotion and restrictive measures are gradually being replaced by simpler and less stern measures, while positive promotion measures are being adopted in many of the developing ESCAP countries. In the following sections, some of the typical measures are reviewed.

Exchange Restrictions: Since most of the developing ESCAP countries are suffering from deficit in their current accounts, the exchange restrictions adopted have been usually geared to the regulation of foreign exchange on current transactions. Through these measures, the authority can gain the maximum foreign exchange available and regulate payments to necessities only. Typical restrictions include: (i) export proceeds surrender obligations; (ii) export registration and/or licensing (restrictions and prohibitions); (iii) import registration and/or licensing (restrictions and prohibitions); and annual foreign exchange budgeting.

Export proceeds surrender obligation is enforced in almost all developing ESCAP countries. Export licensing is adopted in such countries as Fiji, Malaysia, Pakistan, Philippines, Republic of Korea, Thailand and Western

Samoa. The main commodities affected by the licensing include those considered strategic by the specific countries: they are either short in supply in domestic markets or subject to international arrangements including bilateral export quotas. Export licensing in many countries is only for the purpose of registration for securing proceeds and collection of registration fees and cess which often are used directly for production and export promotion programmes. Import licensing has quite a different meaning. Almost all developing ESCAP countries require import licenses in order to regulate, not only the amount but sometimes also the sources of imports. Moreover, licensing fees are charged in such countries as Indonesia, Iran and Pakistan. Import licensing is often an indispensable part of foreign exchange budgeting which controls almost all commercial imports in such countries as Bangladesh, Burma, India, Nepal, Republic of South Viet-Nam, Sri Lanka and Western Samoa.

For a country which suffers from chronic current account deficits, a combination of export proceeds surrender obligation for exporters and foreign exchange budgeting for importers, is considered to yield the highest degree of control on trade. The exchange control generally involves the Ministry of Finance, Central Bank, and authorized banks and dealers. In most cases, personnel in the above institutions are highly trained and competent in their fields of work. It should be remembered, however, that regulation of actual shipping and trade takes place through customs offices and too much reliance on financial institutions for control may bring unsatisfactory results. The general trend in exchange restrictions is that there has been a relaxation to a certain extent, reflecting favourable trend in over-all balance of payments for many of the developing ESCAP countries.

Although it is not directly related to exchange restrictions, the practice of multiple exchange rates is observed among such countries as Afghanistan, Bangladesh, Burma, Cambodia, Laos, Nepal, the Republic of South Viet-Nam, and Sri Lanka. This is, in fact, a very important part of both export promotion and import restrictions in the sense one can subsidize exporters and tax the importers with the manipulation of the rates. It also forms a vital part in trade policies in such foreign aid recipients as Bangladesh, Cambodia, Laos, and the Republic of South Viet-Nam and also in such countries as Afghanistan, Bangladesh, Burma, Nepal and Sri Lanka which have specific bilateral trade arrangements, especially with the centrally-planned economies. The general trend in the ESCAP region is that reforms in exchange system have been carried out in order to unify and simplify the structure. This shows, above all, the preference of the policy makers not to rely on a complex foreign exchange system and to replace the protective elements in the foreign exchange system with other specific trade and financial measures.

Export Promotion Measures: The general characteristics of export promotion measures are such that they have a close link with industrial development policies. Therefore, they tend to be more specific and detailed in nature, compared with the other two. They are often accompanied by restrictive import measures against the final goods and by preferential treatment of imports of capital goods and raw materials. Typical measures include the following: (1) export bonus (subsidy), (2) preferential importation of raw materials and capital goods, (3) concessional export financing, (4) concessional fiscal measures, (5) concessional rates for transportation and electricity, (6) bilateral trade agreements, (7) institutional incentives and aids for exporters.

In terms of variety of these measures adopted, such countries as Afghanistan, India and the Republic of Korea are most vigorous. In the Republic of Korea, for example, almost all measures mentioned above are pursued with duty-free importation of raw materials and concessional fiscal and financial arrangements at the top of the list. It is an interesting contrast to note that such countries that are successful in export expansion as Hong Kong and Singapore have virtually no promotion nor restrictive measures. A recent idea of free trade area and free processing zones may have been stemmed from the experiences of these two countries, and such countries as Malaysia and the Republic of Korea have already launched projects along this idea. It is, however, an open question whether the entrepot type or export processing type of export promotion can play an important role in the over-all development because their links with other sectors of an economy, especially the primary sector, are limited.

The general trend in export promotion measures can be envisaged in the comprehensive export expansion programme adopted by the Republic of South Viet-Nam in 1973, viz., (i) exports should not rely excessively on imports of raw materials, (rather the use of domestic raw materials should be given priority and increase in productivity in the primary sector should be promoted); (ii) comparative advantage should be strongly adhered to in order to compete efficiently in the world market without having excessive promotive measures and (iii) exports of labour-intensive light manufactures and semi-manufactures should be promoted in order to meet job creation objectives. In short, the merit of export promotion measures which tend to encourage high domestic value added is recognized and adopted. An operational example of this can be found in the changed measures in the Republic of Korea.

Many countries among the developing ESCAP countries have a list of commodities which are prohibited to be exported. Except for gold and drugs which have their own implications, the prohibition list includes

mostly such vital commodities for development as iron and steel, non-ferous metals scrap and certain foodstuffs. There are other commodities which are not totally banned but require specific licenses in order to be exported. This reflects above all, the pressure on natural resources in the domestic market which needs to be met, if possible, by domestic supplies. In the vital foodstuffs, the need to retain enough supply for domestic market with satisfacorily low prices forced Thailand to ban exports of rice in 1973 and the Philippines to control their coconut product exports. This sign of self-sufficiency might bring a serious cutback to the expansion of international trade and the efficient use of natural resources. It is, however, too early to make any firm judgment on this problem.

As noted earlier, some export promotion measures are associated with industrial development policies. In this connection, various financial and fiscal incentives for foreign capital (primarily private equity investments), introduced in many developing ESCAP countries, deserve special attention. Although they are more concerned with the capital accounts than the current accounts on which the present discussion is focused, they constitute an important portion of foreign commercial policies of many developing ESCAP countries, notably Afghanistan, Iran, Nepal, the Philippines, the Republic of Korea, the Republic of South Viet-Nam, Sri Lanka, Thailand and Western Samoa. Typical incentives include: free or easier repatriation of capital and/or profits, income tax exemption, tax exemption on dividends, investment guarantee against nationalization and duty-free importation of capital goods and/or raw materials. Such incentives are provided to industries which are approved for this purpose by boards of investment in accordance with laws and criteria concerning foreign investment inducement. In addition, some countries offer special incentives for exporting and/or avoiding imports by utilizing domestic resources. Along with these promotion measures, a number of countries including the Philippines, the Republic of Korea and Thailand, have recently introduced provisions to place upper limits on foreign shares in joint ventures. These examples reflect a general shift towards more selective and restrictive policies for foreign private direct investment.

With respect to capital outflows, most of the developing ESCAP countries impose firm restrictions on outward remittances, including those for investment purposes. Japan, on the other hand, abolished the $1 million ceiling hitherto imposed on direct investment abroad. This occurred in July 1971, and the liberalization of investment abroad by Japanese residents has had a significant impact on the inflow of private direct foreign investment to many of the developing ESCAP countries.

Import Restrictions: It is generally observed that imports to developing ESCAP countries have become rigid, both in size and structure.

There are three relevant factors attached to this import rigidity. In such countries as Burma, India, Nepal, Sri Lanka, the Republic of South Viet-Nam and Western Samoa the deficits in the balance of current accounts are such that imports have to be regulated and controlled strictly to ration international reserves. In some countries, like Afghanistan, Bangladesh, Burma, Cambodia, India, Nepal, Pakistan and the Republic of South Viet-Nam, the bilateral trade arrangements and aid arrangements have introduced a dualistic structure in trade especially in their imports which are earmarked in the respective arrangements. In other countries as Republic of Korea, India and Singapore the import requirements for development and export promotion mounted to such an extent that any cut or change in import amount and structure would surely have an adverse effect on their development targets.

Typical measures adopted to control and restrict imports among the developing ESCAP countries include the following: (1) import licensing, (ii) foreign exchange budget, (iii) import prohibition, (iv) quota, (v) import tax and surcharge, (vi) tariff (including preferential tariff), (vii) advance import deposits obligation, (viii) state importation. It could be observed that import restrictions are by and large, financial in nature with the exception of the total prohibition. In other words, without access to foreign exchange, one cannot obtain any imports. It could also be observed that many developing ESCAP countries adopt import taxes, cess and surcharges on top of regular tariff. The dominant reason for this procedure is the revenue consideration. It was, however, introduced in such countries as the Republic of Korea and Pakistan mainly in order not to allow importers to make windfall gains due to exchange rate changes.

Tariff rates among developing ESCAP countries are generally high. Less uniform have been changes in tariff structures: certain countries have reduced and liberated many tariff restrictions while the others have strengthened them. Such variety also exists in individual countries. Given these changes, it is interesting to investigate whether consistency was kept between the tariff structure and the domestic tax structure and the domestic overall protection and promotion of domestic industries. For example, in Thailand, the recent tariff rate change introduced in late 1973 brought forth a situation where one can buy a certain electric appliance cheaper from foreign sources than domestic one. That is, ex-factory price of goods X is higher than ex-custom price of the same. This is clearly inconsistent with the policy of import substitution oriented industrialization policy adopted in Thailand, especially when the factory was built under the promotion scheme of the Board of Investment. Although other countries in the region need to be investigated to draw any conclusions, it is often believed that tariff structure and other tax structure are strongly influenced by business pressure groups. It is also believed that industries with high foreign partici-

pation are sometimes put to a disadvantageous position in the game, due to a lack of local political support.

Relevant to change in tariff structure is change in licensing structure. Some countries increased the number of commodities to be given free licenses whereas others decreased them and put them, in turn, in restricted categories. The main reason behind this reshuffle is the change in domestic demand and supply conditions of the particular commodities. Basically, however, raw materials and capital goods used in export oriented industries are shifted to the category with lowest restrictions.

Such countries as Fiji, India, Singapore, and Western Samoa have preferential tariff for imports from the Commonwealth nations, although the incorporation of the United Kingdom in the European Economic Community has caused this procedure to be renegotiated. There has been some recent discussion of creating preferential zones in parts of the ESCAP region -- for example in the ASEAN states of Southeast Asia and among the developed and Pacific countries but there seems to be no early prospect of such ideas becoming operational. An attempt to create such links between two ESCAP countries, Iran and Pakistan, and Turkey was actually formalized, but has never borne fruit.

International Arrangements: While domestic policy measures for trade promotion and control have direct and specific implications for respective economies, it is often the international and collective arrangements which give general guidelines in formulating domestic policy measures as well as their implementation. International arrangements for trade policies are particularly important for developing countries, chiefly because their bargaining power can be strengthened through such a collective approach. In practical terms, there are three major fora important to developing ESCAP countries, i.e. (1) collective negotiations both with developed market economies and centrally-planned economies through such international organizations as GATT, UNCTAD and ESCAP, (2) bilateral trade arrangements mainly with centrally-planned economies and (3) collective negotiations with importing countries through such international commodity communities as the Association of Natural Rubber Producing Countries (ANRPC), the Asian Coconut Community and the Pepper Community. In the following sections, some of the important developments and problems are discussed.

International Organizations: Under the United Nations International Development Strategy, the Generalized System of Preferences (GSP) for imports from developing countries was adopted by the European Economic Community and 10 other developed market economies in 1971 and 1972. In addition, several socialist countries in Eastern Europe have

participated in this scheme either through implementation of new programs or reaffirmation of already existing preferential treatment. In the ESCAP region, Japan and New Zealand participated in the scheme while Australia has been applying a tariff preference system for selected manufactures, semi-manufactures, and handicrafts since 1966.

It is well known that preferential treatment schemes under GSP are primarily geared for manufactures and semi-manufactures (BTN chapters 25-99) and are of only marginal relevance to the primary commodities with the exception of selected agricultural and fishery products from developing countries. However, it is noted that the scope of schemes actually implemented has been narrowed down by exclusion of a number of items covered by BTN chapters 25-29. For example, EEC excludes all industrial raw materials and such important items as textiles are also excluded from the benefit list of almost all preference-giving countries. Moreover, the effects of the GSP were weakened because the participation of the United States and Canada is still pending and with the frequent inclusion of so-called "safeguards". While it is too early to assess the practical impacts of the GSP, it is believed the GSP already faces a severe challenge from far-reaching and important developments [10]

In the ESCAP region, the Trade Negotiation Group was set up for a reduction of tariff and non-tariff barriers among the participants. In its fourth session in 1974, the Group conducted a total of 68 bilateral private negotiations in which exchanges of specific request lists and meaningful offers of tariff reductions were made on specific commodities. The practical impacts of the Group are yet to be evaluated. However, the Group represents an important initiative for intraregional trade expansion and efforts should be intensified in order not only to serve initial purpose but also to ensure adequate supply of such vital essentials as food, raw materials and fertilizers at reasonable prices.

In addition, the ESCAP region observed the participation of Nepal in the Asian Clearing Union (ACU) in 1974 when it was finally brought to an operative condition. The trade expansion effects of the ACU at its present scale, through utilizing regional currencies, may be minimal. It is hoped, therefore, that the ACU will attract further participation.

Bilateral Trade Arrangements: Although bilateral trade arrangements are considered negatively from the international point of view, the arrangemen' form an important part in trade policies of many of the

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[10] The Second United Nations Development Decade, *Trade and Policies in the First Two Years*, UNCTAD, 1974, p. 10.

developing ESCAP countries, especially with centrally-planned economies. In such developing ESCAP countries as Afghanistan, Bangladesh, Burma, India, Iran, Nepal, Pakistan, Singapore and Sri Lanka, bilateral trade arrangements affect a substantial part of their trade. Some of them have specific bilateral payment agreements as well. Since trade through bilateral arrangements involves specific organizations and institutions, the administrative efficiency both in planning and implementation is the crucial factor for mutual benefit. In India, for example, the State Trading Corporation with its reinforced agencies and subsidiaries has successfully increased its role in trade, especially in imports through bilateral trade and payments arrangements. Such countries as Afghanistan, Singapore and Sri Lanka have also promoted institutional framework for bilateral trade.

It is promising to note that the socialist countries of Eastern Europe re-emphasized in their Declaration at the third session of the UNCTAD[11] that one of the major aims of their international policy continued to be assistance and support for the developing countries in building up their national economies. The member countries of the Council for Mutual Economic Assistance (CMEA) adopted its "Comprehensive Program" which, *inter alia*, emphasized the special importance the CMEA attached to extending further trade, economic, scientific and technical co-operation with developing countries.[12] The practical effects of this "Comprehensive Program" are yet to be evaluated. However, trade arrangements which were developed in recent years, have shown a growing awareness of new possibilities offered on longer time horizon, taking due consideration of the long-term objectives of existing development plans in the region. Recent trade developments of Iran with the CMEA countries provides a good example.

While some favourable developments in this field have been achieved by the centrally-planned economies and some developing ESCAP countries, it is still noticed that increased administrative complexity is causing several practical difficulties for many of the developing ESCAP countries participating in bilateral trade arrangements. As such trade and payments arrangements grow in size, problems of settlement of trade and credit balances accelerate in complexity. Indeed, the administrative capacity of many of the developing ESCAP countries is the primary constraint on trade expansion. Therefore, it is most important to work out an adequate

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[11] The Second United Nations Development Decade, *Trade and Policies in the First Two Years*, UNCTAD, 1974.

[12] CMEA Secretariat, *Comprehensive Programme for the Further Extension and Improvement of Co-operation and Development of Socialist Economic Integration by the CMEA Member Countries*, Moscow, 1971.

institutional framework for an efficient administration of bilateral trade. In this connection, some of the developing ESCAP countries are trying to maximize the benefits from the bilateral trade and payments arrangements through cooperation with bilateral partners by integrating them more consistently with other projects and plans. Since the particular requirements of trade and payments for these developing ESCAP countries could be met best with the help from the centrally-planned economies, greater participation of the CMEA countries in this field is desirable.

Commodity Communities: The idea of commodity communities stemmed from regional economic cooperation and plan harmonization endorsed by the ESCAP. Under the sponsorship of the ESCAP, the Asian Coconut Community and the Pepper Community were established, while the interested countries by themselves established the Association of Natural Rubber Producing Countries (ANRPC). Since this approach is primarily focussed on the interests of producers (and exporters), the cooperative efforts so far have featured the exchange of information on modernization of production, processing and marketing.

Although common interest and problems were substantially identified and analyzed, however, the practical impacts of the commodity communities are yet at the initial stages, with the exception of ANRPC which has extended its cooperation, especially in recent years. Two major problems are envisaged for commodity communities in relevance to trade policies. They are the problems related to the nature of the producers associations, and those related to the selection of commodities. The cooperative efforts, unfortunately, have not been well implemented due mainly to inadequate financial support from member countries. Even the formulation of projects to tackle common problems is dominantly dependent on external technical and financial assistances. This modest scope of achievement shows, *inter alia*, the practical difficulties in implementation of projects by producers associations. This is especially important considering the wide disparities in production size and in technological know-hows among participants. Although larger and more advanced members could benefit more by pushing forward the interests of the smaller and less advanced members in negotiation with importers, cooperative efforts among members may not be stronger than the economic and political interests with importers who are excluded from participation. It might be necessary to reconsider the orientation and to introduce flexibility and practicality to producers association in order to promote export expansion.

The commodity communities, existing and proposed, are all concerned with primary commodities which are close substitutes to either other primary commodities or synthetics. This tends to limit substantially

the bargaining power of a particular commodity community. Coconut oil production, for example, is highly concentrated in Asia. Technological innovation, however, has enabled almost all vegetable and animal oils and fats to substitute each other.[13] The practical yardstick is virtually only price. It is, therefore, also necessary to be flexible in the selection of commodities for securing maximum bargaining power and trade promotion. In addition, if commodities concerned involve producers from other regions, interregional cooperation should also be sought and promoted.

V. MAJOR TRADE ISSUES

Problems in international trade which have developed in recent years among the developing ESCAP countries can be summarized as follows: (i) problems related to the increased trade dependence in developed market economies (as aggravated by the worldwide inflation and as highlighted by the recent increase in prices of petroleum); (ii) problems related to import substitution; (iii) problems related to export promotion; and (iv) problems related to economic nationalism.

A. Trade Dependence

In general, the degree of dependence[14] upon foreign trade of the developing ESCAP countries has increased greatly in recent years. For some developing ESCAP countries, not only the trade dependence but also the geographic concentration on developed market economies increased. This has made the growth performance of the developing ESCAP countries increasingly vulnerable to the fluctuations in growth in developed market economies.

The increasing economic ties between some of the developing ESCAP countries and the United States and Japan, especially through private direct investment, have increased the economic influence of the latter two to such an extent that economic nationalism has arisen against this trend. Many of the nationalistic arguments are not solely valid for criticising common shortcomings in free market economies. Indeed, the increased influence of foreign investors and traders could have been anticipated as a result of the trade-oriented industrialization approach employed by these developing countries, associated with high inflationary

[13] There are 22 lauric oils which can substitute each other.

[14] In terms of trade (export + import)/GNP or GDP.

pressure and mounting environmental consideration in the developed market economies which increased the incentives for the private sector in the developed market economies to seek other investment and trade markets.

Unfortunately, the weak administrative power of host countries aggravates the extent of the foreign influences. One relevant point to be made here regarding direct foreign private investments is that they have been taking an active and positive role in import substitution and export promotion. Rather than being blindly criticised, direct foreign private investment should be effectively controlled and utilized so that its operations suit the over-all development needs of the host countries. Specific and able country teams consisting of financial and monetary policy, commercial and legal specialists could be formed to review the operation of the direct foreign investments (in particular, multinational corporations) and keep a close watch on implementation of policy.

The increased dependence of the developing ESCAP region on developed market economies for economic development has also brought forth the so-called imported-inflation, which has been especially serious in recent years.[15] Inflation in the region is also partly due to crop failure, enlarged public expenditures and an increase in money supply due to enlarged international reserves. The price rise in imports, however, has certainly aggravated the sharply increasing prices in the region. Foreign inflation tends to penalize most of the developing countries because their exports have low demand elasticities and their import requirements are rigid. On the contrary, developed countries could benefit by foreign inflation through increasing export performance and through reducing import. Only in those developing countries which are major raw material exporters, could export price be increased vis-a-vis the developed market economies which are suffering from inflation. But even this is a short-term policy for a possible slow-down of developed market economies cannot guarantee a favourable long-term price trend in the commodity market, perhaps with the exception of petroleum.

The price trend in imports of developing ESCAP countries from developed market economies had shown a moderate increase until 1971, but it soared up thereafter reflecting inflation in developed market economies. The deliberate price increase in petroleum in 1973 not only expanded the import bill but also increased the value of all imports in such a drastic manner that some of the developing ESCAP countries have to undergo an unprecedented inflation. This affected not only the urban population who tend to enjoy more of the imported goods but rural

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[15] International Monetary Fund, *Annual Report 1974*, p. 5.

population through increased prices of agricultural inputs. Already the availability of chemical fertilizers and protective chemicals has been drastically curtailed, which in turn would further deteriorate the situation through restraining agricultural production. It is feared that some mass starvation might be unavoidable in 1974 when food production not only in developing countries but on global scale is forecasted to be unsatisfactory and food stocks in developed market economies are at the lowest level. Emergency assistance from developed economies and oil producers is needed.

B. Import Substitution

This has already been discussed in general terms and it was pointed out that limit was generally due to production inefficiency, but more importantly to negligence of promotive measures for domestic market development. The task now is how to overcome these constraints. The smallness of the domestic market can be overcome not only by general growth but also by fairer income distribution. In this connection, it is interesting to note an example in Thailand. When the price of rice is high, sales of such commodities as dry batteries, toilet goods, small electric appliances and small motorcycles expand rapidly, and when the price of rice is low the reverse occurs. Another example from the same country occurs with respect to textiles and clothing. Import substitution of textiles was carried out on a larger scale than required by the size of domestic market. When general inflation was aggravated in 1973 due to price rise of petroleum, further decreasing the purchasing power of the poor, domestic demand for textiles especially of less expensive synthetics decreased. It happened in such a manner that not only producers but more importantly many wholesalers and some retailers who increased their inventory stock for speculative purposes came to financial difficulties especially since the interest rates were high and increasing. Producers suffered further from strikes for higher wages and some factories were forced to close down, at least temporarily. Producers demanded the Government should extend financial help on concessional basis.

With a slow growth rate of domestic aggregate demand, it becomes most important to increase exports. For this purpose, import-substitution policy needs an overall review and examination so that only those industries which have competitiveness in international markets with growing demand should be selected for promotion. The deteriorated balance of payments, due to large import components and raw materials, could be improved through careful selection of industries which possess comparative advantage and higher domestic value added. As discussed earlier, the limitation of import-substitution policies necessarily leads to export promotion. For successful transformation, trade barriers on the part of developed market

economies need to be reduced or eliminated. More fundamentally, industrial adjustments are needed to open a market for industries of the developing ESCAP countries in which they have a comparative advantage. Without positive help from developed economies, the efforts of the developing ESCAP countries in industrialization and export promotion have become even very difficult, especially in view of the mounting inflation and heavy pressure on natural resources.

C. Export Promotion

The considerable export expansion by the East Asian countries has not been free of problems. For example, the Republic of Korea employs various protective and promotive measures which have caused some doubt regarding the net gain from export promotion, especially when the total scheme has been heavily dependent on foreign capital and imported inputs. Hong Kong and Singapore suffer less from adverse effects arising from foreign participation. On the other hand, the future market prospects for the light-manufactures and semi-manufactures in which they specialize are not very encouraging and already they are trying to shift the main emphasis to heavy industries. At this stage a doubt remains whether these countries can successfully carry out much larger projects than those they are used to, without further increasing the dependence on foreign capital and expertise.

It is often argued that export promotion measures cause distortion both in resource allocation and income distribution. In fact, export promotion measures should be purused in such a way that whatever distortions they cause promote dynamic increases in productivity in the export industries concerned. It is, however, the role of other policies to complement trade policies in order to minimize their adverse effects, especially in those industries which are left behind in promotion schemes. In the Republic of Korea, for example, it has been recognized that income distortions between the export-oriented industrial sector and the agricultural sector have aggravated the urban congestion and caused performance in agricultural production to deteriorate. The "New-Village Movement", launched for mitigating this problem, is successfully introducing development to the rural population who were relatively neglected. As well as producing distortion, such promotion measures as subsidies and concessional export-financing bring an inflationary pressure. In addition, those promotion measures in terms of reduction in duties and taxes will reduce total government revenue, which thus has to be supplemented by either increasing tax receipts from other sectors or by borrowing, either of which tend to aggravate the distribution problems.

In the raw materials exporting countries, there has been an apparent lack of export-promotion schemes and drive, except for some primary

commodities. On the contrary, the tariff structures are designed basically for revenue and protective purposes and need to be reorganized for consistent promotion purposes, especially for manufacturing industries.[16] Expertise in building up promotion measures, including those involving institutional reforms is yet to be developed.

It is necessary, on the part of importing countries, to reduce trade barriers. It is generally known that the developing countries depend almost exclusively on high-tariff walls as import barriers while the developed market economies employ more quantitative restrictions and other non-tariff barriers (NTB). In the region, however, Japan and Australia have relatively high tariff barriers which escalate as the stage of processing increases.

The textile industry provides good examples of quantitative restrictions in developed market economies. Most developed market economies employ one or more forms of quantitative restrictions. The voluntary restrictions on textile exports from Japan and the Republic of Korea to the United States illustrate the difficulties in removing protection for domestic textile industries in the United States. Other products subject to strong restrictions include canned fruits and labour-intensive manufactures such as footwear, tableware and cutlery and electric parts in some of the EEC countries. However, most commodity items subject to strong quantitative restrictions in developed market economies fall under SITC section 6, the resource-oriented basic manufactures in which the Southeast Asian countries tend to have a comparative advantage.

In the choice of technology, it has been widely suggested to use labour-intensive method in developing countries. While this approach is valid to a certain extent, its advantages may be offset by lack of uniformity in labour quality as well as increased administrative difficulties caused by the lack of experienced middle-level managers and of general work discipline in the modern industrial sense. Labour management has become an increasingly difficult task in many parts of the developing ESCAP region, particularly in the wake of rapid price rise for daily necessities in large cities.

D. Economic Nationalism

Faced with increased external influence over the domestic economy, feeling of economic nationalism against foreign exploitation (real or not) increased in some developing ESCAP countries including Indonesia and Thailand. The situation has been aggravated by the increase in direct

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[16] However, this is not in any way meant to deny the importance of revenue from tariff for these countries.

involvement of foreign private sector in these countries. The operation of multinational corporations in particular has met immense criticism. In Indonesia and Thailand, for example, demonstrations by students protested the mal-practices of the multinational corporations and their home governments in 1973 and 1974. Whether the operation of multinational corporations and of private direct foreign investment in general have positive effects or not on the development of host countries needs in-depth study. But meanwhile, the feeling against them, include investment control laws and upper ceilings for foreign capital participation.

Two major aspects could be noted in current economic nationalism, although they are closely linked together. One relates to the domination of domestic market by foreign goods while the other relates to exploitation of major natural resources (including labour) by foreign corporations. Most of the nationalistic feeling generated among people relates to the first aspect as they feel it directly by consuming foreign goods day by day. Although some social movements did help curtail luxury imports, an appeal to emotion *per se* has limited efforts especially in countries where consumers in urban area, in particular, have been exposed to modern goods. Nationalistic feeling, however, could be effectively linked to development of import substitution oriented industries.

The other aspect, which relates to resource nationalism, is considered to have more serious impact on international trade in future. A historical background for this move is nationalism against colonialism. Another long-term background is the mounting pressure on natural resources from population expansion in developing countries which seems to continue despite efforts to curtail the increase. This move was also highlighted by recent oil crisis.

In international fora, it has been vigorously discussed, the result of which is comprehensively stated in the United Nations' "Declaration on the Establishment of a New International Economic Order".[17] While the practical impacts of the Declaration have not yet been felt, its general direction, together with a slight shift of national economic objectives towards favouring the mass of the poor do suggest the possibility of further intensification of this trend.

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[17] A resolution adopted by the General Assembly [3201(S - VZ)] in 1974.

VI. SOME SUGGESTIONS

In the general discussion of trade policies, it was pointed out that supply efficiency should be promoted and markets should be developed both domestically and abroad. The pursuit of supply efficiency, indispensable to whatever policies are being adopted, should be intensified by reviewing total effects of various protective and promotive measures adopted in developing ESCAP countries. The need for domestic market development efforts has been emphasized for the improvement of import substitution. In fact, import substitution is a misleading word. The term "Domestic Market Development", better captures the substance of this approach to industrialization. Finally, international market development efforts are urged to export promotion. As identified and discussed in part V there are four major problems to be tackled. Although all of these are interrelated, those concerned with export promotion and economic nationalism have the most important implications for regional and sub-regional economic co-operation of the region.

A. Export Promotion

It has been observed that the countries which have expanded exports rapidly have achieved higher growth rates. Reflecting this experience, policy orientation of other developing ESCAP countries towards industrialization shifted back to export promotion from import substitution, particularly for semi- and light-manufactures. While the revised orientation may be well justified on the national level, new adjustments are necessary for successful implementation of it on the regional or sub-regional scale. One such adjustment requires the further reduction of trade barriers on the part of developed market economies and preferential treatment of exports to centrally-planned economies. Trade negotiations through GATT have not achieved substantial success in terms of commodities in which the developing ESCAP countries tend to specialize. The GSP, which was weakened by "safeguards" needs to be improved. Group negotiation between EEC and ASEAN are still in progress and should be expanded. Among the developing ESCAP countries, the Trade Negotiation Group has launched a promising series of practical negotiations to reduce tariff and non-tariff barriers. This approach should be further promoted considering the high trade barriers among them. Progress on the ACU, while still limited is encouraging, and further export expansion among developing ESCAP countries is expected through the use of regional currencies for intraregional transactions.

It is important to remember that reciprocity is the key element for successful implementation of trade promotion among developing ESCAP

countries. For the policy of import substitution for goods from developed market economies, it is necessary to consider only the merit of domestic production increase and foreign exchange savings. For export promotion among the developing ESCAP countries, however, the merits of import substitution on the regional scale depend on trade transfer effects being distributed as evenly as possible to justify the co-operation. As sizes and degrees of industrialization differ widely among the developing ESCAP countries, the full regional approach is less practicable for securing the vital reciprocity compared with the sub-regional approach. It is of particular importance to carry out a realistic sub-regional approach since any difficulties arising from "ideal" but unrealistic projects would surely jeopardize sincere efforts for co-operation now growing among the developing ESCAP countries.

If negotiation on the reduction of tariff and non-tariff barriers bring trade creation effects to certain participating countries but not for others, further adjustments will be necessary in order to protect the barrier reducing countries from production decrease. This should not imply that trade liberalization in favour of trade creation effects should be discouraged. It may, however, take longer to achieve in view of the high priority that industrialization occupies in current development plans in the region.

Another adjustment, which is more important and difficult to induce, is the industrial structural changes required in the developed market economies in order to favour the export oriented industries of the developing ESCAP countries. Without this positive measure for promoting imports from the developing ESCAP countries, the performance of export promotion will be seriously limited. This involves difficult political issues but regional organizations such as ESCAP could perform a positive role through provision of a forum for collective negotiations.

Industrial adjustments among the developing ESCAP countries themselves are also required for effective industrialization. It can be readily foreseen that export oriented industrialization without harmonization and adjustment on a regional scale will lead to excessive competition and misallocation of resource if pursued with protective measures. This would cause detrimental effects on over-all regional and sub-regional co-operation. To prevent this from happening, national policies should be strictly based on economic justification, particularly with respect to comparative advantage, while such a regional organization as ESCAP could play a positive role in assessing these national policies on the regional scale and making arrangements, where necessary, for consultations to reconcile the differences.

Another approach would be to find and develop new markets. For this purpose, all developing ESCAP countries should intensify their

efforts to capture the growing new markets found today among the petroleum producing countries. Trade negotiations have been launched to a limited extent and they should be further promoted in order to expand exports of practically all kinds of inputs needed in the industrialization and over-all development of the petroleum proucding countries.[18] Also, developing ESCAP countries might formulated development projects which, *inter alia,* require high inputs of energy and petroleum products that could be provided by the petroleum producing countries on a concessional basis. At the same time, export-oriented joint ventures with investors from the petroleum producing countries should also be promoted. The potential benefits from intensified trade and financial ties with he petroleum producing countries are threefold; a reduction on trade and financial dependence on the developed market economies, an expansion of export. and an increase in imports of capital and petroleum.

B. Economic Nationalism

While all developing ESCAP countries re free to adopt any nationalistic policies, the pros and cons should be rationally examined and assessed. In this respect, it has become increasingly important to draw a clear over-all picture of the national priorities and reflect these as precisely as possible in the national development plans. The importance of non-economic factors in development is apparently being increasingly recognized and these should be clearly stated, not only in terms of their own merits but also in terms of economic trade-offs postulated. The increasing dependence on foreign private direct investment for promoting both import-substitution and export promotion has put some of the developing ESCAP countries into a dilemma which might have been avoided, had this approach been adopted. Although the problems related to the private direct foreign investments have highlighted over-all economic nationalism recently, the practical implications of resource nationalism in the developing ESCAP countries are yet to be seen. Some of the restrictive measures on exports of certain commodities, together with efforts in increasing domestic value-added through higher processing, however, do suggest the possibility of further intensification in this trend. The over-all effects of the nationalism on the total development efforts – with their implication in trade with the rest of the world – should be directed in such a way that not only the development efforts of the country concerned but also those of the rest of the developing countries, especially in the region, should benefit. It is indeed for this particular reason, that ESCAP is now seriously taking into consideration an approach to self-reliance on regional and sub-regional scales in its policy formation.

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[18] Pakistan, for example, has already taken a positive step in this direction not only by exporting goods but also providing technical assistance to Arab countries.

"Development in Trade and Trade Policies in the Developing ESCAP Countries"

Introduction: **Shoji Nishimoto**

The main intention of the Paper was to review developments in trade and trade policies, during the past decade, within the context of overall economic development in the developing ESCAP countries. Due to limitations of data, the review had been restricted to selected countries while the time-frame was that of the immediate past rather than the entire post-war period.

The main conclusions of the Paper were that (a) export promotion would remain as a major element in policies of further industrialization; (b) policies of import substitution would need to be critically evaluated in terms of the domestic market. In order for import substitution to be successful, the primary sector should be given more priority since a large proportion of the population was dependent on that sector; (c) the promotion of exports was constrained by both the external and the internal economic environment and sub-regional economic cooperation could be a strategy to accelerate exports. A policy of self-reliance could also be implemented, in a selective manner, within the overall framework of import-substitution policies.

COMMENTS

by

Kosit Panpiemras

While the Paper had classified the developing Asian countries into groups on the basis of their resource positions, a grouping of countries on the basis of an identification of the type of and the reasons for the economic policies followed would have been more appropriate.

The Paper had identified a group of developing countries which had been successful in achieving expanding exports of raw materials and

in largely import-substituting the major products of daily consumption. The experience of Thailand – which belonged to that group – could illustrate many major issues under discussion and the specific policy reactions that had emerged.

Quantitative controls were adopted by Thailand in 1952. A program of liberalization was initiated and completed during 1954/55. There had been no reversion to Phase II controls thereafter and that was mainly attributable to two major factors: firstly, Thailand had always remained a food-surplus country and, secondly, agricultural exports had continued to increase with agricultural output increasing at a rate in excess of population growth.

Policies of import substitution were adopted in the early stages of industrial development but, by the late 1960s, more selective incentives were granted for import substituting industrialization. About that period, too, over-capacity in most import-substituting industries led to increased industrial exports mainly of products with a large domestic raw material content. Selective fiscal and monetary policies also provided incentives for industrial exports.

The policy-mix was aimed at promoting industrial exports while, at the same time, selectively encouraging import-substituting industry. It was recognized that the expansion of the domestic market required for more successful import substituting industry depended in turn on export expansion, increased incomes and a suitable pattern of income distribution. Such a policy-mix was difficult to maintain at optimum effectiveness. However, the approach to the problem on a product-by-product basis was, probably, more fruitful than on an overall basis.

The success of many southeast Asian economies had, in the past, depended heavily on agricultural exports. Expansion of agricultural exports was important not only to enlarge the domestic market but also to provide greater employment opportunities particularly in the rural areas. Employment creation through industrialization had not been significant and more intensive agricultural production offered the best strategy to create employment opportunities; to increase rural incomes and, thereby, a more equitable income distribution; and to accelerate overall economic growth.

It was, therefore, striking that, while most developing countries had policies to promote industrial exports, there was an absence of policies to promote agricultural exports. In addition to the attention being paid to the promotion of industrial exports there was an important need to develop the efficient administration of selective programs to promote and stabilize

agricultural exports as well. Although policies to promote agricultural exports could be more costly and more difficult to administer, developing countries could benefit greatly by diversifying agricultural output for export as well.

While some success in agricultural diversification had been achieved in some developing countries, the degree of possible diversification was limited not only by natural factors but also by the real difficulties in assuring stable prices for the producer. In the absence of relatively high and stable prices the incentives to diversify agricultural output or to utilize more modern techniques of production which required costly inputs were greatly reduced. Export taxes and quotas had been imposed in some DMCs to stabilize prices. However, such policies had been effective mainly in containing domestic consumer price increases and difficulties had arisen whenever export prices had fallen.

A major bottleneck to the expansion and diversification of agricultural exports from developing countries was the restrictionist trade policies in many developed countries.

The exchange rate had not been used as an adjustive mechanism in Thailand and, in a relatively open economy, fluctuations in demand and output had been unavoidable. In the Thai experience some controls had been unavoidable. Given the very limited administrative capacity in most DMCs, the Thai experience of selective controls along with a high growth rate of agricultural output might have relevance to other DMCs as well.

COMMENTS

by

Warnasena Rasaputram

The Paper could have usefully analyzed trade developments in terms of the Project schema and could also have indicated the various institutional measures (such as land reform, income redistribution, social welfare policies etc.) which had been undertaken in the DMCs during that period.

The trade data presented in the Paper was in current prices. It was, thus, difficult to interpret and analyze whether the significant changes noted by the Paper in the commodity composition of trade had been due to changes in price, increases in quantity or changes in the terms of trade. For, if the increased exports of manufactured goods was a real increase in spite of the

trade and non-trade barriers in the developed countries, the important conclusion was that the DMCs could have done even better in the absence of such restrictions.

In noting the increasing trade dependence of the DMCs on the developed countries, an analysis of the particular policies and circumstances of DMCs with rapidly growing exports as against DMCs with stagnant exports would have been illuminating. The increasing dependence also drew attention to the problems of imported inflation and the participation of multinational companies. The suggestion that private foreign investments should be effectively controlled was valid. However, where strict controls existed, it was uncertain whether private foreign investments would be forthcoming. Also, where controls were imposed on existing private investments, political problems could be created.

The particular circumstances of Sri Lanka well illustrated some major issues faced by developing countries in adopting specific policy-mixes.

Various forms of controls had existed in Sri Lanka from the early 1950s and a mild policy of liberalization was undertaken during 1967/68 along with a modest devaluation. However, appropriate supporting policies were not adopted because of domestic political circumstances. Some possible effects of the devaluation were even immediately nullified by increased food subsidies and higher wages for the low-income groups.

While strict exchange controls were continued, attempts were made to encourage the non-traditional export sectors by the grant of transferable entitlements to import. Considerable speculation ensued and industrial inventories were built up in spite of restrictive monetary policies which had made stock-building difficult and expensive. Uncertainties about the continuance of the schema and the anticipated parliamentary elections resulted in a heavy demand for imports.

The classification of imports into categories subject to differential exchange rates led to problems in some cases and administrative problems of interpretation and implementation were compounded by political interference.

Unlike the case of the episode of liberalization in India, very good harvests were recorded during the Sri Lankan episode. However, due to the institutional framework, the increased incomes accrued largely to the landlords and the middlemen and a low rate of savings continued with more unequal income distribution.

With the change of government in 1970 the scheme was suspended.

The basic conflict between the policy imperatives of increased output alone and the requirements of price stability and social justice militated against the adoption of all the corrective measures required. While a modest expansion of the economy was sought, it became difficult to determine the actual rate of expansion possible without generating inflationary pressures and accentuating social tensions.

Interest rates were kept artificially low to encourage investment and to assist the export industries. Since the rates did not represent the scarcity price of capital, excess capacity and capital-intensive investments resulted. Further controls resulted in order to regulate and direct the process of investment. Import-substituting investments were generally indiscriminate and import dependence was often increased as a result.

During this period, too, fiscal policies caused further distortions in the domestic price structure while low interest rates and rising prices discouraged savings. The pressure brought to bear on the foreign exchanges by the combination of these forces was sought to be contained by more severe trade and exchange controls.

Developing countries in general face many real problems in moving towards exchange rate adjustment and trade liberalization. Where exchange rates had not been determined by market forces alone, there was always the tendency to delay parity adjustments while attempting to ease the problem by instituting alternate policies. Part of the reason for that tendency was the uncertainty whether a fundamental disequilibrium had really resulted. The delay in parity adjustment in turn becomes more difficult given the alternate policies already undertaken and the uncertainty of the impact that any significant parity adjustment could have on the domestic economy. The hesitation to resort to exchange rate adjustment was, thus, not because of an unawareness of the usefulness of the policy instrument but because of the real domestic problems involved and, possibly, the uncertainty about the real consequences.

The foreign exchange constraints in development had compelled some developing countries to adopt multiple rates as a transitional measure. Often, however, continued pressures on the balance of payments had necessitated further controls. The continued growth in controls witnessed in many developing economies was, thus, often the result of a continued process of adding to *ad hoc* measures designed to meet immediate problems.

Furthermore, the composition of imports in many developing countries is such that there was only a limited possibility of reducing imports

without adversely affecting already low living standards and the process of development itself. Food and primary commodities form the bulk of exports from the DMCs. Given the severe fluctuations in export prices of these commodities, policies of liberalization had to be very cautiously considered except where adequate reserves were available or where adequate supporting finance was assured.

The content of policy had also been influenced by the desired role of the public sector vis-a-vis the private sector in the economy. More generally, too, political factors have been dominant in the timing and the actual implementation of exchange parity changes. The timing of exchange parity changes was also made more difficult since a fundamental disequilibrium was not confined to the balance of payments alone and there were many problems in identifying, at an early stage, basic distortions in relative prices and structural changes in the demand for exports.

A. "Projections and Analysis of Trade Development in Selected Developing Countries in the Asian Region, 1974 and 1975"

B. "Development in Trade and Trade Policies in the Developing ESCAP Countries"

GENERAL DISCUSSION

The conclusions of Paper A regarding the anticipated growth, exports and capital requirements of the DMCs in the immediate future were almost similar to the results of IBRD analyses. The IBRD analyses had, however, linked the growth of exports from the DMCs to the anticipated growth rates in the OECD countries while the Paper had treated exports as almost exogenous. With the substantially reduced rates of growth in the OECD countries and the anticipated trends in production of primary export commodities, the export prices assumed in the Paper were somewhat optimistic. It was most likely that the terms of trade of most of the DMCs would become more adverse and that the effects on the low income, primary exporters would be very severe.

The Papers should have distinguished between developing countries on the basis of income levels and the commodity composition of exports. Total capital requirements and the ability to attract the required capital flows differed greatly as among the DMCs while the capacity to service

increased borrowings through the potential for increased exports also varied greatly as between the exporters of manufactures and the exporters of primary commodities. The potential for increased exports of manufactures from most primary exporters was very limited in the short-run. Exporters with established comparative advantage in labor-intensive products may, however, continue to expand exports because of newer markets in the OPEC countries as well.

The sharp increases in the cost of energy did not, however, necessarily indicate that there could be move towards greater labor-intensity in production since the share of energy cost in total output was not coterminous with the intensity of use of either capital or labor. The potential for further import-substitution could, however, be limited in most developing countries as the possibilities were now largely in the capital-intensive and energy-intensive sectors which were relatively more import-intensive as well.

There was some concern that the economic recession and growing unemployment in the developed countries could lead to restrictive import policies inimical to the export prospects of the DMCs. It was, however, noted that the discussions at GATT held out the promise of freer trade in the future.

The implications of capital flows of varying maturities and terms also required greater attention. For the low-income, primary commodity exporters it was not purely the availability of capital that was relevant but also the important consideration that the capital should be available on concessionary terms. Even the more developed DMCs were finding Euro-dollar borrowings more expensive and more difficult to obtain because of competition from the developed countries. In general, it was suggested that the use of additional foreign borrowings to meet the immediate balance of payments problems could create further problems in the future unless the foreign borrowings assisted in expanding export capacity and, thereby, the capacity to repay. In this respect, investment in food production was an important priority in the utilization of the foreign borrowings. The important role of institutional reforms – rather than increased capital investment alone – in accelerating growth and increasing exports was also noted.

The potential role of the OPEC countries as providers of capital had been underestimated. During 1974 alone these countries had provided over $7 billion to the developing countries and an equivalent amount to multilateral agencies. It was noted that a re-cycling of one-fifth of the OPEC surpluses to the developing countries could double the present flow of development assistance while even the re-cycling of the surpluses available in Asia could meet the bulk of the capital needs anticipated.

A 'triangular flow' – of capital from the OPEC countries; for technology and equipment from the developed countries for investment in the developing countries – was suggested as a desirable mechanism in the re-cycling of surpluses. It was, however, noted that developing countries were generally more consumption-worthy than credit-worthy, Also, OPEC commitments had generally tended to be for specific projects where disbursements were generally slow and, consequently, the effects on the balance of payments were not immediate.

Apart from the immediate short-term problems, the longer-term problems of adjustment and growth required attention. However, such a longer-term analysis was precluded because of the great degree of uncertainty and volatility of the many determining exogenous variables and, consequently, Paper A had the limited objective of highlighting some immediate and crucial issues rather than attempting any projections within the framework of rigid econometric models.

It was noted that an assumption of stability in international trade conditions underlay most of traditional trade theory and the analyses in the Project. The existing instability in international trade and economic relationships, however, made it more difficult to determine the optimum response of the developing countries. The tendency towards floating rates of exchange also further complicated the problems of foreign exchange management although it did, probably, reduce the political and psychological traumas hitherto encountered in adjusting the value of fixed exchange rates.

While the immediate reaction to the balance of payments crises after the Korean War had been a reversion to quantitative restrictions and import-substituting industrialization, it was suggested that the present crisis could result in more concious government direction of investment into export industry.

APPENDIX A

Delineation of Phases

To achieve comparability of analysis among different countries, each author of a country study was asked to identify the chronological development of his country's payments regime through the following phases. There was no presumption that a country would necessarily pass through all the phases in chronological sequence.

Phase I: During this phase, quantitative restrictions on international transactions are imposed and then intensified. They generally are initiated in response to an unsustainable payments deficit and then, for a period, are intensified. During the period when reliance upon quantitative restrictions as a means of controlling the balance of payments is increasing, the country is said to be in Phase I.

Phase II: During this phase, quantitative restrictions are still intense, but various price measures are taken to offset some of the undesired results of the system. Heightened tariffs, surcharges on imports, rebates for exports, special tourist exchange rates, and other price interventions are used in this phase. However, primary reliance continues to be placed on quantitative restrictions.

Phase III: This phase is characterized by an attempt to systemize the changes which take place during Phase II. It generally starts with a formal exchange-rate change and may be accompanied by removal of some of the surcharges etc. imposed during Phase II and by reduced reliance upon quantitative restrictions. Phase III may be little more than a tidying-up operation (in which case the likelihood is that the country will re-enter Phase II), or it may signal the beginning of withdrawal from reliance upon quantitative restrictions.

Phase IV: If the changes in Phase III result in adjustments within the country, so that liberalization can continue, the country is said to enter Phase IV. The necessary adjustments generally include increased foreign-exchange earnings and gradual relaxation of quantitative restrictions. The latter relaxation may take the form of changes in the nature of quantitative restrictions or of increased foreign-exchange allocations, and thus reduced premiums, under the same administrative system.

Phase V: This is a period during which an exchange regime is fully liberalized. There is full convertibility on current account and quantitative restrictions are not employed as a means of regulating the *ex ante* balance of payments.

APPENDIX B

Definition of Concepts

Exchange Rates:

Nominal Exchange Rate: The official parity for a transaction. For countries maintaining a single exchange rate registered with the International Monetary Fund, the nominal exchange rate is the registered rate.

Effective Exchange Rate (EER): The number of units of local currency actually paid or received for one-dollar international transaction. Surcharges, tariffs, the implicit interest foregone on guarantee deposits, and any other charges against purchases of goods and services abroad are included, as are rebates, the value of import replenishment rights, and other incentives to earn foreign exchange for sales of goods and services abroad.

Price-Level-Deflated (PLD) Nominal Exchange Rates: The nominal exchange rate deflated in relation to some base period by the price level index of that country.

Price-Level-Deflated EER (PLD-EER): The EER deflated by the price level index of the country.

Purchasing-Power Parity Adjusted Exchange Rates: The relevant (nominal or effective) exchange rate multiplied by the ratio of the foreign price level to the domestic price level.

Devaluation:

Gross Devaluation: The change in the parity registered with the IMF (or, synonymously in most cases, *de jure* devaluation).

Net Devaluation: The weighted average of changes in EERs by classes of transactions (or, synonymously in most cases, *de facto* devaluation).

Real Gross Devaluation: The gross devaluation adjusted for the increase in the domestic price level over the relevant period.

Real Net Devaluation: The net devaluation similarly adjusted.

Protection Concepts:

Explicit Tariff: The amount of tariff charged against the import of a good as a percentage of the import price (in local currency at the nominal exchange rate) of the good.

Implicit Tariff (or, synonymously, tariff equivalent): The ratio of the domestic price (net of normal distribution costs) minus the c.i.f. import price to the c.i.f. import price in local currency.

Premium: The windfall profit accruing to the recipient of an import license per dollar of imports. It is the difference between the domestic selling price (net of normal distribution costs) and the landed cost of the item (including tariffs and other charges). The premium is, thus, the difference between the implicit and the explicit tariff (including other charges) multiplied by the nominal exchange rate.

Nominal Tariff: The tariff – either explicit or implicit as specified – on a commodity.

Effective Tariff: The explicit or implicit tariff on value-added as distinct from the nominal tariff on a commodity. This concept is also expressed as the effective rate of protection (ERP) or as the effective protective rate (EPR).

Domestic Resources Costs (DRC): The value of domestic resources (evaluated at "shadow" or opportunity cost prices) employed in earning or saving a dollar of foreign exchange (in the value-added sense) when producing domestic goods.