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Philippine Trade and Industrial Policies

CATCHING UP WITH ASIA'S TIGERS

• MEDALLA • TECSON • BAUTISTA •
• POWER and ASSOCIATES •

Philippine Institute for Development Studies

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CATCHING UP WITH ASIA'S TIGERS

Volume I

PART I: MAIN REPORT

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Gwendolyn R. Tecson
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John H. Power

PART II: SPECIAL PAPERS

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b

Table of Contents

Part I: Main Report

Foreword / xv
Acknowledgements / xvii

CHAPTER 1
Introduction
Past Studies on Trade and Industrial Policy / 3
Objectives and Plan of the Study / 6

CHAPTER 2
Why Promote Industrialization?
Doing What Comes Naturally / 10
Why Promote Industrialization? / 11
The "Structuralist" Perspective / 14

CHAPTER 3
Trade Policy and Industrial Promotion
The Role of Trade Policy in Industrial Promotion / 16
Industrial Promotion through Import Protection / 18
Reform Toward Export-Oriented Policies / 21
The Philippine Case / 23
Effects of Trade Policy Reform / 26

CHAPTER 4
Improving Exchange Rate Policy
Real Exchange Rate: Definition and Measurement / 36
Determinants of the Real Exchange Rate / 38
Terms of trade / 38
Trade policies / 39
Current account / 39
Nominal exchange rate / 40
Attributing Real Exchange Rate Changes to Policy and External Factors / 41
Real Exchange Rate Overvaluation as a Source of Incentive Bias / 43
Short-Run Aspects of Exchange Rate Policy / 44

CHAPTER 5

Investment Incentives System and Industrial Promotion

Role of the Investment Incentives System in Industrial Promotion / 48
The role of fiscal incentives for foreign investment / 52
Small enterprises / 55
Regional investments / 56
Review of the Philippine Investment Incentives System / 58
Some statistics on BOI-approved projects / 63
The IPP listing / 66
Implications for Reforms in the Investment Incentives System / 75

CHAPTER 6

Reinforcing Other Policies for Industrial Development

Role of Monetary Policy in Industrial Development / 83
Role of Technology in Industrial Promotion / 87

CHAPTER 7

Efficiency, Competitiveness and Structure of the Philippine Manufacturing Industries

Introduction / 95
Methodology / 97
Data / 98
Trade Policy Reform and the Structure of the Manufacturing Sectors, 1983 and 1988 / 98
Industrial Structure and the Trade Policy Reform / 101
Efficiency and Competitiveness of Manufacturing Industries / 104
Determinants of Allocative Efficiency of Manufacturing Industries / 108
Change in Size Structure and Efficiency of Manufacturing Industries / 113
Impediments to Attaining Efficiency / 114
Demand constraints / 119
Technological constraints / 121

CHAPTER 8

Toward More Broadly Based Philippine Development

Introduction / 123
Analytical Considerations / 126
Redressing the Anti-Rural Bias
of Trade and Industrial Policies / 130
Agricultural Growth as a Demand Stimulus
to Rural Industrial Growth / 133
Concluding Remarks / 137

CHAPTER 9

Scope for Regional and Multilateral Cooperation for Export Expansion

Growth Scenarios for the 1990s and Beyond / 140
Protectionist Sentiments / 141
Regional Trading Arrangements / 143
The Single European Market (SEM) / 144
The North American Free Trade Area (NAFTA) / 146
The ASEAN Free Trade Area (AFTA) / 149

CHAPTER 10

Summary, Conclusions and Recommendations

Summary of Findings / 154
Recommendations of the Study / 158
Bibliography / 165

Part II: Special Papers

SPECIAL PAPER NO 1

Trade Reform in the 1990s: Effects of E.O. 470 and the Import Liberalization Program
By Elizabeth S. Tan

Trade Policy and Trade Policy Reforms: 1950s - 1970s / 167
- Introduction / 167
- History of Trade Policy and Trade Policy Reforms / 168

Trade Reform in the 1990s / 175
- Tariff Reform and Import Liberalization in the 1990s / 175
- Effect on Implicit Tariffs and Effective Protection / 181
- Liberalization of Foreign Exchange / 203

Theoretical Framework / 207
- The Chunglee Model / 207
- The Simulation Model / 211

Analysis of Results / 215
- Trade Reform and Exchange Rate Policy / 215
- Effects of E.O. 470, Trade and Exchange Rate Liberalization / 217

Conclusion / 235

Bibliography / 237

SPECIAL PAPER NO. 2

Foreign Direct Investment in the Philippines: A Reassessment
By Rafaelita A. Mercado-Aldaba

Introduction / 243

Overall Investment Climate in the Philippines: 1940s-1990s / 247
- Parity Amendment and Import Substitution: 1940s to mid-1960s / 247
- Martial Law, Export Promotion, and Debt-driven Growth: Late 1960s-1970s / 251
- Economic Crisis, Trade Liberalization, and People Power Revolution: 1980s-Early 1990s / 251

FDI in the Philippines / 255
- Trends and Patterns / 255
- Sectoral Concentration / 261
- Sources of FDI / 264

Trade and Investment Policy Changes in the 1980s:
Impact on FDI Flows and Exports / 267
FDI and the Overall Trade and Investment Policy Regime / 267
FDI and Exports / 273
FDI in Four ASEAN Countries: A Comparison / 281
Regression Analysis / 292
Determinants of FDI / 292
FDI and Exports / 299
Conclusions and Policy Recommendation / 303
Bibliography / 307

SPECIAL PAPER NO. 3

A Review of the Remaining Import Restrictions
By Loreli C. de Dios

Background / 313
The Remaining Regulated Commodities / 325
Composition / 325
Licensing Procedures / 328
Framework / 335
Effects of a Tariff / 337
Effects of an Import Quota / 327
Comparing the Effects / 338
Price Ratios / 339
Industrial Structure / 345
Characteristics / 345
Some Regression Results / 350
Welfare Effects in Car Assembly / 359
Summary and Conclusions / 363
Bibliography / 367

List of Tables, Figures and Boxes

Part I: Main Report

TABLES

1.1 Comparative Growth Rate of Value Added in Industry and Industry's Share of GDP in ASEAN / 2

1.2 ASEAN Member Countries' Shares of World Exports, 1985-1990 / 2

4.1 Determinants of Real Exchange Rate Changes, 1981-1991 / 42

5.1 Selected Statistics on New and Expansion Projects (With Incentives), 1981-1993 / 64

5.2 Selected Statistics on New and Expansion Projects (With Incentives), 1981-1993 / 65

5.3 Comparative Statistics on Firm Size, 1981-1988 / 66

5.4 Selected Statistics on New and Expansion Projects by Type of Projects (With Incentives), 1981 -1993 / 67

5.5 Selected Statistics on New and Expansion Projects by Type of Projects (With Incentives), 1981 -1993 / 71

5.6 DRC/SER and EPR of Projects included in the IPP (1988) / 78

6.1 Central Bank Rediscounting of Export Loans in the Philippines / 86

6.2 Percentage of GNP Allocated to Education Saved Due to Lower Fertility Rates / 90

6.3 Human Capital Formation / 91

6.4 R & D Expenditures as Percent of GNP / 92

7.1 Policy and Manufacturing Sector Indicators, 1983 and 1988 / 99

7.2 Size Structure of Philippine Manufacturing Industries, 1978, 1983 and 1988 / 103

7.3 3-Digit Manufacturing Industries Classified by Relative Effective Protection and Efficiency, 1983 and 1988 / 105

7.4 Changes in Efficiency Classification of 5-digit PSIC Industries / 109

7.5 Determinants of Efficiency of Philippine Manufacturing Industries / 111

7.6 Size Structure of Manufacturing Industries at 3-digit PSIC Classification, 1983 and 1988 / 115

7.7 Regression Analysis of DRC/SER and EPR by Size, 3-digit PSIC Industries / 119
8.1 Distribution of Household Income, 1961-1988 / 124
8.2 Per Capita Gross Domestic Product by Region: 1980, 1985, 1990 / 125

FIGURE 8.1 Basic Analytical Scheme / 127

BOXES

5.1 Foreign Direct Investment in the Philippines: Some Findings / 54
6.1 Reforms for Assuring Automatic Access to Export Financing / 88
7.1 "Small is Also Efficient" / 117

Part II: Special Papers

SPECIAL PAPER NO. 1
Trade Reform in the 1990s:
Effects of E.O. 470 and the Import Liberalization Program

TABLES

1.1 The Import Liberalization Program, 1980-1989 / 170
1.2 Weighted Average Effective Protection Rates by Major Sectors, 1983, 1985, 1986, 1988 / 172
1.3 Weighted Effective Protection Rates by Major Sectors, 1983, 1985, 1986, 1988 / 173
2.1 Frequency Distribution of Tariff Rates, E.O. 470 / 176
2.2 The Import Liberalization Program, 1990-1993 / 178
2.3 Tariffication Under E.O. 8 / 180
2.4 Frequency Distribution of Tariff Rates, E.O. 8 / 182
2.5 Weighted Average Implicit Tariffs Using Book Rates, 1990-1995 / 183
2.6 Weighted Average Implicit Tariffs Using Price Comparisons, 1990-1995 / 188
2.7 Weighted Average Effective Protection Rates Using Book Rates, 1990-1995 / 192

2.8 Weighted Average Effective Protection Rates Using Price Comparisons, 1990-1995 / 196
2.9 Weighted Average Effective Protection Rates Using Book Rates by Major Sectors, 1990-1995 / 201
2.10 Weighted Average Effective Protection Rates Using Price Comparison by Major Sectors, 1990-1995 / 202
2.11 Frequency Distribution of EPRs, 1990 and 1995 / 203
2.12 Short-Term Capital Investments, 1990-1993 / 205
4.1 Effects of Trade Reform Assuming Fixed Real Exchange Rate / 218
4.2 Effects of Trade Reform on Output Assuming Fixed Real Exchange Rate / 221
4.3 Effects of Trade Reform on Income Assuming Fixed Real Exchange Rate / 224
4.4 Effects of Trade Reform Assuming Flexible Real Exchange Rate / 227
4.5 Effects of Trade Reform on Output Assuming Flexible Real Exchange Rate / 229
4.6 Effects of Trade Reform on Income Assuming Flexible Real Exchange Rate / 232

SPECIAL PAPER NO. 2
Foreign Direct Investment in the Philippines: A Reassessment

TABLES

1 Net Foreign Investment Flows in the Philippines: 1950-1969 / 256
2 Net Foreign Direct Investment Flow in the Philippines: 1970- 1993 / 257
3 US Direct Investment in the Philippines, by Industry / 259
4 Distribution of CB-Registered Foreign Direct Equity Investments by Sector (Cumulative Flows) / 262
5 Distribution of CB-Registered Foreign Direct Equity Investments by Country (Cumulative Flows) / 266
6 EPR and FDI Concentration, All Industries / 268
7 EPR and FDI Concentration in the Manufacturing Sector / 269
8 Export Performance of Majority-Owned Nonbank Affiliates of Nonbank US Parents (MONANUS) / 274

9 Exports and Total Sales of MONANUS / 278
10 FDI Flows in Four ASEAN Countries, 1973-1990 / 282
11 Sectoral and Geographic Distribution of FDI Stock / 284
12 Japanese Overseas Direct Investments in Indonesia, Malaysia, Thailand and the Philippines: 1973-1989 / 287
13 Capital Expenditures by Majority-Owned Foreign Affiliates of US Companies / 288
14 OLS Estimates: Determinants of FDI / 298
15 OLS Estimates: FDI vs. Exports / 301

BOX 1 Chronology of Significant Economic and Political Events in the Philippines / 248

FIGURE 1 Total FDI Flows in Four ASEAN Countries: 1973-1990 / 283

SPECIAL PAPER NO. 3
A Review of the Remaining Import Restrictions

1 CB Circulars Liberalizing Commodities, 1981-1994 / 315
2 Number of Regulated and Liberalized Commodities by Major Commodity Group / 321
3 Number of Liberalized Commodities by Major Commodity Group / 322
4 Annual Net Regulated Number / 323
5 Remaining Regulated Commodities / 326
6 Typology of Sample Regulated Commodities / 341
7 Typology of Sample Liberalized Commodities / 342
8 Regression Results / 352
9 Welfare Effects of Protection in the Car Industry, 1992 / 360

APPENDICES

1 Number of Commodities Regulated and Liberalized: 1970-1994, By Two-Digit Commodity Level / 368
2 Remaining Regulated Commodities / 374

FIGURES

1, 2, 3, and 4 / 336

Foreword

The Institute is pleased to present the first of a two-volume publication -- the result of a three-year research program that focused on the analysis of trade and investment policy in the Philippines. The project's primary objective was to formulate a trade and investment policy framework that will enhance the efficiency of the industrial sector.

This book comes at a most opportune time when the global community is faced with excellent opportunities for a freer world trade — a new-found openness ushered in by the creation of the World Trade Organization following the GATT-Uruguay Round negotiations and of regional initiatives like the Asean Free Trade Area (AFTA).

In 1979, the Institute published the book *Industrial Promotion Policies in the Philippines* by Bautista, Power and Associates, hailed by many as a landmark study in the Philippines in the field of trade and industrial reform. In the years that followed, many government policies and analyses on the industry as a sector and on the economy as a whole were anchored on the recommendations provided by this study. Some of the significant debates on industrial issues were also spurred by its findings.

Today, 16 years after, the Institute again takes pride in publishing another book which is essentially a continuing assessment of the industrial sector's performance. We are confident that this volume will go the same way as the first book — to help us understand the external and internal pressures facing the industry and to help sharpen the country's competitive advantage as it prepares to compete under the new rules of a freer global trade.

With the expected growth in global and regional incomes and trade, and with the country's expanded trading opportunities, our hope of catching up with Asia's tigers could finally be realized.

Volume I serves as the main report of the Development Incentives Assessment Project (DIA). It capsulizes the highlights of the policy issues covered by the Project, makes incisive observations and critical analyses of the trade environment, and offers research-based conclusions and recommendations. The special papers included in this volume, meanwhile, review the effects of policies, pinpoint the flaws, explore possibilities for efficiency and, finally, offer strategies for reform.

Volume II of this publication with the same title will present in detail the impact of trade policy reforms on the performance, competitiveness and structure of certain industries such as the appliance, textile and garments, synthetic resin and plastic, agricultural machinery, motorcycle and parts, packaging, and shipbuilding/ship repair and boatbuilding.

It is hoped that the publication of these studies will not only aid policymakers in shaping policies and legislations that can propel the country to where it wants to be. It is also hoped that a full grasp and understanding of the issues and pressures on the trade and industry sector will guide the Filipino people in seizing the many doors of opportunities that are available for the country's future growth.

As the authors have cited, "greater consciousness of the possibilities for increased trade and cooperative efforts will help the country realize its potentials and serve to strengthen the movement toward a more liberal and, hence, wider and more intense trading activity in the region."

This project was initiated, developed and completed with the help of numerous individuals and experts who proposed the study, provided extensive sources, offered valuable criticisms and unselfishly gave suggestions throughout the development of this project. The Institute, the National Economic and Development Authority through its Technical Resources Project, and the United States Agency for International Development which provided the financial support, are indebted to them all. This book may as well serve as a tribute to their professional excellence.

PONCIANO S. INTAL, JR.
President

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Finally, we invoke the usual disclaimer. The views expressed in the studies are solely those of the authors. So are any mistakes which may remain.

ERLINDA M. MEDALLA
DIA Project Director

PART I: MAIN REPORT

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CHAPTER 1

Introduction

The performance of the country's manufacturing sector is a perennial source of frustration to economic analysts and policymakers alike. With an industrial sector that was rated second in Asia to that of Japan in the early 1950s, the Philippines is now ranked close to the least successful economic performers of the region. Among ASEAN countries, the Philippines has the lowest record of industrial growth (Table 1.1) and structural change has hardly taken place. For instance, the share of light consumer industries (food, beverages, tobacco, textiles, wearing apparel, and leather products) has since lingered at its 40 percent share of manufacturing value added in 1963, while the share of metal products, machinery, and equipment has even declined from its relative position more than two decades ago. Industry's share of GDP itself shows none of the marked changes that have characterized other ASEAN countries' industrial sectors since 1970.

In an intercountry comparison of (total) factor productivity growth in 16 developed and developing countries (Page 1990), the Philippines is one of the two countries (India being the other) which registered negative productivity growth in postwar economic history. The country lost its competitiveness in the world market vis-a-vis other ASEAN countries like Thailand and Malaysia, reflected in the low and declining share of world exports (Table 1.2). Even the top performers in the country's export sector, namely apparel and electronic products, succumbed to the pitfalls of import dependency. Unwittingly, many of the import-substituting, infant-industries of the past regime failed to be competitive even in domestic markets.

TABLE 1.1

COMPARATIVE GROWTH RATE OF VALUE ADDED IN INDUSTRY AND INDUSTRY'S SHARE OF GDP IN ASEAN

(in percent)

Growth Rate of Industrial Value Added	Indonesia	Malaysia	Philippines	Singapore	Thailand
1971-1980 (average)	12.5	9.1	8.3	9.8	12.0
1981-1990 (average)	5.8	7.2	-0.2	5.1	9.7
Industry's share of GDP					
1970	20.9	24.7	29.4	29.8	25.7
1980	41.3	35.8	36.2	38.8	30.8
1990	40.6	41.7	33.0	35.9	35.3

Source: Tables A4 and A6, *Asian Development Outlook, 1991.*

TABLE 1.2

ASEAN MEMBER COUNTRIES' SHARES OF WORLD EXPORTS, 1985-1990

(in percent)

Country	1985	1986	1987	1988	1989	1990
Indonesia	1.014	0.736	0.717	0.706	0.737	0.731
Malaysia	0.841	0.694	0.749	0.769	0.841	0.862
Philippines	0.252	0.239	0.238	0.256	0.260	0.242
Singapore	1.244	1.118	1.198	1.432	1.503	1.519
Thailand	0.389	0.440	0.483	0.581	0.673	0.704

Source: Table A15, *Asian Development Outlook, 1991.*

Past Studies on Trade and Industrial Policy

There have been numerous studies on the industrial sector, both for specific industries and the manufacturing sector as a whole, attempting to understand and analyze the problems and recommending policies to improve industrial performance and achieve sustained economic growth. The major and more comprehensive studies include Power and Sicat (1971), Ranis et al. (1974), Bautista, Power and Associates (1979), the Joint Tariff Commission-PIDS Working Paper Series (1986), and Medalla (1990). These studies focus on industrial and trade policies and the incentive system they breed, as well as on the economic performance of industries and firms. As such, they contribute to a greater understanding of the effects of the policy regime on industrial efficiency that has led to the rethinking and formulation of more appropriate policies for industrial development. Notwithstanding these contributions, not much is known about the real impact of economic policy reforms that have been implemented in the 1980s on particular industries and firms, and whether the expected results have been achieved.

A series of studies on industrial restructuring commissioned by the Development Bank of the Philippines (DBP) in 1992 includes cement, pulp and paper, textiles, and shipping and shipbuilding, among others. More recently, a set of industry studies was done by the Japanese International Cooperative Agency (JICA) for the Board of Investments (BOI) covering metalworking, die-casting, furniture-making and software development. Focusing on current problems affecting the financial viability of various industries, these studies give little or no attention to social costs and benefits.

The series of Tariff Commission-PIDS case studies of industries addressed both efficiency issues and firms' responses to the tariff reform and import liberalization programs. However, these studies were conducted at a time when the policy reforms were just beginning to take effect. Consequently, they were unable to capture the medium and long-term adjustments undertaken in response to the policy changes. They also gave little attention to the specific factors behind the inter-industry, inter-firm, and intra-industry differences in adjustment responses. What the studies showed, however, is that effective protection to domestic industries was generally reduced and firms tended to become more socially efficient, but that there were different responses in terms of factor productivities, factor intensities, output growth, and others (Tan 1986).

In general, two major conclusions have emerged from these studies:

(1) That the more than three decades of protection has been very costly in terms of its inherent penalty to exports, its seriously adverse impact on resource allocation and dynamic efficiency losses arising from lack of competition, and

(2) That a reform toward a more liberal, and neutral trade policy is necessary to propel the economy to a higher level of industrialization.

Some would add a third conclusion. This is:

(3) That while a reform toward a more neutral trade policy regime is a necessary condition for a more rapid industrialization, it may not be sufficient. More specifically, there seems to be a need for a more judicious, more effective, selective intervention.

There is some debate on the third issue, however. For example, reflecting on the experience of South Korea, Pack and Westphal (1986) challenged the "neoclassical" position (as espoused by such authors as Balassa, Corden, Krueger, and Little) by asserting that "a neutral policy regime may not generally be a sufficient condition for rapid industrialization." Their contention is based on what they consider "new elements" that have entered the debate, namely:

(1) An empirical finding that market forces alone are not responsible for the purported "market successes" of economies like Japan or Korea; and

(2) A distinct, empirically based concept that puts indigenous dynamic phenomena involving technological change at the center of industrialization.

After discussing the principal mechanisms behind the Korean government's practice of selective intervention, and given Korea's remarkably successful industrial performance, the authors assert that the Korean experience, as a whole, demonstrates that selective intervention is not inimical to successful industrialization (p. 99). Among the essential elements of the Korean approach are the following:

(1) A two-pronged strategy of industrialization consistently practiced by the government:

(a) reliance on market forces responding to mostly neutral policies to allocate resources in well-established industries; and

(b) a strict selective intervention on industries judged to be in Korea's dynamic comparative advantage;

(2) An extensive consultation of the government with the private sector in deciding which industries to promote and how to do it.

On the other hand, other studies, particularly World Bank (1993), The East Asian Miracle, find that promoting specific industries did not generally work.

> "Industrial policy narrowly defined — that is, attempts to achieve more rapid productivity growth by altering industrial structure — was generally not successful. In Japan, Korea, Singapore and Taiwan, China, promotion of specific industries had little apparent impact. Industrial growth tended to be market-conforming, and productivity change was not significantly higher in promoted sectors. Although governments in these four economies were undoubtedly trying to alter industrial structure to achieve rapid productivity growth, with the exception of Singapore their industrial structures evolved largely in the manner consistent with market forces and factor-intensity based comparative advantage."
>
> — (World Bank 1993: 354)

Even Pack and Westphal are also quick to note that a selectively interventionist approach is successful **only when the government decides on the basis of an overriding objective of dynamic efficiency. Export performance** is still the practical measure of a selected industry's progress toward achieving world-class competitiveness. In certain instances when the selectivity rule was relaxed, however, Korea's industrial performance deteriorated. A recent example is when government promoted too many infant industries in the heavy and chemical sectors during the 1970s. As a result, technical and entrepreneurial talent was thinly spread over too many promoted industries and excess capacity became a major problem. Since international competitiveness was not given importance in the monitoring process of industrial performance, there was an "unprecedented reluctance to abandon or radically revise its detailed strategy on the basis of information and experience accumulated during implementation" (p. 101). Such mistakes merely underscore the importance of **dynamic efficiency** in providing the litmus test in the selection of industries to be promoted. They also offer lessons to other developing countries looking for models of industrial policymaking, such that they highlight the costs of failing to understand the underlying principles of the East Asian model.

Most unfortunately, regardless of whether selective intervention could work or not, the Philippine government seems to have espoused for more than three decades prior to reforms the worst possible policy combination — adopting an interventionist approach under an inward-looking, protectionist policy framework. The government has utilized a host of trade

restrictions to protect domestic industries in the domestic market. At the same time, starting in the late 1960s, there have been some attempts at selective intervention in the form of BOI Investment Priorities Plan (IPP) listing of preferred industries and progressive manufacturing programs (PMP) which have, generally, also been domestic market in orientation and tended to reinforce the biases of the protectionist trade policy.

Much of the reforms undertaken since the early 1980s recognize the pitfalls of the past industrial strategy. The continuing thrust of the country's trade and industrial policy reform is to provide an environment conducive to industrial growth and productivity by eliminating at least the policy-induced distortions to resource allocation. This thrust is the spirit behind the tariff and import liberalization policies of recent years. Not much, however, has been done to reform the investment incentive system.[1]

Objectives and Plan of the Study

With little evidence as yet on the impact of these reforms, owing mainly to the necessary lag time for such impact to be felt, there remain difficult questions about why the industrial sector remains sluggish, when it would take off, or even whether it would ever manage to come out of the slump and catch up with our dynamic Asian neighbors.

Businessmen still point to the sad state of our infrastructure, the high interest rates, age-old technology, and others. (Why, in the first place, had there not been spontaneous, continuous upgrading of technology considering the "rents" that must have been harnessed from extremely protectionist policies of the past?) Some would argue that the reforms have not been enough, or that the reform package had been incomplete if not inconsistent. More specifically, there seems to be a need for more of the second element mentioned above — a more judicious, more effective, selective intervention.

This study is yet another attempt to plough through these questions. It is the first of two volumes serving as the main report of the Development Incentives Assessment (DIA) Project undertaken at the Philippine Institute for Development Studies (PIDS). Its major objective is to provide a better understanding of, as well as more perceptive empirical findings about Philippine industrialization policy, the state of the manufacturing sector, the

1. There was an attempt to reform the investment incentive system in 1983 with the passing of Batas Pambansa 391 which granted much more generous incentives to exports. This was, however, rescinded with the passing of the 1987 Omnibus Investment Code, which basically reverted to the old system.

impact of reforms, and what more needs to be done. To this end, this volume goes back to the fundamentals — the basic issues and concepts which make up a sound and solid industrial policy — in order to provide a clear and consistent framework, then proceeds to more detailed and empirical analyses of the manufacturing sector.

Chapter 2 discusses the rationale for the promotion of industrialization. This is intended to set the perspective of the study. The next four chapters tackle the major policy instruments of industrial policy. These include (a) trade policy, (b) exchange rate policy, (c) the investment incentive system, and (d) the other factors affecting industrial performance, particularly financial policy and technology. How have these measures been used, and how should they be used, to promote industrialization? How have they, in fact, affected the Philippine industrial sector?

Chapter 3 deliberates on the use of trade policy in industrial promotion. Trade policy reforms have been among the most controversial policy measures of both the Ramos and the Aquino administrations. Resistance to trade reforms will continue to be felt and the danger of policy reversal and questions regarding its impact would remain. This chapter sheds further light on costs of protection, what has been the Philippine experience in this area and what has been its impact, drawing on the results of both macro and industry studies under the DIA Project.

Chapter 4 continues with the role of the exchange rate which is, potentially, the most important complementary measure to accompany trade liberalization. What needs to be done, considering the persistent trend toward peso appreciation?

Chapter 5 examines the implications of industrial policy for the investment incentives system, touching on foreign investment and incentives for regional and small-scale investments. The chapter also provides an assessment of the BOI performance in terms of the type and composition of investments it has encouraged over the years.

Chapter 6 looks at other policy measures affecting industrial policy. This includes a brief discussion on financial policy, how it should be used to effectively influence resource allocation. More importantly, this chapter focuses on the role of technology in industrial development and the implications on government policy.

Chapter 7 then provides a more empirical analysis of the recent performance of the Philippine manufacturing sector. This is done in terms of an assessment of the protection it receives across sectors, its efficiency in terms of resource use, and other indicators of performance. This chapter provides further empirical evidence

on the impact of trade reforms using 1983 and 1988 establishment data. How much recovery has been achieved? How ready is it to take the leading role? And, on the whole, how competitive is the manufacturing sector?

Industrialization policy impacts on and is affected by agricultural growth. Chapter 8 examines this interrelationship more closely with a view toward a more broadly based Philippine development.

To complete the picture, Chapter 9 then brings in some external factors, particularly the scope for regional and multilateral cooperation for export expansion. This would cover the General Agreement on Tariffs and Trade (GATT), Asean Free Trade Area (AFTA), and other regional blocs.

Finally, Chapter 10 provides the conclusion and formulates the policy recommendations for industrialization. This chapter puts together the findings and conclusions of the different chapters into a consistent policy package for industrialization. The suggested roles of the major policy instruments in providing a healthy environment for growth and overcoming impediments to growth are spelled out and the role of government is further defined.

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CHAPTER 2

Why Promote Industrialization?

Rapid industrialization has long been a predominant policy objective and key component of economic development strategy among developing countries (LDCs). In many cases, the motivation has been a desire to diversify the economy from a perceived overreliance on primary production and, more generally, to redirect the country's production capacity toward providing a basis for modernizing the economy.

In the early 1980s, what has been called the generalized debt crisis forced the attention of LDC policymakers toward short-run stabilization problems. For many LDCs that borrowed heavily in the preceding decade to finance consumption or unproductive investments, the macroeconomic imbalances and slow (if not negative) growth during the 1980s necessitated the adoption of comprehensive economic policy reforms aimed at promoting not only macroeconomic stability but also long-run growth. Two related intermediate objectives of these reforms are the redirection of trade policy toward greater openness and improvement of the international competitiveness of domestic industry. These have significant implications in the pursuit of industrialization and choice of development strategy in many LDCs.

Political leaders and economic planners have commonly viewed industrialization as almost equivalent to economic development. It is expected to absorb excess labor from the agricultural sector, increase labor productivity throughout the economy, and raise living standards of the population. Such expectations seem reasonable on the basis of the economic record of present-day developed countries; each had to go through a process of

"structural transformation" that made domestic industry the dominant producing sector of the economy. Indeed, one would be hard-pressed to identify a developed country today that is not "industrialized." The substantial disparity between developed countries and LDCs in the contribution of manufacturing to national output is often seen as the principal manifestation of economic backwardness in the latter countries.

In this chapter, we examine the need for a deliberate encouragement of the expansion of domestic industry. We focus our discussion initially on conceptual issues, followed in later chapters by an examination of the Philippine experience. It will be necessary to first point out that, in view of certain advantages of the industrial sector over other production sectors of the economy, the process of industrialization can be expected to occur naturally over time, even without making policies biased toward manufacturing industries. We then discuss the economic rationale for government to promote industrialization, bearing in mind that the typical means for so doing often represent a cost to other sectors. It is necessarily related to the existence of market failures; illustrative examples in the product, labor, and capital markets are provided, most of them arising from the structural characteristics of developing economies. Some caveats to the market-failure argument for government industrial intervention are also given.

Doing What Comes Naturally

It has been argued that neither the historical association between industrialization and economic development nor the result of intercountry comparisons on the relative importance of domestic industry in the national economy implies the necessity of promoting industrialization. It may well be that industrial promotion policies are unnecessary, and that industrial growth will occur over time even when government policies are neutral between industry and other production sectors. One reason for this is that industrial products are generally characterized by higher income elasticities of demand compared to primary products and services; hence, at least for relatively closed economies, income growth over time will be associated with an increasing share of industrial goods in consumption and production. In the case of open economies, participation in foreign trade leads to specialization and exchange based on comparative advantage that shifts over time, with capital accumulation and improving technology and labor quality, toward more sophisticated industrial products.

With respect to the factors of production, the increasing scarcity of land and other natural resources, accompanied by population and labor force growth, places a premium on dynamic sources of output growth where the complementary inputs to labor are more easily reproducible. This requirement is met not by agricultural and other primary sectors, the expansion of which in any given country is inevitably constrained by the finite amount of natural resources. Industrial growth, on the other hand, can be sustained by capital accumulation. The industrial sector also has strong production linkages to other sectors of the economy. Lastly, it is sometimes argued that diversification of the production structure toward industrial goods is warranted by the likelihood of secular deterioration and marked short-run instability of the terms of trade for primary products.

These advantages of manufacturing industries over the primary sectors have the implication that structural transformation of a developing country can be expected to occur naturally, i.e., even without the benefit of industrial promotion policies. Any intertemporal price disadvantage of primary products, for example, will induce an automatic market response and reorient the domestic production structure toward industrial goods. The relevant policy question is not whether industrialization will or will not take place, but why it may or may not be desirable for the government to intervene in the operation of market forces and attempt to promote industrial development beyond what will occur under a policy regime that is unbiased between industry and other sectors.

Why Promote Industrialization?

The answer to the latter question has to do with market externalities and distortions associated with market failures that can result in a less than socially optimal allocation of the economy's scarce resources to the industrial sector. Thus, if (positive) externalities in a given manufacturing activity lead to a larger social benefit so that a lower output is produced than is socially desirable (i.e., from a national interest point-of-view), government intervention to encourage the expansion of that production activity is warranted. It is important to recognize two things, however. One is that the market failure may also apply to the nonindustrial sectors. The other is that government efforts to correct specific sources of market failure can lead to a more costly outcome. The latter possibility in particular is often neglected in discussions of the need for market intervention. Showing that the market is not perform-

ing well is not enough; it is also necessary to show that the government can do better.

Potentially relevant market failures and distortions exist in both product and factor markets. Concerning the product market, a frequently cited example is the terms-of-trade decline that faces a country with monopoly power in international trade that is not perceived by individual traders. Restricting the supply of exports and the demand for imports in that country can increase the export price and reduce the import price. As is well known, there is an optimum tax that can take advantage of such market and maximize the benefits for the national economy.[2] Another source of product-market failure relates to production and marketing externalities. Adopting new technologies, introducing new products, or venturing into new markets—including the export market—generates spill-over benefits to other producers in terms of valuable market and technological information. Unless such external economies are internalized, underproduction will result. A third example relates to the case where production is characterized by scale economies and learning-by-doing: Firms will likely produce at the point where price equals average rather than marginal cost, implying a suboptimal level of production. Finally, in the context of sustainable development, a larger or smaller manufacturing sector might be warranted, depending on the overall impact of industrial production on the environment. Apart from the purely regulatory measures, policies might be required to alter incentives away from the more environmentally degrading production activities.

In the labor market, the wage rate for urban and industrial workers in developing countries is often made artificially high by minimum-wage and other legal requirements or labor-union pressure. This penalizes industrial employment and creates disincentives to expand output and investment in the affected industries. Another manifestation of labor market failure is underinvestment in the training of workers. Firms are unable to fully appropriate the gains from skills upgrading for their workers, external benefits being reaped by other employers as a result of labor turnover.

Finally, LDC capital markets are notoriously underdeveloped and distorted. Inadequate savings mobilization and financial intermediation lead to a lower level of investment. This would be particularly true among small-

2. If an infinite elasticity of world supply of the country's imports is assumed, the "optimum tariff" is determined by the elasticity of world demand for the country's exports; alternatively, distinguishing among different export products, the appropriate instrument is a set of export taxes as determined by the individual world demand elasticities (Power 1979:430).

and medium-scale producers whose access to credit, as well as the cost of credit to them, are typically less favorable relative to large enterprises, and are forced to rely on internal financing and the informal credit market.

The classic argument for government intervention to promote "infant industries" ultimately rests on the existence of capital market imperfections. Even if an industry has real comparative advantage in the long run, it may have to incur losses for some time before becoming firmly established and earning the returns required to justify the investment. Particularly relevant cases are industries where economies of scale are important and the learning process takes time. This need not represent a problem if private agents foresee the eventual profitability of the investment and are able to finance the initial losses. The latter is of course made difficult by capital market imperfections. While such imperfections exist in developing countries, it is important to recognize that some investors have access to external financing beyond the domestic credit sources. In particular, subsidiary firms of transnational corporations can draw on profits earned elsewhere or from the international capital market.

It bears emphasizing that some of the externalities and distortions described above apply to nonindustrial sectors as well, and it is not obvious that the net balance would favor manufacturing industries. For example, monopoly power in export markets is more likely to be found in primary than in industrial products. Also, although to a lesser extent, externalities associated with new products, technologies, and markets can be generated in nonindustrial activities involving, for example, nontraditional agricultural exports in LDCs such as horticultural products. Credit market distortions in many LDCs tend to penalize small producers in agriculture and services more than the large manufacturing enterprises, so that the removal of such distortions may even lead to a smaller allocation of resources to domestic industry. Environmental effects differ among various nonindustrial activities as well; in agriculture, for example, alternative mixes of annual and perennial crop production will produce differing levels of land degradation. Finally, it cannot be presumed that spill-over effects through labor training, scale economies, and learning-by-doing will be much greater in manufacturing than in agriculture or even the services sector.

Another reason to be cautious about market failure-type arguments for industrial promotion is that the nature of externalities is such that they are difficult in practice to identify specifically, to assess quantitatively, and to target successfully. The needed corrective action to be taken by the govern-

ment then becomes unclear and liable to be corrupted, providing fertile ground for "government failure." The cure of industrial intervention might well prove worse than the disease itself.

"Structuralist" Perspective

Over and above these "market failures" per se as a rationale for promoting industrialization, the "structuralist" view sees more fundamental failures in the process of growth and structural change which require specific intervention and an appropriate industrial policy.

In the structuralist perspective, the growth process of rising incomes, capital accumulation and structural change is not smooth but, rather, "kinked" at certain stages. That is, there are junctures or "nodes" in the production function where increases in the marginal productivity of capital and accelerated growth could occur. At these junctures, discrete choices have to be made. The optimal structural change need not happen automatically and may even be retarded if left alone to market forces. Specifically, a concerted accumulation of critical mass for a number of resources — labor skills and capital, for example — may be required to overcome this kink. The profitability of the investment in one area may depend on the level of investment in another. Thus, left to the market, the required critical mass for both would not automatically and simultaneously be reached (Justman and Teubal 1991). Thus, in addition to creating a favorable macroeconomic environment and correcting for orthodox neoclassical market failures, the need is for an industrial policy that would stimulate such optimal structural change.

This does not imply that the government should carry out the task of analyzing and then selecting the "right" development path. Few governments would have the resources and/or capability for such a complex task. Also, pointed interventions toward predetermined solutions are inferior to an "enabling" approach that promotes the participatory process in addressing development problems. The primary role of government should be one of coordination and serving as a catalyst for interaction among the economic, as well as political, players. It also has a primary role in human resource and skills accumulation (to reach the critical mass).

Having set forth in this chapter the rationale for promoting industrialization, the succeeding chapters then deal with the major policy instruments for industrialization.

CHAPTER 3

Trade Policy and Industrial Promotion

Since market externalities and distortions rarely originate in trade, it is seldom the case that trade policy is the first-best instrument for industrial promotion. There is one particular instance where trade policy has a first-best role, which derives from the positive externality associated with exporting, especially of manufactured products. The irony is that in practice, import-competing rather than export industries have been the principal beneficiaries of past government interventions in many LDCs.

Two reasons for the choice of import-protection strategy for industrial development are examined These relate to industrial export pessimism and the perceived need to nurture infant industries to maturity. Both proved untenable over time as some LDCs, especially the East Asian NICs (newly industrializing countries)[3] which were the earliest to shift to export-oriented policies, succeeded in sustaining rapid export growth. The high cost of industrial promotion through import-protection and some lessons from East Asian country experiences are discussed in the succeeding paragraphs. In the 1980s, as stagnant growth and macroeconomic imbalances persisted, industrial intervention and import-substitution policies in many LDCs began to give way to trade liberalization and export-oriented policies aimed at expanding industrial exports and increasing industrial competition. Our

3. This follows common usage of the epithet, although "countries" is not the appropriate word. It is generally agreed that Taiwan is a province of China, the Republic of Korea (South Korea) is the southern part of a divided country, and Singapore and Hong Kong are city states by virtue of their size (the latter to become a Chinese territory in 1997).

discussion emphasizes the need for a real exchange rate depreciation to accompany import liberalization, a consideration that is particularly relevant in the present context of Philippine trade policy reform.

We then examine the industrialization experience in the Philippines and the evolution of trade policy from the comprehensive foreign exchange and import controls instituted in the early 1950s to the trade policy reforms undertaken since the early 1980s. The chapter ends with a discussion of the economic effects of alternative trade policies with special reference to the Philippine manufacturing sector, drawing on the existing empirical literature and especially the findings of the PIDS-DIA study.

Role of Trade Policy in Industrial Promotion

It is a well known principle, based on the theory of second-best, that in the presence of market failure—or of any government interventions that distort the market—offsetting policies that directly address the source of the distortion will maximize national income (Corden 1974). These "first-best" policies differ from other policies (second-best, third-best, and so on) that are not as direct and have less favorable effects on national income because of the adverse side effects they bring about. The more closely the policy instruments are directed to the source of market failure, the less side effects are generated and the more favorable are the consequences from a national interest point-of-view.

Is trade policy a first-best instrument for promoting industrialization? Based on the aforementioned discussion of relevant sources of market distortions and externalities, the answer is "not likely." Indeed, very few of the cited market-failure arguments for industrial promotion can be seen to originate in foreign trade. With respect to capital market imperfections, the first-best policy is to improve the capital market through institutional innovations and the removal of any policy-induced distortions. If the sources of capital market imperfections cannot be removed, a second-best policy that is preferable to say, infant-industry protection through import restrictions, would be subsidized loans to infant (and other deserving) industries.

In the labor market, the observed distortion in the form of industrial and urban wage premia is best addressed through direct subsidies, as long as the legal minimum wage and the influence of labor unions continue. Also, the external benefits from labor training imply a first-best policy that provides commensurate subsidies at the firm level when trained workers leave for employment in other firms. A second-best policy might be a direct subsidy

that helps finance the skills upgrading programs; import protection to a firm or industry that provides labor training would be an indirect and hence, inferior instrument to deal with this externality.

Similarly, the first-best policy in dealing with production externalities and distortions related to scale economies and learning-by-doing would be corrective action through offsetting direct subsidies and taxes. Trade policy is a less potent instrument since the subsidies and taxes are directly targeted at the source of market failure.

The attraction for LDC policymakers of using trade policy — for example, import protection via tariffs — rather than production subsidy to promote say, infant industries is that government revenue is generated in the former but spent in the latter. This is an important consideration for LDCs that rely heavily on trade taxes; for example, in 1986, trade taxes exceeded one-third of total government revenue in 7 out of 18 low-income countries and in 5 out of 42 middle-income LDCs (Bautista 1993: 193-4). In the Philippines, the share of trade taxes has been less than 30 percent since the early 1980s. The relevant issue is whether the cost of resource misallocation induced by the trade restriction is lower than the marginal social productivity of government expenditure. It is also necessary to inquire if there are lower-cost means of financing production subsidies other than trade taxes.

Only in two of the previously cited cases would trade policy be a first-best instrument. One pertains to the terms-of-trade effect arising from an existing market power in international trade. As noted already, an optimum tariff or a set of export taxes is the most direct means to exploit such monopoly in the world market. However, this argument for trade intervention is almost irrelevant for LDC manufacturing industries whose share in world trade of specific industrial products is invariably small. The qualifying word "almost" is used advisedly, since market power might exist with respect to a particular importing country.

The other case relates to the externalities associated with selling to new export markets. Especially in the case of manufactured goods, LDC producers need exposure to international markets to provide a competitive spur to greater efficiency, among other reasons. In developing export capability that can be emulated by future exporters in the same country, successful entrants to world markets provide benefits that are not internalized in private profitability calculations.[4] Such positive externality in the exporting activity pro-

4. Industrial export-based externalities are discussed in Krueger (1981), Naya (1988), and de Melo and Robinson (1990), among others.

vides the rationale for export subsidies that would encourage the expansion of manufactured exports beyond the free-trade level. It is ironic that, in practice, LDC government interventions have generally discriminated against industrial export production while heavily protecting import-competing industries. Import-protection policy does not qualify as a first-best instrument for promoting industrialization.

Policy-induced distortions, not only in the price incentive structure but also in public investment, have also discriminated against agricultural and rural producers in most developing countries (Bautista and Valdés 1993). The foregone income of rural households could have added to the incremental demand for nonagricultural products in the local economy. The policy bias represents therefore an impediment to broad-based, rural-oriented industrial development. This is a clear case of policy-originating distortions that need to be directly addressed by appropriate changes in existing policies.

Industrial Promotion Through Import Protection

The theoretical case for free trade, based on comparative advantage and the gains from specialization and division of labor, has long been a basic tenet of classical economic analysis. Moreover, the empirical association between economic growth and industrialization on the one hand, and the expansion of foreign trade especially exports of manufactured goods on the other, is well established. Indeed, recent economic histories of the rapidly growing East Asian NICs provide abundant evidence of the vital role of international trade in the industrialization process. As has been indicated, if there has to be trade intervention, it is export subsidization rather than import protection that will serve the national interest.

Nevertheless, the main focus of LDC trade and industrial policies, especially during the 1950s and 1960s, was the promotion of import-substituting industries, which benefited from the high tariff walls and quantitative restrictions set up against imports of industrial goods. Since the initial growth of the industrial sector also necessitated heavy importation of capital goods and materials, these "essential" producer goods were allowed to be liberally imported and the required foreign exchange was made available at highly favorable terms. Such government intervention in the trade regime provided the opportunity for profitable manufacturing investments by creating non-contestable domestic markets, in particular, at least initially, for light consumer goods.

The deliberate restriction of trade adopted in most LDCs — especially those newly emergent from colonial rule — was in part due to widespread pessimism about their capacity to compete in the world market for manufactured products. The general perception was that developed countries had a lock on industrial exports, so that import substitution in the domestic market offered the only road to industrialization for most LDCs.

The choice of inward-oriented industrial development was also influenced by the sense of purpose associated with the infant-industry argument. Considering the limited industrial experience and lack of technical and other skills in these countries, the new industries were perceived to need protection from foreign competition. It was believed that infant industries would eventually mature and be internationally competitive as the necessary skills were learned and scale economies realized.

Both arguments for industrial promotion through import protection proved less and less valid over time. Export pessimism weakened as firms in an increasing number of LDCs that shifted to export-oriented policies established market positions, mostly in developed countries, supplying a wide variety of industrial products. In other countries where import-substitution policies continued to be adopted, many infant industries remained uncompetitive and became a hindrance to those countries' participation in the manufactured export boom. The early successes of the East Asian NICs in sustaining rapid export growth was followed by other developing countries, some of them in Southeast Asia.

Numerous studies have documented the excessive level and large variance of effective protection to manufacturing industries afforded by the trade regimes of many LDCs (see Little et al. 1970, Bhagwati 1978, and Krueger 1978 for the early contributions). It has also been shown in more recent studies that total factor productivity and the international competitiveness of domestic industries can be adversely affected by import restrictions (see, e.g., Chenery et al. 1986). This is likely to reduce the rate of growth because of the decline in the efficiency of investment. A given amount of savings when invested will result in a lower increase in output.

Additional costs associated with import protection relate to the administration of the trade interventions and to the induced rent-seeking activities. The cost of administering the protection system can be very high if there is an elaborate licensing system and a scarcity of trained personnel. This is one reason why tariff protection is preferable (if there has to be import protection) to the imposition of quantitative import restrictions. Import quotas are also conducive to rent-seeking, the cost of which include not only the actual

labor costs involved in the lobbying activity but also the cost arising from a diversion of the entrepreneurial effort. The latter can lead to a further decline in the rate of growth.

Some of the East Asian countries are sometimes pointed out as providing successful cases of industrial protection. As a prime example, the South Korean experience is said to have demonstrated the important role of selective protection and encouragement of infant industries (Amsden 1989). However, one has to make a few qualifications.

First, the observed association between infant-industry protection and rapid growth of South Korean manufacturing does not imply causality from one to the other. Might not Korean industrial growth have been faster had there been no selective government interventions? It is now widely accepted, for example, that the heavy protection and credit subsidies granted to the chemical and steel industries during the second half of the 1970s represented a costly policy mistake. Second, only a few industries were selected for special promotion at any given time, so that the overall cost of resource misallocation had been relatively low. Moreover, in contrast to the tendency in many LDCs to perpetuate the infant status of favored industries, the Korean government did not delay much the withdrawal of protection to poorly performing industries. The performance indicator used was mainly their export record, which served to put pressure on the targeted industries to be internationally competitive. Finally, even those industries that were not selectively protected operated under a trade regime that was more or less unbiased between domestic sales and exporting; in particular, export producers were accorded "free-trade status," having been given access to world priced inputs and benefiting from a competitive real exchange rate (Westphal and Kim 1977).

An important aspect of selective industrial intervention in the East Asian NICs relates to the ability of their governments to exercise effective leadership over the private sector (Amsden 1989). This enabled the implementation of intervention policies — so called "hard" policies — as they were originally conceived. By contrast, discretionary policies in many LDCs tend to be "soft," more likely to be poorly implemented or worse, captured by special interests to serve their own purposes. This qualitative dimension of government intervention is often overlooked in discussions of industrial promotion policies in South Korea or Japan and these policies' applicability (more properly, inapplicability) to developing countries that may not have the required administrative and political capabilities to implement them.

As a final point, we also need to make a brief reference to some recent contributions to the theory of international trade and "strategic trade policy" (see, for example, Krugman 1987) that suggest an economic rationale for protection. The "new trade theory" assumes increasing returns to scale in production at the firm level and imperfect competition among oligopolistic firms (located in different countries) in international markets where excess profits (rents) are being made. Under such conditions, government intervention can influence the market outcome in favor of domestic firms. Provided that their share in the oligopoly profits is increased sufficiently, tariff protection can result in a net domestic welfare gain despite the attendant costs.

The relevance of strategic trade policy to LDCs is questionable. Apart from the lack of robustness of the theoretical results, it is difficult in practice to identify the industries to be targeted for protection.[5] Indeed, very few (if any) LDC firms can be considered active participants in oligopolistic international markets. Furthermore, even where it is appropriate to adopt strategic trade policy, retaliation by the country's trade partners will reduce the benefit. In any trade war, all participants will come out as losers. For these reasons, we are extremely skeptical about the applicability of the protection argument from the new trade theory, as in fact also are the trade theorists who originally contributed to the literature.

Reform Toward Export-Oriented Policies

By the end of the 1970s, the inward-looking strategy of industrialization through import protection had already fallen generally into disfavor. It was influenced undoubtedly by the superlative export performance and overall development record of the Asian NICs. For these countries, the benefits of moving toward "export-oriented policies" (by definition, having incentive effects that are neutral between the domestic and export markets) were not confined to the substantial and sustained increases in export earnings. Their growth experience since the mid-1960s was also spectacular, with per capita GNP in each of these countries increasing at more than twice the combined average of that of other developing countries (Bautista 1992). Furthermore, income inequality and poverty were much reduced, presumably related to the initially labor-intensive character of their export industries.

5. It might appear that "excess" profits are being earned in a given international market, but which could well be the normal profits that compensate for the high risk (of failure) involved.

The advantages of export-oriented industrialization largely derive from the greater exposure of domestic industries to international markets. It enables producers not only to gain access to world-priced inputs but also to specialize in areas of comparative advantage in the static sense of currently available resources, technology, and infrastructure. More importantly, it encourages producers to compete against foreign products in the world market which leads them to more quickly adopt improved technologies and learn new skills (e.g., in marketing and management). This increases total factor productivity faster than would have taken place under a protected import-substituting regime. The greater reliance on market forces, rather than on discretionary policies and administrative regulations, also reduces the scope for rent-seeking and its associated costs.

The high cost of maintaining the industrial protection system was felt more acutely during the 1980s in many LDCs that were adversely affected by the succession of oil-related external shocks in the preceding decade. The problem was mitigated to some extent in the 1970s by the expanded borrowings of LDC governments. However, the beginning years of the 1980s were marked by sharply higher real interest rates and continuing deterioration of the external terms of trade for many LDCs. This led quickly to a foreign exchange crisis among heavily indebted countries, the management of which, in the face of stagnant growth and macroeconomic imbalances, required the implementation of macroeconomic stabilization and structural adjustment programs. The latter program typically includes trade liberalization measures and an industrial policy component in which the expansion of industrial exports and increased industrial competition are the two major objectives (among others).

Thus, the protective import-substitution strategy for industrialization became a major casualty of the stabilization problems of the early 1980s. It is too early to tell whether a genuine change of heart among LDC policy makers has indeed taken place with regard to trade policy. In any case, many LDC governments have been implementing, since that time, policy reform measures intended, among other objectives, to reduce the average level and dispersion of industrial protection, implying a movement toward a neutral (or uniform) incentive structure. These measures commonly include the rationalization of the tariff structure, relaxation of import licensing and quantitative restrictions, and simplification of import procedures. During the period from 1979-1988, 43 LDCs were granted adjustment loans by the World Bank involving conditionalities related specifically to implementing trade policy reforms (World Bank 1989: 24).

At this point we need to be more precise in the use of the term "trade policy reform." For present purposes, it is used to represent a shift to greater incentive neutrality (i.e., toward equality of price incentives across production sectors) or to a more liberal trade regime (i.e., less restricted by discretionary government interventions and greater reliance on the price system). Since the "initial" trade policy discriminates against exporting (relative to import-competing) industries, more neutrality will mean a reduced anti-export bias; this can be achieved by reducing import protection or improving export incentives. Trade liberalization, on the other hand, can be achieved by removing or at least reducing import and export restrictions — even if the "equivalent" trade taxes are simultaneously imposed. The latter case exemplifies the possibility of trade liberalization without achieving greater neutrality. An example of trade policy reform that leads to a more neutral incentive structure but not trade liberalization is the granting of export subsidies by the government. Trade policy reforms should aim at both greater neutrality (to improve resource allocation) and trade liberalization (to reduce the fiscal and other costs of government intervention).

The Philippine Case

The industrial development experience of the Philippines has followed the general story told above concerning "many LDCs." The evolution of trade policy likewise involved the initial imposition of direct controls on imports and foreign exchange. Such controls were comprehensively instituted from 1949-1950 as a policy response to a balance-of-payment crisis. But these subsequently served as a protective instrument that encouraged the domestic production of import-competing industrial consumer goods at the expense of export production, the capital-goods sector, and agriculture.

Unlike most of the neighboring market economies in East Asia, the import-protection policy to promote industrialization held sway in the Philippines for a protracted period. This was a major contributor to the poor growth performance of the industrial sector and of the entire economy, as several studies have shown (e.g., Power and Sicat 1971, ILO 1974, and Bautista, Power and Associates 1979). It is hard to believe, given their comparative status at this time, that in 1965, the Philippines had a higher per capita GNP than Thailand and South Korea (Bautista 1992: 21). Not only were the rates of industrial and overall economic growth disappointingly low; employment generation did not match the rapid expansion of the country's labor force, the continuing high unemployment and underemployment

rates contributing to the failure to achieve a significant reduction in income inequality and poverty over time. Indeed participation of the poor in the growth process was limited by the capital intensive, large-scale, and regionally concentrated nature of Philippine industrialization — which was induced to a large extent by the trade and exchange rate policies adopted.

The Philippines, in 1965, had already one-and-a-half decades of industrial import-substitution policies and the attendant high-cost structure of manufacturing production. It would appear that the Industrial Incentives Act of 1967, the Export Incentives Act of 1970, and the tariff rationalization in 1973 did not change much the structure of industrial protection, as reflected in the continuing high effective protection rates (EPRs) for industrial consumer goods that were on average four times those for capital goods in both 1965 and 1974 (Tan 1979: 144). Export production continued to be heavily penalized relative to other industries, the average EPR for the latter being about 15 times that for the former in 1974.

The decade of the 1970s also witnessed a marked increase in the number of imported goods subject to quantitative restrictions (QRs), its share in the total number of Philippine Standard Industrial Classification (PSIC) seven-digit product categories doubling from 26 percent in 1970 to 52 percent in 1980 (World Bank 1993). Furthermore, despite the large nominal devaluation in February 1970 and the "managed floating" of the Philippine peso, the real exchange rate (RER) remained highly overvalued during the 1970s. The average RER overvaluation has been estimated at 24.2 percent from 1970-1974 and even higher at 32.1 percent from 1975-1979 (Intal and Power 1990). Based on the comparison given in Bautista (1990: 122), these rates are much higher than those derived for Thailand (15.9 and 24.1 percent, respectively) and Malaysia (2.3 and 0.4 percent, respectively) using the same estimation methodology.

It was during the 1980s that significant trade policy reform measures were implemented. A gradual tariff reduction program and relaxation of QRs were part of the conditionalities associated with a series of structural adjustment loans granted by the World Bank beginning 1980. Peak tariff rates of 70 to 100 percent were reduced to 50 percent in two stages. Very low tariff rates, on the other hand, were raised to at least 10 percent by 1985. Based on the codal (book) tariff changes implemented during 1981-1985, the average tariff rate declined from 43 percent in 1980 to 28 percent in 1985. Moreover, the degree of dispersion should also have been lower in 1985.

With regard to import licensing, from the original list of 2,901 import items banned or requiring "prior approval" by the Central Bank and other government agencies, 263 were removed in 1981. Another 587 were taken off the list in 1982, and 47 in 1983. Import liberalization plans were cancelled subsequently as the external debt-related foreign exchange crisis developed after August 1983. Instead, comprehensive controls on foreign exchange and imports were imposed, which rendered the ongoing tariff reform ineffective.

The import liberalization program resumed in 1986 under the new Aquino government, which also abolished export taxes (mostly on primary products), except on logs. During the three-year period from 1986-1988, 1,388 items were removed from the QR list (World Bank 1993), bringing down the share of import items subject to restriction to 10.3 percent of the total number and to 14.5 percent of the total import value (from 47.1 and 33 percent, respectively, in 1981). Additional import items were liberalized subsequently so that by the end of 1992, only 150 remained in the regulated list, representing 2.5 percent of the total number. Consumer electronic products and passenger cars accounted for a large part (more than 50 percent of the total value) of import items in the QR list.

In July 1991, the country's second most important tariff reform (after the 1981-1985 tariff changes) was launched. Under Executive Order (E.O.) 470, the number of commodity lines (8-digit harmonized system code) with high tariffs will decrease while the number of commodity lines with low tariffs will increase over a five-year period. The simple average tariff rate will decline from 28 to 20 percent. The effect on EPR (based on book rates) for "all sectors" is to reduce the average level from 22 to 18 percent and the standard deviation from 34 to 23 percent (Tan 1993). For the manufacturing sector, the reduction in average EPR is from 34 to 27 percent and in the standard deviation from 45 to 31 percent. Finally, the average EPR for manufacturing "importables" will decline from 51 to 39 percent, while the standard deviation will be reduced from 43 to 28 percent.

Based on price comparisons that incorporate the effect of QRs, the average EPR for manufacturing has been estimated to decrease from 54 to 48 percent as a result of E.O. 470, while that for manufacturing importables will be reduced from 79 to 70 percent (Tan 1993).

It would seem evident that, while there has been significant progress toward neutrality in the incentive structure through greater openness of the country's trade regime since the early 1980s, much remains to be done in both tariff reform and the liberalization of import QRs. Indeed, considering that the social benefits derived from participation in foreign trade exceed

the private benefits for exporters (due to the positive externalities from exporting, as discussed above), there is a theoretical case for discriminating in favor of (rather than against) export production. This would lead to an optimal level of exports that is higher than that under a free trade regime.

Effects of Trade Policy Reform

Considering the strong conceptual basis for the superiority, on economic grounds, of export-oriented policies over import-protection policies, it is not surprising that a positive relationship is often observed between export growth and economic performance among LDCs. Thus, a major conclusion from a comparative study involving eleven "semi-industrialized economies" is that rapid export growth has had favorable effects on GDP and industrial growth in those countries during 1960-1973 (Balassa 1982). More direct evidence of the association between the adoption of export-oriented policies and superior economic performance is provided in another multi-country study which concludes that episodes of trade policy reform in the ten LDCs examined have led generally to a more rapid export expansion and diversification (Krueger 1978). Furthermore, an important finding in a cross-country study done by Chenery et al. (1986) is that the growth of total factor productivity (TFP) increases significantly as trade policy based on import substitution shifts toward export-oriented policies, other factors remaining the same.

A more recent study (Michaely et al. 1991) examines 36 episodes of "trade liberalization" (meaning trade policy reform in the present discussion) in 19 countries over the period from the early 1950s to the early 1980s. Export growth among the successful liberalizers, i.e., those that persisted in reforming their trade regime, is found to have been twice as rapid on average as in the nonliberalizing countries. Another finding is that, even in the short run, liberalization does not appear to have inhibited economic growth; this is particularly true for episodes of strong liberalization policies. Because pre-reform trade policy typically discriminates against agriculture, liberalization is found to result in accelerated agricultural growth. However, in manufacturing which is characteristically the most protected sector, output growth tends to decelerate immediately following the policy reform. But this slowdown in industrial growth is observed to be only temporary, the growth rate returning to the pre-liberalization level within roughly a year.

The employment effect of trade policy reform is a major concern for many LDCs that suffer from low rates of labor force utilization. The induced

shift in relative incentives and profitability favors the production of exportables vis-a-vis importables and, if there is an accompanying depreciation in the real exchange rate, also relative to nontradables. Because export production tends to make greater use of the relatively more abundant factor, higher labor intensity is generally observed in the export sector compared to both nontradable and import-substituting industries. Therefore, trade policy reform and exchange rate adjustment can be expected to have a positive employment effect, at least in the long run. This expectation is borne out in the study by Krueger et al. (1981) involving ten LDCs. In general, those that followed a more export-oriented trade policy are found to have a better long-term record on industrial employment and labor force utilization.

The short-run relationship between employment and trade policy reform is not so straightforward. The complication is introduced by the possibility of reduced employment in import-substituting and nontradable goods production — which may not be fully offset in the short run by the employment expansion in newly profitable export industries. There are likely to be delays in intersectoral resource reallocation as well as in the development of new markets, particularly in export markets. This is especially the case where there is a deficiency in infrastructure, both physical and social. Because the degree of infrastructure development and speed of sectoral supply response vary across LDCs, it is not possible to generalize on the short-run employment impact of trade policy reform. An additional consideration is that the initial circumstances differ among reforming economies, and in any given country at different times (i.e., for different liberalization episodes). As emphasized by Rodrik (1992b: 89), for example, an initial situation of macroeconomic instability is likely to render the "structural change (induced by the trade policy reform) more painful by exacerbating transitional unemployment."

Not surprisingly, the country studies in the trade liberalization project of Michaely et al. (1991) do not find clear evidence of a specific direction in the short-run impact on employment: the rate of unemployment immediately following the trade reforms decreased in eight cases but increased in the other ten cases analyzed. It is interesting that the Philippine study indicates a negative employment effect for the liberalization episode during the first half of the 1960s but positive for the 1970-1974 episode.

Examining more closely the Philippine experience, a number of studies (e.g., Power and Sicat 1971, ILO 1974, Baldwin 1975, Bautista, Power and Associates 1979) provide abundant evidence that the adoption of protective import-substitution policies from the early 1950s to the late 1970s effectively

held back the expansion of manufactured exports and impeded output growth and labor absorption in the industrial sector as well as in the entire economy. On the effect on total factor productivity (TFP), the Williamson and Sicat (1968) study indicates a substantial TFP loss arising from inefficient resource allocation in the manufacturing sector, attributable in turn to the comprehensive import controls during the 1950s and highly protective tariffs in the subsequent period. On the other side, Hooley (1985) finds that export orientation is a significant determinant of manufacturing TFP growth during 1956-1980; other things being the same, the greater the share of an industry's output that is exported, the more rapid is its productivity improvement.

The aforementioned studies provide empirical evidence on the Philippine experience prior to the trade policy reforms of the 1980s. Some of the studies in the PIDS-DIA project address the impact of the reform measures recently implemented beyond the price-incentive effects described in the preceding section. Their findings are reviewed below, together with those of a few earlier studies. Before doing so, it is useful to first distinguish between the effects of trade policy reform as such — that is, in isolation from other possible influences — and the combined effects of all factors operating during the reform period. The latter would include the effects of other policy changes that may accompany the trade policy reform as part of a larger policy package, as well as those attributable to such economic and noneconomic developments as world price changes, income growth in trade partner countries, domestic political instability, weather disturbances, and others. This distinction is helpful in the proper understanding of the results of various studies using different analytical approaches.

To investigate quantitatively the economic effects arising from trade policy reform, a number of studies have made use of multi-sectoral models that incorporate the trade policy instruments (tariff and export tax rates) or the protection rates (nominal or effective) corresponding to pre- and post-reform conditions. Some of the early attempts have estimated the effects of hypothetical, rather than actual, changes in trade policy.

The PIDS-Tariff Commission (1984) study analyzes the impact of eliminating all export taxes; as indicated above, the new Aquino government in 1986 abolished export taxes but not those on logs. The results indicate some significant changes in output and employment in the primary sectors whose products were subject to export taxes, e.g., increases of as much as 4.9 percent (based on 1979 values) for pineapple, 7.9 percent for copra, and 12.9 percent for logs, but reductions of 15.8 to 19.8 percent for lumber,

plywood, and veneer in which logs represent a major share in production cost. In terms of total output and total employment, the estimated proportionate changes are quite modest — increasing by less than 0.1 and 1.0 percent, respectively. Likewise, the net output and employment effects in the agricultural and manufacturing sectors are less than 1.0 percent and, as might be expected, positive in the former sector but negative in the latter.

The PIDS-Tariff Commission study employs an input-output model in which sectoral output is determined only by its effective price (hence, by the sectoral EPR) and the own-price elasticity of sectoral supply. The changes in sectoral output induced by a change in trade policy (such as the removal of export taxes) affect national income, sectoral demands, exports and imports, and government revenues in a recursive fashion. The same model is used in the assessment of the 1981-1985 tariff reform (Medalla 1986) and of the scheduled tariff changes under E.O. 470 and import liberalization during 1991-1995 (Tan 1993), the latter as a component study in the PIDS-DIA project. Both studies examine the alternative cases of fixed and flexible real exchange rates, significant differences being indicated in the results for the two cases. Thus, in Tan's study, total output is estimated to increase by 3.8 percent in the flexible RER case but only 0.5 percent under fixed RER;[6] also, production of exportables increases by 11.5 percent and of importables by 4.0 percent in the former, compared to 5.6 and -2.8 percent, respectively, under the fixed RER regime. This provides support to the argument that a depreciation of the real exchange rate is necessary to ensure the effectiveness of trade policy reform.

While the input-output model employed in the three studies cited above has the advantage of capturing the actual changes in trade policy as they affect each of the relatively large number of tradable-good sectors represented (58 in all), a major shortcoming is the absence of cross-price effects in the sectoral supply function. Other studies have also analyzed the possible repercussions of trade policy reform using computable general equilibrium (CGE) models of the Philippine economy. Based on the Walrasian general equilibrium structure, CGE models give emphasis to the consistency of intersectoral linkages in production, consumption, and trade, and to the endogenous determination of relative prices subject to relevant macroeconomic and institutional constraints.

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6. These simulation results are based on the assumed supply elasticities of 0.8 for the primary sectors and 1.5 for the manufacturing sectors. It is notable that the quantitatively less significant changes estimated in the earlier studies of the PIDS-Tariff Commission (1984) and Medalla (1986) are due to the lower elasticity values assumed alternatively (0.1 and 0.5) and uniformly applied to all sectors

Clarete and Roumasset (1987), employing a static CGE model with seven production sectors, find that complete removal of trade barriers would shift capital and labor resources largely from the industrial import-substituting sector to the production of cash crops, agricultural food, and industrial exportables. In the long run, the former sector would suffer a 39 percent reduction in income while the latter sectors would gain by 31, 24, and 27 percent, respectively. The trade policy reform would also raise the wage-rental ratio as a positive redistributive effect, and increase national income by 3.4 percent.

A ten-sector CGE model that distinguishes between rural and urban households is employed in Bautista (1986) to investigate the comparative static effects of lowering trade barriers, including the adoption of a uniform tariff rate of 10 percent and elimination of export taxes on primary products. The latter measures are found to result in a 2.8 percent increase in national income, the distribution of income gains favoring rural households (3.4 percent) over urban households (1.6 percent). Exports and imports increase — by 8.1 and 7.7 percent, respectively. The biggest output gainers are the nonagricultural export-oriented sectors (mining, food manufactures, and light manufactures), responding well to the induced real exchange rate depreciation. Agricultural crop income also increases significantly, by 6.2 percent.

The effects of E.O. 470 are examined in Manasan (1991) using a 14-sector CGE model developed by Habito (1987) that differentiates among ten household groups by income size. The simulation results indicate, after the E.O.'s implementation, higher total output, exports and imports, but lower wage-rental ratio. Total household income in real terms would also increase by 1.4 percent, with relatively larger income gains accruing to middle-income household groups.

The aforementioned studies represent attempts to isolate the effects of trade policy reform, abstracting from other possible influences on economic performance. The quantitative estimates serve to illustrate the appreciable impact of specific changes in trade policy that are either hypothesized or actually implemented in the Philippine context. To be sure, the economic benefits from trade policy reform are not fully reflected in those estimates — which are based on the results of comparative static analysis. The latter should be interpreted as deviations from a reference growth path of the economy with no change in base-year values of other exogenous variables and parameters (apart from the trade taxes) of the model. The estimated effects are conditioned, among other things, by the initial sectoral allocation

of capital, which realistically should respond, along with the sectoral distribution of labor resources, to changing relative profitabilities due to the postulated shift in trade policy.

In a dynamic context, therefore, additional income gains would be generated by the induced intersectoral resource flows. It is also likely, as has been pointed out, that there would be improvements in overall productivity at the sectoral level since more open trade regimes are conducive to increased competition, better economies of scale, and greater use of improved technologies. Furthermore, there are positive dynamic income effects implied by the larger savings, made possible by the observed rise in national income, that will finance additional domestic investments. Quantitative evaluation of these dynamic repercussions of trade policy reform would require the specification of intertemporal linkages (involving capital movements, labor migration, technological change, etc.) which need to be grafted onto the static economy-wide models represented in the aforementioned studies.

The effectiveness of trade policy reform may also be evaluated in terms of the actual changes in industry characteristics and indicators of economic performance during the reform period. This analytical approach would be appropriate if the other determining factors can be reasonably assumed to have had no significant influence during the period, or if the effects of trade policy reform cannot be disentangled from those resulting from the accompanying changes in other policies and from other (nonpolicy) influences. Indeed, actual trade policy effects, including producer responses to changing relative incentives, are likely to depend, in both direction and magnitude, on the macroeconomic policies adopted concurrently especially those affecting public investment, domestic credit and interest rates — which can themselves directly affect output supply. It would be extremely difficult to discriminate among those various effects.

Component studies in the PIDS-DIA project have examined the actual changes in the manufacturing sector and some specific industries between 1983 and 1988, which of course represent only a partial response — conditioned by other concurrent developments during the period from 1983-1988 to the trade policy reforms that spanned the entire decade of the 1980s and indeed are still ongoing. A major consideration in the choice of those two end-years is the availability of plant-level data from the 1983 and 1988 manufacturing censuses. It would undoubtedly have been preferable to use comparative data for an earlier year (than 1983) to represent pre-reform

conditions and for a later year (than 1988) to represent post-reform conditions. Unfortunately, neither of these two options was feasible.

The detailed presentation and analysis of the findings of these "industry studies" are given in a separate volume (see Volume II). Chapter 7 also describes and interprets some of these findings. Here, we bring out some comparative results related to the aforementioned discussion, particularly those concerning changes in the industrial structure and efficiency of resource use from 1983 to 1988.

We should note first that, in terms of output performance, the manufacturing sector (and indeed the entire economy) showed a U-shaped profile for the period 1983-1988, marked by negative growth in the 1984-1985 crisis years and slow recovery in the following three years.[7] Changes in political conditions and in the conduct of fiscal and monetary policies were the principal determinants of the country's unstable economic performance during the period. The trade policy reform measures were not likely to have had a significant effect on total manufacturing output. Based on the aforementioned discussion, we expect that the effects would be manifested more clearly in the changes in market structure and competitiveness.

An immediate effect of trade policy reform would be the increased availability of imports through the relaxation of QRs and lower domestic prices, the latter arising also from a tariff reduction. Consistent with this hypothesis, the ratio of imports to GNP increased from 22 percent in 1983 to 26 percent in 1988. It appears that there was also a shift in import composition toward manufactured goods, whose share in total imports rose from 0.61 to 0.76 percent during 1983-1988, implying a greater import penetration of industrial products in the domestic market. It is notable that imports of "nondurable consumer goods" expanded — from 3.9 percent of total imports in 1983 to 6.5 percent in 1988.

By improving production incentives for exportables, it is also expected that trade policy reform would lead to an increased export orientation of the domestic economy. This expectation is borne out by the comparative values of the ratio of exports to GDP — 19 percent in 1983 and 27 percent in 1988. Moreover, greater exporter diversification toward industrial products seems to have resulted, as shown by the significant decline in the share of the "ten principal exports," consisting entirely of traditional agricultural, forestry, and mining products, from 35 to 18 percent.

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7. Based on the national income accounts, manufacturing value-added (in billion pesos, at constant 1972 prices) was 25.1 in 1983, 23.3 in 1984, 21.5 in 1985, 21.7 in 1986, 23.1 in 1987 and 26.9 in 1988.

While increasing imports may restrict the market for domestically produced goods, it also increases competition and induces greater efficiency among domestic producers. At the same time, export expansion widens the market, which may also result in lower production costs and higher efficiency as domestic producers specialize in areas of comparative advantage and benefit from scale economies and learning-by-doing. The measure of efficiency used in the PIDS-DIA project is the ratio of the domestic resource cost (DRC) to the shadow exchange rate (SER).[8] An important finding that is relevant to this discussion is that manufacturing industries (at the 3-digit PSIC level) producing consumer goods generally showed lower DRC/SER ratios in 1988 compared to 1983, implying widespread improvement in the efficiency with which domestic resources were used. Relatedly, the share of consumer goods in total manufacturing value-added increased from 34 percent in 1983 to 44 percent in 1988. This is not inconsistent with the finding earlier noted concerning the increased import penetration of consumer goods in the domestic market, considering that exports have effectively expanded the market for domestic products. It is also worth noting that the DRC/SER ratio declined in most export-oriented industries.

Trade policy reform is also expected to reduce barriers to entry in existing industries, especially for small-scale producers who are invariably penalized by restrictive trade policies (such as QRs on imports of material inputs). Increased market contestability afforded by a more open trade regime does not necessarily have to be accompanied by a reduction in industrial concentration, since the mere threat of import competition is sufficient to keep monopolistic tendencies in check. Nonetheless, the evidence points to a significant deconcentration of manufacturing industries taking place between 1983 and 1988, as reflected in the sharp decline in the four-plant, value-added concentration ratio at the 3-digit PSIC level. Furthermore, the large majority of new entrants into industries were relatively small-scale plants. While the number of manufacturing plants increased by 63 percent from 1983 to 1988, employment grew by only 21 percent. This led to a significant decline in the average employment size of manufacturing plants from 125 to 92 workers per plant during the period. The compositional shift toward smaller plants served to reduce the large-scale bias of Philippine manufacturing industries, which presumably would have had positive employment and income distribution effects. This did not generally

8 For an earlier application of the DRC/SER ratio as an efficiency measure in the context of Philippine manufacturing, see Baltista, Power and Associates 1979

involve a tradeoff in efficiency, inasmuch as small and medium-scale plants have been found to be at least as efficient as the large-scale plants in a wide range of 3-digit PSIC industries.

One final point is worth noting. This relates to the finding of a decline in the contribution of industries in Metro Manila to total manufacturing sector output from 45 to 41 percent during 1983-1988, indicating a discernible regional dispersal of industries. Because past import-protection policies favored industries that relied heavily on imported inputs and capital equipment, there was a strong inducement to locate plants near Manila, the principal port. It is to be expected then that trade policy reform would reduce the incentive bias toward Metro Manila-based enterprises and reduce the effective penalty on the more geographically dispersed industries that make greater use of indigenous materials.

We can conclude from these discussions that the observed changes in industrial structure and efficiency from 1983 to 1988 are generally supportive of various hypotheses concerning some of the favorable effects of policy reform toward a more open trade regime. It is important to recognize that the full effects of the reform measures, especially those implemented during the period 1986-1988, would not have been reflected in the comparative data for 1983 and 1988. Moreover, the period 1983-1988 was marked by macroeconomic instability, inherently a difficult situation for undertaking trade policy reform. On the other side, not all the positive results from the comparative examination of "historical data" for the two years can be attributed to the implemented changes in trade policy. Nevertheless, the fact is that visible progress was achieved toward incentive neutrality and liberalization of the country's trade regime, as well as in reducing trade policy-induced distortions in the domestic market and in the industrial structure. This suggests to us that there is a high cost of postponing the implementation of corrective policy measures. Moreover, sustaining the policy reform process, involving not only the trade regime but also other aspects of economic policy, would seem necessary to decisively break the past pattern of inefficient, narrowly-based, and inward-oriented industrial development in the Philippines.

CHAPTER 4

Improving Exchange Rate Policy

Trade policy reform toward incentive neutrality, to be effective, invariably requires an accompanying real exchange rate depreciation. The latter will raise the domestic price of tradable goods (both exportables and importables) relative to nontradables, encourage resource movement toward tradable goods production, and help prevent a deterioration of the current account that may result from the liberalization of imports. It will also make possible a positive net output effect, offsetting the potential production losses in previously protected import-substituting industries with likely output gains elsewhere, particularly in export industries. It is necessary, therefore, to coordinate the implementation of trade policy reform and exchange rate adjustment — which are best regarded as representing a policy package.

It is, of course, the real exchange rate, rather than the nominal exchange rate (which the government can control directly) that is relevant in the assessment of the relative profitability of tradable goods production. This chapter first discusses how the real exchange rate is defined and measured in the present study, followed by an examination of its evolution since the early 1980s in relation to the trade policy developments during the period. The factors affecting the past behavior of the real exchange rate are then empirically analyzed, distinguishing those determined by domestic policies and those associated with external developments which are outside the control of policymakers. The following section analyzes the scope of policy improvement with reference to the estimated overvaluation of the real exchange rate during 1981-1991. The final section of this chapter examines

some of the short-run issues related to the adjustment of the nominal exchange rate, and draws implications for policy.

Real Exchange Rate. Definition and Measurement

The real exchange rate can be broadly defined as the real worth of foreign exchange in terms of the domestic currency. Analytical discussions in which foreign prices are taken as given typically represent the real exchange rate simply as a ratio of the nominal exchange rate to a general price index in the small country under study. In empirical work that traces the movement of the real exchange rate over time, foreign prices cannot be assumed constant. Changes in the general price level in, as well as the bilateral exchange rate with the currency of, each trade partner country need to be taken into account.

For present purposes, a "real effective exchange rate" (REER) index is calculated, for a given year, as follows:

$$REER = \frac{1}{CPI} \sum_{i} W_i \; R_i \; WPI_i \qquad (1)$$

where

CPI	=	Philippine consumer price index,
WPI_i	=	wholesale price index in trade partner country i,
R_i	=	nominal exchange rate of the peso per unit of country i's currency, and
W_i	=	trade share of country i.

(The nine largest contributors to Philippine foreign trade are included in the calculations.) Because the WPI consists mostly of the prices of tradable goods, and the CPI mostly of the prices of nontradables, the real exchange rate as represented above can also be interpreted as the relative price of tradable goods vis-a-vis nontradables. Thus, a real depreciation of the Philippine peso (i.e., an increase in REER) will encourage the production of tradable goods both importables and exportables relative to nontradables.

The calculated annual values of the REER for the period 1980-1993 are as follows:

1980:	107.3	1987:	131.0
1981:	103.2	1988:	133.8
1982:	97.5	1989:	122.7
1983:	117.3	1990:	124.8
1984:	115.4	1991:	121.1
1985:	100.0	1992:	104.5
1986:	123.7	1993:	106.8

The first point to note concerns the instability of the real exchange rate. While the initial and terminal values of the REER index during the period are about equal, the intervening years show significant variability. In the absence of efficient hedging facilities such as forward contracts, tradable-goods producers face an added cost due to the higher price risk associated with RER instability, and they are likely to react by reducing their output and investment. Moreover, exports will be adversely affected.[9]

The real appreciation of the Philippine peso that began in 1973-1974 (Bautista 1987: 49) continued through 1982, as can be seen from the aforementioned REER annual values. The advent of the foreign exchange crisis in 1993 apparently forced a sharp exchange rate depreciation which however was almost fully nullified in two years. The sub-period 1986-1988, representing the first three years of the new Aquino government, witnessed a dramatic rise in the real exchange rate but which was also reversed in a short time. It is especially notable that the subsequent 29.3-percentage point decline in the REER index, or a 22 percent appreciation from 1988 to 1992 took place at a time of continuing trade policy reform implementation.

Simultaneously liberalizing imports and appreciating the real exchange rate is, as indicated in the aforementioned paragraphs, not a desirable policy combination. The likely effects are: The country's imports will increase and, without an accompanying boost in exports, will lead to a deterioration in the trade balance. The output and employment effects will also be negative, since the domestic relative prices of tradables, and hence the profitability of producing both export and import-competing goods, will decline as a result of the exchange rate appreciation. Indeed, if the exchange rate is appreciating, it does not make economic sense to liberalize imports. Conversely, if

9. See, for example, Bautista (1981a) for empirical evidence on the significant influence of real exchange rate variability of LDC manufactured exports.

imports are being liberalized, it does not make economic sense to appreciate the real exchange rate. Ideally, import liberalization and exchange rate depreciation should go together.

It is worth nothing that what happened in 1988-1992 was the exact opposite of the policy developments in the early 1970s — which involved a peso devaluation but no import liberalization. In response to the balance-of-payments crisis that developed in 1968-1969, the government reimposed several import restrictions and then devalued the peso in 1970. The exchange rate was floated in February, moving quickly from P3.9 to about P6 per U.S. dollar and stabilizing at P6.8 by the second quarter of 1972. The average nominal devaluation against all trading partners was about 100 percent (ILO 1974: 127). In real terms, the effective exchange rate depreciation from 1969 to 1971 has been estimated to range from 19 percent for "essential" producer goods to 66 percent for "new" exports (Baldwin 1975: 91). On the other hand, the new import controls and most of the old import-protection biases remained; except for the simplification of the tariff structure in 1972, no meaningful tariff reform was undertaken. Not surprisingly, the minor export boom that occurred during 1970-1971 was not sustained, the export volume index in 1974 showing about the same level as in 1971.

Determinants of the Real Exchange Rate

In an accounting sense, movements of the real exchange rate can be attributed to movements of the nominal (effective) exchange rate, foreign prices (exogenous to the small country), and the general level of domestic prices. Since domestic prices are affected by nominal exchange rate changes (to an extent determined by the accompanying fiscal and monetary policies), the nominal and real exchange rates have no one-to-one correspondence.

Behaviorally, changes in the real exchange rate are explained in the theoretical literature (see, for example, Edwards 1989) in terms of at least four influences: the country's external terms of trade, trade policies, the current account balance, and the nominal exchange rate.

Terms of trade

If export prices fall relative to nontradable goods while import prices remain constant — the terms of trade deteriorate and the supply of nontradables will increase. At the same time, the demand for nontradables will decrease due to both income and substitution effects. Therefore, the real exchange

rate must depreciate (based on the aforementioned measure, increase) to eliminate the excess supply and restore equilibrium in the nontradable goods market. If the deterioration in the terms of trade arises from an increase in import price, the induced income and substitution effects on demand will be in opposite directions; if the substitution effect is stronger, the real exchange rate will depreciate (Dornbusch 1980). The greater the substitutability between nontradables and importables in consumption, and the greater the influence of export prices on the terms-of-trade change, the more likely will a depreciation of the real exchange rate result from a deterioration in terms of trade (Bautista 1987).

Trade policies

An import quota or tariff (export subsidy) raises the domestic price of importables (exportables), which encourages their domestic production and induces lower consumption, leading to a decrease in imports (an increase in exports). Resources are reallocated toward the tradable goods sector away from nontradable goods production. The reduced supply of nontradables results in an increase in their price and hence in a decrease in the real exchange rate. It is well known, for example, that the adoption of import-protection policies to promote industrialization has helped sustain an overvalued exchange rate in many developing countries. In contrast to the terms-of-trade variable, this determinant of the real exchange rate is within the control of policymakers.

Current account

The expected relationship between the current account balance and the real exchange rate is positive. A deficit in the current account implies an excess demand for foreign exchange, and its accommodation through reserve drawdowns or capital inflows serves to defend an artificially low real exchange rate. The positive relationship is reinforced by the possibility of a reverse causality in which a higher (lower) real exchange rate, other things the same, may lead to an improvement (deterioration) in the current account. For many developing countries in which the domestic capital market is underdeveloped and not integrated to the world financial system (in part due to government restrictions on private capital movements), the

current account balance can be considered a policy variable, determined largely by macroeconomic policies including foreign borrowing policy.[10]

Nominal exchange rate

There is a general agreement in the literature that while changes in the nominal exchange rate can affect the short-run behavior of the real exchange rate, they will not have a long-run effect (Edwards 1989). The real exchange rate being a relative price variable, its long run level is not likely to be influenced by nominal variables.[10] However, in the short run, a change in the nominal exchange rate may facilitate the adjustment of the real exchange rate to the changes in real variables. Without accompanying measures addressing the "fundamentals" (e.g., liberalizing the trade regime, reducing the gap between national income and expenditure), a nominal devaluation will not lead to a sustained real devaluation; it may only raise the general price level without changing relative prices in the economy.

Based on the foregoing considerations, the following specification of the real exchange rate equation for the Philippines is adopted:

$$\ln REER = f\,(\ln TOT,\ \ln T_m,\ \ln T_x,\ CA,\ \Delta \ln NEER) \qquad (2)$$

where

TOT	=	foreign terms-of-trade index,
T_m	=	1 + tm, where tm is the implicit tariff rate,
T_x	=	1 - tx, where tx is the implicit export tax rate,
CA	=	current account surplus as a ratio of GDP, and
NEER	=	index of nominal effective exchange rate.

Note that the nominal exchange rate variable is entered as a first difference, which is meant to reflect the short-run character of its influence on the real exchange rate.

Several dynamic formulations were tried in the exploratory regressions using available annual data for 1950-1980. The lagged adjustment a la Koyck-Nerlove proved to be the most satisfactory. Among the explanatory

10. It has been pointed out that "Philippine current account deficits (can be viewed) as a result of the country's external borrowing, not only because interest payment on the debt eventually became a major component of current account deficits, but also because capital inflows increased the demand for imports via income and price effects" (Boyce 1990, 57)

11. Some authors (e.g., Turnovsky 1987) have argued that a systematic relationship between the nominal and real exchange rates is possible if there is wage indexation

variables shown in equation (2), only ln Tx did not yield a significant coefficient estimate, presumably due to the insignificance of direct export taxes and subsidies in the Philippines (and hence little variability in T_x). Dropping ln T_x in the right-hand side of (2), the estimated equation is

$$\ln REER = \underset{(0.095)}{2.02} - \underset{(0.100)}{0.265} \ln TOT_t - \underset{(0.465)}{0.259} \ln T_{mt} + 1.607\, CA_t + \underset{(0.089)}{0.690}\, \Delta \ln NEER_t + \underset{(0.095)}{0.589} \ln REER_{t-1} \quad (3)$$

where the numbers in parentheses are the standard errors of the coefficient estimates. The adjusted coefficient of variation is 0.967, indicating a very high degree of explanatory power of the equation.

The coefficient estimate of ln $REER_{t-1}$ being less than one implies a non explosive dynamic pattern; the long-run effect of each of the other explanatory variables (except $NEER_t$) in equation (3) on the REER is about 2.5 [=1/(1-0.589)] times the short-run effect. That the coefficient of Δln $NEER_t$ turned out to be significant supports the hypothesis of a short-run influence (i.e., within one year) of the nominal exchange rate on the RER. The results also indicate that about 70 percent of say, a nominal devaluation is translated into a real devaluation. For the latter to be sustained beyond the first year, it is seen from equation (3) that one or a combination of the following needs to happen: (i) the terms of trade deteriorates, (ii) import restrictions are reduced, and (iii) macroeconomic policies promote an improvement in the current account. The first is outside the control of policymakers. With respect to the second, a 10 percent decline in t_m will lead in the long run to a 6.17 [=2.59/(1 - 0.589)] percent increase in REER. On the other hand, a one percentage-point rise in CA will depreciate the real exchange rate by 3.82 [= 1.607/(1 - 0.589)] percent.

Attributing Real Exchange Rate Changes to Policy and External Factors

The estimated coefficients in the real exchange rate equation (3), together with the annual values of the explanatory variables, can be used to examine the contributions of domestic policies and the external terms of trade to the observed changes in the real exchange rate since the early 1980s when trade policy reforms began to be implemented. Table 4.1 presents the results of the calculations.

TABLE 4.1

DETERMINANTS OF REAL EXCHANGE RATE CHANGES, 1981-1991

		Change due to policy-related factors				
Year	Change in RER	Terms of Trade	Total	Lagged RER	Current Account	Trade and Exchange Rate Policies
1981	-3.9	-3.7	0.2	2.5	0.0	-2.3
1982	-5.7	-0.4	-5.3	-2.3	-4.4	1.4
1983	18.5	1.5	17.0	-3.3	0.0	20.3
1984	-1.6	-0.8	-0.8	10.9	6.6	-18.3
1985	-14.3	-1.9	-12.4	-1.0	6.7	-18.1
1986	21.3	2.0	19.3	-8.4	5.3	22.4
1987	5.7	2.6	3.1	12.5	-7.1	-2.3
1988	2.1	2.7	-0.6	3.4	0.3	-4.3
1989	-8.7	-1.2	-7.5	1.2	-4.0	-4.7
1990	1.7	-3.8	5.5	5.1	-4.3	4.7
1991	-3.0	2.4	-5.4	1.0	6.2	-12.6

Note: The entries are 100 times the calculated changes in natural logar variables, which therefore approximate the annual percentage.

Source: Author's calculation

Relatively large changes in the real exchange rate can be observed for 1983, 1985, 1986, and 1989. In each of these four cases, the policy variables not the external terms of trade, were the major influence. Indeed, RER changes induced by exogenous terms-of-trade movements during 1981-1991 had been generally small. Among the policy-related factors, trade and nominal exchange rate policies were the most significant contributor to the RER changes for those four years, serving in each case to reinforce the terms-of-trade effect. On the other hand, the RER effects of the current account (determined, as argued above, by macroeconomic policies) were relatively substantial in 1984, 1985, and 1987 but tended to "lean against the wind," i.e., in the opposite direction of the RER change due to the terms of trade.

That the RER effects arising from changes in both the current account and trade and nominal exchange rate policies were negative in some years reflect the lack of consistency with which the improvement of the incentive structure for tradable goods production was promoted during the period. It is striking, for example, that trade and nominal exchange rate policies during the "crisis years" 1984 and 1985 resulted in a significant RER appreciation; presumably, policymakers were more concerned about macroeconomic stabilization at that time than about resource allocation. Even after 1986, however, policy-related factors were the dominant influence in the observed RER appreciation in 1989 and 1991.

We can conclude from these findings that the conduct of government policies affecting the real exchange rate during the recent period of trade policy reform was less than appropriate. The incentive bias against tradable goods production intensified as a result of the real exchange rate appreciation (at least during 1989-1991), which ran counter to the objective of promoting a more open trade regime and more rapid growth of exports.

Real Exchange Rate Overvaluation as a Source of Incentive Bias

"Real exchange rate overvaluation" here means the downward deviation of the real exchange rate from its "equilibrium" value, the latter being associated with a completely open trade regime (i.e., the implicit tariff and export tax rates are zero) and a balanced current account.[12] Clearly, an overvalued RER will result from the adoption of a restrictive trade policy and from incurring a deficit in the current account; in either case, the price of the domestic currency in terms of foreign exchange is being artificially defended. This comes at the expense of tradable-good producers who are penalized (or "price-disprotected") to the extent of overvaluing the exchange rate.

To derive a measure of the policy-induced RER overvaluation, we refer back to the estimated real exchange rate equation (3) and use the implied long-run elasticities of the REER with respect to T_m and CA. The following

12. Capital-scarce developing countries are commonly assumed to require capital inflows that will accommodate current-account deficits, which would be reversed (i.e., capital outflows and current-account surpluses) during a later stage in economic development. In the Philippine case, as pointed out by Intal and Power (1990: 46), the country's "record of investment waste" suggests that it is more realistic to assume, for purposes of defining the equilibrium exchange rate, current-account balance rather than some specific deficit levels.

calculated values of the RER overvaluation for various subperiods during 1950-1980 are obtained: 1950-1961, -1.067; 1962-1969, -0.452; 1970-1974, -0.115; and 1975-1980, -0.301. It would appear that there was a general trend of declining real exchange rate overvaluation since the regime of import and foreign exchange controls during the 1950s, but this trend was reversed in the second half of the 1970s.

The following decade of the 1980s was marked by dramatic developments in the Philippine economy. Among other things, the government undertook major policy changes, including trade policy reforms, as part of the macroeconomic stabilization and structural adjustment programs adopted during the period. The average implicit tariff rate for importables declined significantly from 78 percent in 1983 to 37 percent in 1988-1991 which, on account of EO 470, will decline further to 30 percent by 1995. The current-account balance (as a ratio of GDP) varied — from a 3.2 percent surplus in 1986 to a deficit of 8.7 percent in 1982. The real exchange rate overvaluation induced by import restrictions and current-account deficits is calculated at 25.6 percent for 1989 and 20.7 percent for 1992, which still represented a sizeable incentive bias against tradable goods production.

Short-run Aspects of Exchange Rate Policy

To bring about real exchange rate depreciation that can reduce a high degree of RER overvaluation, nominal exchange rate adjustment is typically needed. If successful, it will improve the competitiveness of export industries and also of import-competing industries, especially those that had been accorded low or no protection. The supply response to an exchange rate depreciation, however, is likely to occur with a lag, since it takes time to develop new markets and expand exports; by contrast the increase in imports resulting from liberalization is often quick. Some factors that can increase the short-run response of the export sector are:

(1) a strong government commitment that the trade policy reform will be sustained;
(2) an improved infrastructure that reduces transport, marketing and other transaction costs for export producers; and
(3) a more elastic world demand for the country's exports, associated with an expanding world economy and reduced protectionism in developed-country markets.

Nominal exchange rate policy in the Philippines has been motivated not only by the need to improve relative incentives for export producers. A major

consideration relates to the fiscal implications of exchange rate adjustments. More than 80 percent of the country's foreign debt is public, so that a currency devaluation has an immediate negative fiscal effect arising from the increased peso value of external debt service. The short-run effect on government revenue, on the other hand, is not likely to be perceived as providing a significant offset. Moreover, if the Central Bank reserves position is weak, there will be an understandable reluctance to depreciate the nominal exchange rate.

An alternative to currency devaluation in trying to achieve a real (RER) depreciation is evident from the expression for the real exchange rate given in the previously mentioned equation (1) — which is to keep the domestic inflation rate lower than the inflation rate in trade-partner countries. This approach, which requires fiscal and monetary restraint, may work if there is significant inflation abroad; otherwise, it may necessitate a downward movement of domestic nominal wage rates and prices along with an undesirable contraction of domestic output and incomes.

The timing of exchange rate adjustment can be influenced by the external economic environment, which may reinforce or mitigate the effects of for example, a currency devaluation on the domestic prices of tradable goods and on the general price level. The inflationary pressure arising from a devaluation is exacerbated by a deterioration in the external terms of trade from increased import prices (in foreign currency). However, the latter benefits producers of import substitutes beyond the favorable effect of devaluation on their product prices. On the other hand, if the terms-of-trade deterioration is due to a lowering of export prices, it will have an offsetting effect on the gains for export producers from the devaluation. Decisions regarding exchange rate adjustment — by how much and when to do it — will presumably be influenced by the differential political clout of the affected groups.

The external environment can constrain policy choice in another sense. In the context of Philippine policymaking, the implementation of an IMF-sponsored macroeconomic stabilization program is often claimed to make fiscal and monetary policies overtly restrictive. As argued cogently in de Dios and Associates (1993: 49), "inflexible IMF ceilings on money supply have robbed the monetary authorities of all credibility in their attempts to influence interest rates and the exchange rate." Promoting economic growth through increased government spending (e.g., in rural infrastructure) tends to raise interest rates under the tight-money regime. Especially after the liberalization of the foreign exchange market in 1991, this serves to attract

short-term foreign capital which accommodates an increase in the current-account deficit and causes an appreciation of the real exchange rate.[13] Not only will the government have to shoulder a heavier debt-service burden that contributes to the deterioration of fiscal performance, the induced RER appreciation will weaken export growth and overall economic growth.

The policy implication from the preceding analysis is to "relax the monetary targets" so that interest rates can be lowered and the exchange rate depreciated, which will support economic recovery and long-run growth. However, other influences are at work, some of which may operate in the opposite direction. Monetary expansion runs the risk of being excessive and inflationary, which may prevent the real exchange rate from depreciating. This possibility cannot be ignored given the country's checkered performance in aggregate demand management. On the supply side, the social productivity of public expenditures needs to be carefully considered. Undoubtedly, there would not have been a "debt overhang" clouding Philippine policymaking since 1983 if the foreign loans had financed domestic investments with higher rates of return (at border prices) than the interest rates on the borrowing. In the present context, it would be useful at least to investigate quantitatively the sectoral price and output effects of alternative patterns of expanded government spending and rates of monetary expansion, preferably using a general equilibrium framework in which the nominal and real exchange rates serve as intermediary variables,[14] for their repercussions on the growth and distribution of incomes during the period of transition as well as in the longer run.

The actual situation in recent months has been one of an appreciating nominal exchange rate and, with a domestic inflation rate higher than the foreign inflation rate, also an appreciating real exchange rate. If the present level of current-account deficit can be assumed to be sustainable, i.e., no expected decline in remittances and capital inflows, this would be the best time to further reduce — by as much as is politically feasible — tariff and nontariff barriers to foreign trade. This would be complementary to a judicious expenditure expansion in raising the demand for foreign exchange and depreciating the real exchange rate.

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13. It is a truism that integration of the domestic capital market to the world market makes the management of the exchange rate more difficult, especially if the RER is being fine-tuned as part of a policy reform package

14. So-called "real" CGE models have been extended, in recent contributions to the empirical literature, to include the financial sector and asset markets so as to provide a better framework for analyzing the effects of macroeconomic policies operating through monetary mechanisms (Robinson 1991).

CHAPTER 5

Investment Incentives System and Industrial Promotion

Unlike trade policy, which indirectly affects resource allocation by altering relative prices of commodities (both inputs and outputs), the investment incentive system directly attempts to reallocate resources by influencing where investments should go through various forms of investment incentives, mainly fiscal, and by listing priority industries eligible for these incentives. This, in effect, is a conscious effort on the part of the government to target specific sectors for promotion. It is thus easy to see how the investment incentive system is essentially a form of selective intervention which could be a major industrial policy tool.

The Philippines has had a long experience in this area. It formally institutionalized the investment incentives system in 1967 although it has granted similar incentives for favored sectors much earlier. It appears, however, that the government has been ineffective in directing investment to the most beneficial investment areas. This is clearly manifested in the overall tepid performance of the sector[15] and the insignificant difference in performance between preferred and nonpreferred investments.[16]

To shed some light on the problem, this chapter first examines the ideal role of investment incentives in industrial promotion. It also looks into the implications on foreign investment policy and incentives for regional and small-scale industries as special cases. Then, the chapter reviews the Philip-

15. There are, of course, other factors which contribute to performance of the industrial factors. Still, the investment incentives system is supposed to make a difference.

16. Indeed, empirical evidence seems to indicate otherwise, as shown in Table 5.6.

pine experience in this policy area and analyzes how well the Philippine investment incentives system fits the ideal role. The chapter concludes with the implications for reforms in the Philippine investment incentives system.

Role of the Investment Incentives System in Industrial Promotion

The role of investment incentives in the overall industrial policy regime follows directly from the discussion in Chapter 2 of the rationale for industrial promotion. The argument presented there was that the existence of various market failures and distortions could warrant some form of government intervention to consciously promote industrialization. The view is that the natural role of industry as the leading sector in the development process would be revealed in market indicators except for such failures and distortion.

Thus, the primary task of government is to correct these market failures and distortions which impede the optimal flow of investment into the industrial sector. Accordingly, this is the role the investment incentives system should play The objective is not to induce more investment per se. This, if needed, should be the responsibility of the overall fiscal and monetary policy. Rather, the objective is to channel investments to the "desired" sectors within industry which will maximize the potential of the industrial sector in the development process. This temporarily puts aside the question of attracting more foreign investment which will be dealt with later on in this chapter.

Chapter 2 discussed the various market failures that could inhibit the market from allocating industrial investments optimally. In general, the major sources of distortions arising from "genuine" market failures include imperfections in the capital market, externalities, and economies of scale. These give rise to two general cases for selective intervention — (1) the "infant" industry case, and (2) interdependence of investment decisions. There is, however, a more pervasive source of market distortions which affect the efficient allocation of resources. This pertains to the distortions created by government policies themselves, affecting largely the export sector — case (3). These three cases are discussed in the succeeding paragraphs.

Despite the fact that it has been much maligned by economists, the infant industry argument has special relevance for countries that are in the early stages of industrialization. It is important, however, not to exaggerate the scope of its applicability. There is naturally a temptation to consider

virtually all but traditional industries as infants in a less-developed country, since the possibilities of scale economies and gains from learning will in some measure apply to all. But, since it is long-run comparative advantage that we are seeking, industries qualifying for promotion must not simply promise future cost reduction, but must promise relatively greater cost reduction in relation to other domestic industries than do their counterpart world industries. Accurately identifying industries that meet this requirement would be a formidable task. Prudence suggests limiting the list to those where there is very strong evidence of a future comparative advantage.

The second candidate for the category, "genuine" market failure, is the interdependence of investment decisions. Unless the using and the supplying industries are integrated, investment decisions may fail to consider the advantages related to backward and forward linkages. Again, it is important to clearly identify the nature of these advantages so as not to fall in the trap of rewarding linkages, per se. To the extent that a country is able and willing to trade with the world, the advantage of the mere existence of linkages loses force. The world can serve as market or supplier. This is modified to the extent that there is natural protection from transport costs. It is further modified in the same way if we consider an optimal, modest uniform tariff for terms of trade reasons, justification for which has been discussed in Chapter 2. Then an industry which cannot quite export could nevertheless be an economical domestic supplier if there were a domestic using industry. In the same way, the potential using industry might not be able to export or even to compete domestically behind natural-plus-optimal protection if it had to depend on imported supplies. If the two industries were considered together in one investment decision, the complex would be economical. If, however, the investment decisions have been considered entirely independently, both products would continue to be imported.

Since the optimal rate of tariff protection would be very modest — perhaps no more than 10 per cent — the most important case of this kind would occur where natural protection from transport costs is substantial, and where the output of the supplying industry is specific to a particular using industry (or a narrow range of them). This would seem to limit considerably the importance of the investment interdependence type of market failure. However, when this is combined with the possibility of economies of scale, it assumes greater importance. The extent of the potential domestic demand, then, becomes much more important in determining whether it is ultimately possible for an industry to reach a position of competitive advan-

tage in the domestic market. (If it could be competitive in the world market, of course, it does not need the domestic linkage).

Finally, we come to policy-originating distortions. It may seem ironic to suggest that there is a need for special incentives for some kinds of investments because of biases created against them by other government policies. Yet, the existence of these policy-originating distortions may represent the most important reason for the existence of an investment incentives system in the Philippines.

While one could find numerous instances of contradictions and conflict in Philippine economic policies, there are two critical areas of great relevance to industrial promotion. The first concerns the conflict between various measures which cheapen capital, and the desire to promote labor-intensive techniques and industries to enhance growth of employment. These measures include artificially low interest rates, tax exemptions and credits on the purchase of equipment, accelerated depreciation, and reinvestment allowances. They are in themselves investment incentives, but they are in conflict with the government's professed aim of promoting employment through labor-intensive production. Rationalization of the investment incentives system would call for the elimination of the capital-cheapening elements. But, in the absence of that, their continued existence poses an even greater need to provide incentives to the use of labor.

It is the protection system (tariff and other trade controls), however, that stands as the single most powerful obstacle to a rationale pattern of investment and growth in the industrial sector. The details have been chronicled many times in Philippine economic history. It will suffice here to focus on the most important bias in the protection structure.

And this is the bias against exports. The penalty on exports from the undervaluation of foreign exchange that the protection system defends has been estimated to be about 30 percent if we use free trade as the standard of comparison; and at least 16 percent if we use an optimal tariff as the standard. A tax of this magnitude can be a very formidable obstacle to the development of potentially comparatively advantageous export industries. Thus, the promotion of nontraditional exports starts with a very severe handicap.

The undervaluation of foreign exchange comes from the average level of protection of the domestic market. There is, however, in the Philippines, wide variation in rates of protection among industries producing for the domestic market. Those on the low side, with rates of effective protection less than the undervaluation of foreign exchange are also penalized by the

system. Again, the development of potentially comparatively advantageous industries is discouraged.

Indeed, it was the recognition of these biases, especially those against new exports, that led some, at least, to support the introduction in the late 1960's of the present investment incentives system under the Board of Investments (BOI). Whether or not it was recognized as a counter to the biases of the protection system, however, it has served that role, at least with respect to nontraditional exports.

What is needed is more explicit recognition of this role (and possibly its extension to the case of underprotected potential import substitutes). We should not be misled, however, as to the potential effectiveness of fiscal incentives as a counter to the biases of the protection system. Studies by Tan and Gregorio (in Bautista, Power and Associates, 1979) indicate that at most, only two or three percentage points of the penalty against exports is offset by the aggregate of BOI subsidies to the eligible export industries. This is not, however, because the potential rate of subsidy is low in the existing system. A particular export firm enjoying the full range of benefits would gain more than enough to offset the penalty. Rather, it is because so few firms are reached. To fully offset the penalty on the aggregate of firms representing industrial exports would require a massive subsidy program as to render it impractical. This is why, in the long run, there is no real alternative to the present projected reform of the protection system itself. Patching on fiscal counter-incentives can only serve as a short-run remedy for selected areas of industrial investment.

In sum, the rationale for an industrial investment incentives system is essentially to offset market failures and distortions that prevent the industrial sector from playing its leading role. These include "genuine" market failure cases (infant industry and interdependence), as well as distortions owing to policies and institutions (export penalty). To the extent that the latter can be eliminated through policy and institutional reform, the need for an industrial incentives system disappears. Elimination of capital-cheapening measures, for example, would reduce the need to promote labor intensity. The projected reform of the tariff system, when brought to a point where the bias against exports and underprotected import substitutes is eliminated, would, in turn, eliminate the need to provide special incentives for these sectors.

Beyond the period of full tariff and trade reform, the permanent role of fiscal incentives would relate to genuine market failures and intractable institutionalized distortions.

In the meantime, perhaps the most important role the investment incentives system can play is to support the restructuring of the industrial sector during the gradual transition over the period of tariff reform. This means giving primary emphasis to the promotion of those export and import-substitution sectors that ultimately can be expected to be profitable as a result of the reform, but are currently still handicapped by the tariff and trade protection system.

Along the same vein of correcting for market failures and distortions are other cases of possible selective intervention which are of special interest to the Philippines. These include the following: (1) foreign investment, (2) regional investment, and (3) small enterprises.

Role of fiscal incentives for foreign investment

In the previous section, the discussion abstracted from the question of attracting foreign investment with fiscal incentives. To the extent that this can be done there is, of course, less force in the argument that incentive-induced investments will be at the expense of other investments. To a considerable extent,new foreign investment should represent a net increase in available savings. While in most cases there will be some competition for other scarce resources — skilled labor, energy, and others, this is not likely to "crowd out" domestic investment in or about the same proportion. If there were no political considerations to meet, fiscal incentives could be used to raise total investment by attracting foreign investors. Thus, output and employment growth could be higher.

Another advantage of foreign investment includes those arising from its direct linkage with the world market. This means greater market access in both output and inputs, and learning from its expertise in dealing with these markets.

A more important advantage of foreign investment could be technology transfer. How important this might be depends on the nature of the particular investment and, possibly, on conditions imposed by the host government. The question of how much should be paid, by way of fiscal incentives for the gain in technology remains.

These three advantages of foreign investment might suggest that a premium should be attached to foreign investment, and that it could take the form of more generous fiscal incentives. There are a number of reasons, however, why this might not be a feasible or even desirable as a policy.

First, it is in part a political question. In the Philippines, there seems to be broad support for the idea that foreign investment should be limited in relation

to domestic investment. This was built into the past investment incentives regulations (the 60 percent Filipino requirement), though there were important exceptions. Even apart from the desire to limit the proportion of foreign investment, the question of offering more attractive terms to foreigners than to Filipinos would be politically sensitive.

Where would this leave the Philippines in competition with other less-developed countries seeking foreign capital? What if the nature and level of incentives established on the criteria suggested leaves the Philippines short of attracting the optimum flow? Would not the desire to attract an optimum flow of foreign capital suggest an alternative criterion for incentives for foreign investment?

This might seem to pose a dilemma between economic and political criteria. But there are ways to compete for foreign capital which do not imply (at least not overtly) discriminating in favor of foreigners. A good climate for investment, both domestic and foreign, and an expectation of stability and consistency in the economic policy regime can be of greater importance than tax exemptions and credits, particularly in attracting the kind of investments that would be desirable and lasting. Moreover, favorable conditions regarding repatriation of earnings and capital, as well as employment of foreign nationals in key positions, may be more politically acceptable than discriminatory fiscal incentives.

There is yet another consideration which requires caution when competing for foreign investment by means of more liberal fiscal incentives. The economic situation in the Philippines will remain for a number of years strongly influenced by the distortions caused by the present protection system. Even the best feasible system of fiscal correctives is likely to fall short of fully correcting these biases for some time to come. Therefore, foreign investments attracted under the restricted trade regime would not be the same set as those under the ultimate reformed system. Generally being more footloose than domestic investments, foreign investments may in these circumstances represent a less stable element in the industrial structure. Box 5.1 provides an indication of the type of foreign direct investments (FDI) attracted in the past.

This is particularly true when the investment is oriented to the domestic market, attracted by the protection offered. Since the domestic market is limited, the probability of reinvestment is less. American investment in the Philippines in the 1950s, attracted by the protection of the domestic market, subsequently resulted to many instances of net repatriation of capital.

BOX 5.1

FOREIGN DIRECT INVESTMENT IN THE PHILIPPINES: SOME FINDINGS

Aldaba (Special Paper No. 2, this volume) provides some indications of the determinants and the type of foreign direct investment (FDI) attracted in the Philippines. In her regression analysis, she finds that the fiscal incentives system was an insignificant explanatory variable. The most significant explanatory variables are (1) political stability and (2) the effective protection rate (EPR). In other words, foreign investments in the past was concentrated in the high protection import substituting sectors. This is unfortunate because it is the FDI in exporting activities which are found to be most beneficial. Aldaba also estimated the export propensities of majority-owned, nonbank affiliates of US parent companies (MONANUS) for a number of countries including the Philippines, Thailand, Indonesia and Malaysia (see table below). The export propensity for the Philippines is the lowest in the set in 1982, the high protection period, although only slightly lower than that for Thailand The export propensity for Thailand rose sharply, reaching 31.8 percent in 1989. The propensity for the Philippines also increased in 1989, but more slowly, so that it remained lower than the rest.

Still, there was some improvement in the orientation of FDI, which coincided with the more open trade regime following significant reforms during the period 1986-1988.

EXPORT PROPENSITY (%)

	1982	1989
Philippines	5.7	22.3
Thailand	17.5	31.8
Malaysia	47.4	38.5
Indonesia	66.1	43.8
Singapore	82.0	69.7

The conclusion reached is that fiscal incentives for foreign investment should not be more liberal than for domestic; and that the criteria suggested earlier — correction of failures and distortions — still seem appropriate. Competition for foreign capital should take the form of a favorable overall investment climate created by macroeconomic policies, stability of the policy regime, and reasonably liberal rules concerning repatriation of capital and earnings.

A positive development is the recent Foreign Investment Act (FIA) which liberalizes entry and equity requirements of FDI. Outside the set of industries in the Negative list, there are no limits on foreign equity participation. The use of a limited negative list for foreign investment is viewed as a major improvement in relaxing rules and regulations governing entry of FDI and encouraging more FDI inflows.

We now turn to the next two special cases for investment incentives.

A possible role for fiscal incentives in the promotion of small and regionally dispersed enterprise depends, first, on the rationale for such promotion and, second, on whether fiscal incentives represent the appropriate instrument, given the rationale. While there might be some overlap in the two cases, they will be treated here separately.

Small enterprises

It is said that more rapid growth of small enterprises would have favorable employment and income distribution effects in the Philippines (see the ILO Mission Report, *Sharing in Development* 1974: 158-65 and 530-67). Moreover, small enterprises are found to contribute to the creation of general and entrepreneurial skills, which tend to spill over to other sectors and generally stimulate more economic activities. Such potential dynamic externalities from the small enterprises provide an even stronger reason for supporting their development. The question, however, is: what are the restraints on this potentially favorable development that would require special measures? If we could answer this, we would have a clearer idea of the most effective measures that would promote their development.

Following the ILO Report, we can identify three principal obstacles to the growth of small enterprises. First is what might be labeled as an institutional distortion, the high cost of processing and avoiding risk in lending to small borrowers, with the consequent dependence on heavy collateral requirements to avoid the costs. Since the social risk (the individual risks pooled) would be less than the sum of the private risks, there is a case for a government role. Ideally, the problem should be resolved by substituting more careful loan appraisal, emphasizing the actual economic prospect for the enterprise as a means of reducing risk in place of a collateral requirement. The cost of this should be subsidized, and this could be done by a tax concession to banks for setting up a special facility for providing more care and technical assistance in processing loans for small enterprises. Or the government could play a more direct role, as in the Philippines, in setting up technical assistance centers and guaranteeing loans. The main point

here, however, is that simply providing BOI tax incentives to small enterprises does not address the problem.

A second difficultly faced by small enterprises is the inability to enjoy a division of labor and specialization among entrepreneurial responsibilities. A small entrepreneur must serve in all managerial capacities at once, rather than being able to allocate responsibilities for production, marketing, finance, legal matters, and others. Again, however, the remedy is not a tax concession. Technical assistance centers, extension service and links with larger firms are some of the kinds of help needed.

A third problem is infrastructure. There is an overlap here with regional investment. The BOI tax credit for infrastructure expenditures by private investors appears to be of little value in inducing investment in backward areas and certainly is not something that would appeal to small enterprises. What is needed is for government to provide infrastructure.

In short, the obstacles to more rapid growth of small enterprises are not of the kind that can be remedied by fiscal incentives though perpetual subsidies could keep small firms going without ever correcting their deficiencies. Nevertheless, small enterprises should have as complete access as possible to whatever fiscal incentives are generally made available for other reasons and efforts should be made to make BOI registration more accessible to those that are eligible.

Regional investments

Again, it is widely believed that a more regionally balanced industrial growth is needed to mitigate income inequalities and diminish political alienation. To some extent the industrial concentration around Manila is due to historical accident, to some extent to natural economic forces, and to some extent to policy biases in the past. The reform of the protection itself should help somewhat to correct this but powerful forces toward agglomeration remains that are difficult to counter.

Recognizing that private advantages from "clustering" give rise to social disadvantages, governments might consider (and occasionally do) the possibility of creating new centers of industrial activity through the installation of the necessary infrastructure in a backward region. What usually stops them, is the tremendous cost of a balanced composition of lumpy investments, the excess capacity that would exist for a considerable time while the region is developing, and the attraction of the cheaper option of simply investing in the bottleneck areas of the existing agglomerations. There is an illusion at work here simply because all elements of infrastructure typically

do not reach capacity limitations at once. Therefore, it always seems advantageous to make one lumpy investment to overcome a bottleneck because excess capacity remains elsewhere. As the ILO Report concluded, "it takes a long view to recognize the absurdity of the process."

What may be needed in the Philippines is simply a firm decision to stop this process in Manila, and to make only "housekeeping" investments to maintain the infrastructure, rather than new lumpy investments. Then the appropriate role of the fiscal incentives system would be simply to rule out any incentives for investments in Manila.

The present incentives for regional dispersion seem to be either worthless or inappropriate. The tax credit for private infrastructure investment can hardly be attractive because of the financial burden on the investor — even if he gets it back later. The double exemption for direct labor costs might often be of little or no value because of the overall 25 percent limitation. Moreover, it applies only to exports.

It is not clear whether Parliamentary Bill No. 612, an Act to Promote Investments in Less Developed Areas, is actually a law since it is not incorporated in Presidential Decree No. 1789. In any case, the investment allowance, pioneer status, and access to finance do nothing to overcome the deficiencies of a backward region.

Any attempt to promote regional investment by tax concessions is, in any case, misguided unless accompanied by a real commitment to overcome the disadvantages that make a region unattractive to industrial investment. Therefore, the main thrust of regional policy must be the latter. Beyond infrastructure, what are needed are banking, commercial, educational, cultural, recreational, and government services, just to begin the list. This seems formidable, but unless a real commitment is made to provide the necessary resources (and to retard growth in Manila), inequality and alienation will worsen. If the commitment is made, however, tax concessions to induce regional investments would play a role similar to that for "infants" or underprotected sectors, since future profitability would be improved relative to present. But tax concessions, by themselves, would be of little value.

Aside from more favorable incentives from BOI for regional investments, a mechanism which has been adopted by government to overcome such disadvantages in social and physical overhead for regions outside Manila is the development of industrial estates. These are "large and suitable tracts of land subdivided and developed primarily for the use of a community of industries and provided with roads, water supply facilities, electrical

facilities, communication facilities, sewage and drainage systems, and other infrastructure ... under unified and continuous management." Industrial estates could be of two general types: the regular industrial estate (IE) whose products could be for export or domestic consumption, and the export processing zone (EPZ) geared strictly for exports. Firms locating in the estates receive fiscal incentives.

The EPZ is more of an incentive to exporting and thus receive more generous incentives. These include: (1) exemption from customs duties and internal taxes for capital equipment, raw materials and supplies, local taxes and licenses, except real estate taxes, contractor's taxes, wharfage dues and export tax; (2) deduction of labor training expenses, organizational and pre-operating expenses; (3) tax credits on supplies and raw materials; (4) net operating loss carry-over; and (5) accelerated depreciation. The firms in a regular IE receive similar incentives as in (1). They are also entitled to BOI incentives if eligible and registered. Results from past studies of the performance of IEs and EPZs, however, are not very encouraging (Louis Berger, Inc. 1986). These studies find that on the whole, they have been very costly and ineffective instruments for regional dispersal of industries, which is largely attributed to the substantial unutilized capacity in the industrial estates. In recent months, there have been persistent signs of increased investment activities, both foreign and domestic, and increased capacity utilization in the various IEs. Hopefully, these would yield more favorable results.

The next question is, how well does the Philippine investment incentives system fit the ideal role as discussed above? The discussion that follows addresses this issue. The Philippine experience is presented and analyzed followed by the implications for reforms.

Review of the Philippine Investment Incentives System

Although there has been the New and Necessary Industries Law in the 1950s and the Basic Industries Law of the 1960s, the Philippine investment incentives system was first formally institutionalized with the passing of the Investment Incentives Act of 1967. This was later supplemented by the enactment of the Export Incentives Act in 1970. Since then, it has been amended and codified three times, culminating with the present Executive Order No. 226 (EO 226) in 1987, or the 1987 Omnibus Investment Code (OIC).

EO 226 superseded BP 391 which was enacted in 1983. BP 391 granted a tax credit equivalent to a certain percentage of net value earned (local

content for exports). This was replaced in the 1987 OIC by a provision granting instead an income tax holiday for a duration ranging from three to eight years.

The investment incentive system, under the 1987 OIC is administered by the Board of Investments (BOI). Only enterprises listed in the Investment Priorities Plan (IPP) for a particular year, or an enterprise that would export at least 50 percent of its output could be eligible for incentives.

In the 1987 Code, incentives are uniform, with minor exemptions, for exporters and nonexporters. Both receive exemption from taxes and duties on imported equipment and accompanying spare parts. This represents a change in that previously, nonexporters received exemption only as a temporary credit to be repaid out of tax credits earned later. Only exporters (producers exporting at least 50 percent of their outputs) were given an outright exemption under the 1983 Code.

The most important change in incentives is the introduction of an income tax holiday to replace the tax credits on net value added and net local content. This also is available on the same terms to exporters and nonexporters. Pioneer firms are exempt from income tax for six years and nonpioneer firms for four years. Moreover, the holiday can be extended to a maximum of eight years for pioneer and seven years for nonpioneer firms if certain conditions relating to capital intensity, use of local materials and foreign exchange earnings are met. A three-year tax holiday is available for "expansion firms" — i.e., existing firms that invest for expansion — on income proportionate to the expansion.

Another new incentive, available to both exporters and nonexporters is a deduction from taxable income of 50 percent of annual incremental labor expense for a period of five years. This is something of a puzzle since, if the tax holiday is available, a deduction from taxable income is worthless. The period covered is five years while the holiday for new nonpioneer firms is four years and for expanding firms, three years. Thus, the incremental labor expense deduction could be used during the fifth year by a new nonpioneer firm that for some reasons could not get an extension on its tax holiday, as well as by expanding firms in the fourth and fifth years (no extension is available for this category).

Apparently, the incremental labor expense incentive was added in the drafting of the Code in response to criticism that the first draft was biased toward the use of capital in substitution for labor. At that point in the drafting, there was no income tax holiday for expansion firms, hence existing firms might have availed of it. The later addition of a three-year holiday for

expansion, however, sharply limits its usefulness. The BOI, in the face of this anomaly, has decided to apply the incremental labor expense incentive to existing firms not eligible for the expansion holiday — i.e., to firms that are expanding employment, not capital.

Another incentive that appears to be partially redundant is the credit for tax and duties paid on supplies, raw materials and semimanufactured products used in producing export products "and forming part thereof." This incentive is not new, having been in the system in some form since 1970. Insofar as imported inputs are concerned, it duplicates the Customs drawback. What it added in the past was the inclusion of sales taxes on domestic raw materials and, perhaps, a superior administrative machinery for the rebate of duties and taxes on imported materials. With the advent of the value added tax system (VAT), there is also duplication with respect to domestic materials, since exports are zero-rated under VAT. This means exports are exempt from VAT and exporters receive a refund of VAT paid on material inputs whether these are imported or domestic. Thus, on the surface it appears that this incentive adds nothing to what is already available under the Tariff and Customs Code and VAT. What the BOI offers, however, is apparently a superior administrative system in the form of fixed rates of tax credit as an option, and a Tax Rebate Center that reduces the exporter's time and cost of obtaining the credits. The optional fixed rates are available also to nonregistered firms, though apparently not many are aware of this.

Thus, the income tax holiday and the tax-free importation of capital equipment rank as the key incentives in the new Code. As already noted, these are uniform for exporters and nonexporters alike. This contrasts with the 1983 Code which explicitly aimed incentives at mitigating, if not overcoming, the bias against exports from the protection system. This disappearance of pro-export incentives is related to the Philippines' commitment to GATT. Thus the new Code, insofar as tax incentives are concerned, is virtually neutral between exporters and nonexporters.

Minor exceptions to this generalization are the exemption of exporters from export taxes and wharfage dues and the exemption from taxes and duties on imported spare parts and supplies needed for the operation of the duty-free equipment if the firm is exporting 70 percent of its output and has a bonded manufacturing warehouse. Needless to say, the latter will not reach many small exporters.

The fact that the tax incentives are virtually neutral between exporters and nonexporters does not mean, of course, that the system is neutral. There are other provisions in the Code that favor exporters, particularly with

respect to eligibility of or incentives via registration with the BOI. First, there is a long list of "priority products for export" in the IPP. Second, while in general firms can register for investments only in the preferred areas listed in the IPP, an enterprise proposing to export at least 50 percent of its output can register even if not so listed. Moreover, existing firms proposing to begin exporting a part of output may register under certain conditions for limited incentives (no tax holiday or tax-free equipment). In addition, indirect exporters — i.e., those producing an input into an export product, export traders, service exporters and exporters of television and motion pictures or musical recordings may register without regard to the IPP. In other words, exporting is virtually made automatically a preferred area, though the 50 percent of output requirement might seem high.

For foreign investment, there is a bias toward exporting in the rules regarding foreign ownership. Before the new FIA, if the industry is not designated as pioneer, foreign ownership cannot exceed 40 percent; it can be as high as 100 percent, however, if 70 percent of output is exported. As noted earlier, there are very good reasons for preferring foreign investment that is export-oriented. Under the new FIA, there is now a negative list, regardless of orientation (export or domestic), where FDI is limited to a 40 percent or lower foreign equity participation. But the bias for FDI in the export sector remains for smaller enterprises with paid-up capital of $500,000 or less. Foreign equity participation is limited to 40 percent for these smaller enterprises except for exporting firms.

Thus, despite the fact that the set of tax incentives offered in the present Code are less slanted toward exports, the system may nevertheless still be favoring exports. Until recently, the majority of the firms registered have been exporters.

While the incentives in the new Code have become more neutral with respect to exporters and nonexporters, they are now less neutral with respect to the choice between labor-intensive and capital-intensive industries and techniques of production. Two changes account for this. First, as noted above, registered firms may be granted exemption from taxes and duties on imported capital equipment and accompanying spare parts. This represents a return to the pre-1983 situation. Prior to the 1983 reform, a need for this incentive was argued by the BOI on the grounds of a liquidity problem for the investor. He can get credit for the import of the equipment, but not for the payment of duty. This argument was met in the 1983 Code by letting the investor pay the duty and tax over time out of tax credits earned — in effect,

an interest-free loan. Hence, the reversion to the old system in the 1987 Code must have a different rationale.

Because the re-introduction of this incentive was opposed by some as representing a bias toward capital intensity, a compromise was effected whereby the incentive is to be available for only five years from the effective date of the Code — until 1992, that is. The effectivity date has been extended until the end of 1994. (The BOI is likely to request for another extension.)

The other change that implies a bias toward capital intensity is the substitution of the tax holiday for the tax credits on value added and local content. The latter were actually pro-labor in their bias, while the income tax holiday reduces the user cost of capital and encourages substitution of capital for labor.

Manasan (1990) has estimated that, for a typical firm, the tax holiday could reduce the user cost of capital by about 12 percent, while the duty-free import of equipment could reduce it by about 16 percent. These effects would be additive and could reduce employment per unit of capital by as much as 20 percent, as a conservative estimate.

A rationale for providing tax incentives in the early years of the life of an enterprise might be the infant industry market failure, or the similar case of underprotected industries that may be viable only when trade liberalization has proceeded further. Uncertainty and private risk that exceeds social risk, as well as a long gestation period combined with imperfect capital markets, could represent additional reasons why some investments might not be undertaken without tax or other benefits in the early years. Exemption from income tax may not be the appropriate remedy, however. If the going is indeed rough in the early years, earnings will be low and losses may be incurred in some years. Income averaging or loss carryover would help, but neither are present in the system. Indeed the generous loss carryover provision of previous Codes — losses for the first ten years carried over for six years — was unaccountably eliminated in the 1987 Code. This means that the enterprises that need help in the early years are not likely to benefit much from income tax incentives. Rather the principal beneficiaries will be those enterprises that are amply profitable from the outset and, therefore, might not have needed incentives. (The Philippines, incidentally, is the only one of nine countries reported in SGV's "Comparative Investment Incentives" that has no loss carryover).

Some statistics on BOI-approved projects

A look at some statistics on BOI-approved projects adds further light to our qualitative analysis of provisions under the 1987 OIC. An indicator of the

impact of the 1987 OIC could be gleaned from selected statistics on BOI-approved projects from 1981 to 1993 under the successive versions of the Investment Incentives Act — P.D. 1789, amended by BP 391 in 1983, then superseded by EO 226 (or the 1987 OIC) in 1987. These are presented in Tables 5.1- 5.5.

The figures are very revealing and interesting. As shown in Table 5.1, the capital-labor ratio (K/L), which is estimated by the project cost divided by employment, fell drastically during the period from 1983 to 1986, when BP 391 was in effect — P512,740 per employee in 1982 down to only P83,660 in 1986, both in nominal terms. (The decline is even more drastic using constant prices.) (Table 5.2.) Since then, the figure for K/L continues to rise rapidly, reaching P1.27 million by 1993. In constant prices, the ratio tripled from 1987 to 1993. A similar trend holds for the average cost of firms.

The large differences clearly indicate the capital bias of the investment incentive system under the 1987 OIC vis-a-vis BP 391. This finding is reinforced by comparable statistics for the average manufacturing firm using NSO data. These are presented in Table 5.3. The national averages, using NSO data, are even much lower. In 1988, for example, the average K/L was only P116.8 thousand, compared to P224.3 thousand for BOI-approved projects. The average book value of fixed assets per firm was only P8,595 thousand, compared to P28,720 thousand for BOI-approved projects.

A disaggregation between major types of producers — e. g., domestic, exporters, and others — of the same statistics is presented in Tables 5.4 and 5.5. Export production is clearly much more labor-intensive, at less than one tenth of the rest in the 1990s. (The other sectors include mainly the service sectors — e. g., tourism.)

The IPP listing

Turning now to the IPP list, the determination of preferred areas of investment to be included in the list "shall be based on long-run comparative advantage, taking into account the value of social objectives and employing economic criteria along with market, technical and financial analyses" (Art. 28). In determining long-run comparative advantage, the BOI should take into account primarily the "economic internal rate of return," contribution to development goals, other measures of comparative advantage, and measured capacity. The language is taken from the 1983 Code and reflects the need at that time to align investments with comparative advantage (exports and efficient import substitutes) in contrast to the previous bias toward protected import substitution; and an accompanying need to subject invest-

TABLE 5.1

SELECTED STATISTICS ON NEW AND EXPANSION PROJECTS (WITH INCENTIVES), 1981-1993

(in thousand pesos, in nominal terms)

Year	No. of Firms	Project Cost (Nominal)	Employment	K/L	Average Cost Per Firm
1981	193	11,364,366	53,110	213.98	58,882.73
1982	143	14,497,342	28,274	512.74	101,380.01
1983	143	7,437,044	27,980	265.80	52,007.30
1984	121	7,203,588	37,830	190.42	59,533.79
1985	136	2,742,089	23,961	114.44	20,162.42
1986	114	2,191,961	26,201	83.66	19,227.73
1987					
P.D. 1789	230	5,369,942	48,782	110.08	23,347.57
E.O. 226	181	4,474,199	33,319	134.28	24,719.33
1988	616	28,720,161	128,052	224.29	46,623.64
1989	1,007	62,303,895	153,490	405.92	61,870.80
1990	755	99,895,449	113,290	881.77	132,311.85
1991	489	74,175,386	59,944	1,237.41	151,687.91
1992	389	39,624,815	46,512	851.93	101,863.28
1993	386	70,269,299	55,166	1,273.78	182,044.82

Note: From 1981 to 1986, projects were approved under P.D. 1789.
For 1988, 1989, and 1990, projects were approved under E.O. 226.
For 1991, 1992, and 1993, projects were under E.O.226, R.A. 7103, and M.O. 157.

Source: Board of Investments (BOI).

TABLE 5.2

SELECTED STATISTICS ON NEW AND EXPANSION PROJECTS (WITH INCENTIVES), 1981-1993

(in thousand pesos, in real terms)

Year	No. of Firms	Project Cost (Real)	Employment	K/L	Average Cost Per Firm
1981	193	11,364,366	53,110	213.98	58,882.73
1982	143	13,341,021	28,274	471.85	93,293.85
1983	143	5,996,100	27,980	214.30	41,930.77
1984	121	3,783,112	37,830	100.00	31,265.39
1985	136	1,224,343	23,961	51.10	9,002.52
1986	114	950,574	26,201	36.28	8,338.36
1987					
P.D. 1789	230	2,165,534	48,782	44.39	9,415.36
E.O. 226	181	1,804,308	33,319	54.15	9,968.55
1988	616	10,565,669	128,052	82.51	17,152.06
1989	1,007	21,022,209	153,490	136.96	20,876.08
1990	755	29,852,967	113,290	263.51	39,540.35
1991	489	19,012,233	59,944	317.17	38,879.82
1992	389	9,412,396	46,512	202.36	24,196.39
1993	386	16,691,622	55,166	302.57	43,242.54

Notes: From 1981 to 1986, projects were approved under P.D. 1789.
For 1988, 1989, and 1990, projects were approved under E.O. No. 226.
For 1991, 1992, and 1993, projects were under E O. No. 226, R.A. No. 7103 and M.O. No. 157.

Source: Board of Investments (BOI).

TABLE 5.3

COMPARATIVE STATISTICS ON FIRM SIZE
1981-1988
(asset and cost in thousand pesos)

Year	BVFA/Firm	NSO-Ratio Worker/Firm	K/L
1981	5,154.45	101.96	50.55
1982	5,828.39	102.06	57.11
1983	8,585.14	122.26	70.22
1984	10,515.59	118.77	88.54
1985	11,116.91	116.16	95.70
1986	14,253.10	119.99	118.79
1987	16,806.99	135.27	124.25
1988	8,595.13	73.56	116.84

Notes: PC = Project Cost
BVFA = Book Value of Fixed Assets
NSO-RATIO = National Statistics Office (Annual Survey of Establishments)
K/L = Capital-labor ratio where capital represents Project Cost in the case of BOI figures, and Book Value in the case of NSO.
Census of Establishment data was used for 1988

Source: Department of Trade and Industry (DTI).
National Statistical Coordination Board (NSCB)

TABLE 5.4

SELECTED STATISTICS ON NEW AND EXPANSION PROJECTS BY TYPE OF PROJECTS (WITH INCENTIVES), 1981-1993
(in thousand pesos, in nominal terms)

	1981	1982	1983	1984	1985	1986	1987	
							P.D. 1789	E.O. 226
NO. OF FIRMS	193	143	143	121	136	114	230	181
Agricultural Producers	40	15	18	13	12	16	24	23
Domestic Producers	31	23	32	19	8	5	9	6
Export Producers	118	105	93	89	116	93	197	152
Others	1	-	-	-	-	-	-	-
PROJECT COST (P)	11,364,366	14,497,342	7,437,044	7,203,588	2,742,089	2,191,961	5,369,942	4,474,199
Agricultural Producers	2,650,230	627,282	476,046	703,188	486,807	422,576	627,560	826,099
Domestic Producers	3,533,599	11,072,654	5,088,653	1,037,886	206,305	199,916	419,582	366,562
Export Producers	5,150,537	2,797,406	1,872,345	5,462,514	2,048,977	1,569,469	4,322,800	3,281,538
Others	30,000	-	-	-	-	-	-	-
GNP deflator	100 000	108.667	124 031	190.414	223.964	230 594	247.973	247 973

TABLE 5.4 (CONTINUED)

	1981	1982	1983	1984	1985	1986	1987	
							P.D. 1789	E.O. 226
EMPLOYMENT	53,110	28,274	27,980	37,830	23,961	26,201	48,782	33,319
Agricultural Producers	10,650	3,285	2,728	2,571	3,455	2,129	3,169	2,437
Domestic Producers	9,353	6,210	6,507	9,787	226	237	2,704	1,301
Export Producers	32,989	18,779	18,745	25,472	20,280	23,835	42,909	29,581
Others	118	-	-	-	-	-	-	-
K/L	214	513	266	190	114	84	110	134
Agricultural Producers	249	191	175	274	141	198	198	339
Domestic Producers	378	1,783	782	106	913	844	155	282
Export Producers	156	149	100	214	101	66	101	111
Others	254	-	-	-	-	-	-	-
AVERAGE COST PER FIRM (P)	58,883	101,380	52,007	59,534	20,162	19,228	23,348	24,719
Agricultural Producers	66,256	41,819	26,447	54,091	40,567	26,411	26,148	35,917
Domestic Producers	103,929	481,420	159,020	54,626	25,788	39,983	46,620	61,094
Export Producers	43,649	26,642	20,133	61 377	17,664	16,876	21,943	21,589
Others	30,000	-	-	-	-	-	-	-

TABLE 5.4 (CONTINUED)

	1988	1989	1990	1991	1992	1993
NO. OF FIRMS	616	1,007	755	489	389	386
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	77	118	101	77	51	60
Export Producers	539	806	524	354	296	270
Others	-	83	130	58	42	56
PROJECT COST (P)	28,720,161	62,303,895	99,895,449	74,175,386	39,624,815	70,269,299
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	12,346,020	16,760,079	2o,789,155	38,006,259	14,946,558	22,936,659
Export Producers	16,374,141	38,581,374	25,932,073	10,918,010	8,537,204	17,961,547
Others	-	6,962,442	47,174,221	25,251,117	16,141,053	29,371,093
GNP deflator	271.825	296.372	334.625	390.146	420.985	420.985
EMPLOYMENT	128,052	153,490	113,290	59,944	46,512	55,166
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	22,045	19,705	11,960	7,776	4,040	6,528
Export Producers	106,007	127,636	84,216	46,882	40,407	44,990
Others	-	6,149	17,114	5,286	2,065	3,648

TABLE 5.4 (CONTINUED)

	1988	1989	1990	1991	1992	1993
K/L	224	406	882	1,237	852	1,274
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	560	851	2,240	4 °38	3,700	3,514
Export Producers	154	302	308	233	211	399
Others	-	1,132	2,756	4,777	7,816	8,051
AVERAGE COST PER FIRM (P)	46,624	61,871	132,312	151,688	101,863	182,045
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	.60,338	142,035	265,239	493,588	293,070	382,278
Export Producers	30,379	47,868	49,489	30,842	28,842	66,524
Others	-	83,885	362,879	435,364	384,311	524,484

Note From 1981 to 1986, projects were approved under P.D. 1789
For 1988, 1989, and 1990, projects were approved under E.O. 226.
For 1991, 1992, and 1993, projects were under E.O. 226, R.A. 7103 & M.O. 157.

Source: Board of Investments (BOI).

Table 5.5

SELECTED STATISTICS ON NEW AND EXPANSION PROJECTS BY TYPE OF PROJECTS (WITH INCENTIVES), 1981-1993
(in thousand pesos, in real terms)

	1981	1982	1983	1984	1985	1986	1987	
							P.D. 1789	E.O. 226
NO. OF FIRMS	193	143	143	121	136	114	230	181
Agricultural Producers	40	15	18	13	12	16	24	23
Domestic Producers	34	23	32	19	8	5	9	6
Export Producers	118	105	93	89	116	93	197	152
Others	1	-	-	-	-	-	-	-
PROJECT COST (P)	11,364,366	13,341,021	5,996,100	3,783,112	1,224,343	950,574	2,165,534	1,804,308
Agricultural Producers	2,650,230	577,249	383,811	369,294	217,359	183,256	253,076	333,141
Domestic Producers	3,533,599	10,189,489	4,102,715	545,067	92,115	86,696	169,205	147,823
Export Producers	5,150,537	2,574,282	1,509,574	2,868,751	914,868	680,622	1,743,253	1,323,344
Others	30,000	-	-	-	-	-	-	-
GNP deflator	100.000	108.667	124.031	190.414	223.964	230.594	247.973	247.973

TABLE 5.5 (CONTINUED)

	1981	1982	1983	1984	1985	1986	1987	
							P.D. 1789	E.O. 226
EMPLOYMENT	53,110	28,274	27,980	37,830	23,961	26,201	48,782	33,319
Agricultural Producers	10,650	3,285	2,728	2,571	3,455	2,129	3,169	2,437
Domestic Producers	9,353	6,210	6,507	9,787	226	237	2,704	1,301
Export Producers	32,989	18,779	18,745	25,472	20,280	23,835	42,909	29,581
Others	118	-	-	-	-	-	-	-
K/L	214	472	214	100	51	36	44	54
Agricultural Producers	249	176	141	144	63	86	80	137
Domestic Producers	378	1,641	631	56	408	366	63	114
Export Producers	156	137	81	113	45	29	41	45
Others	254	-	-	-	-	-	-	-
AVERAGE COST PER FIRM (P)	58,883	93,294	41,931	31,265	9,003	8,338	9,415	9,969
Agricultural Producers	66,256	38,483	21,323	28,407	18,113	11,453	10,545	14,484
Domestic Producers	103,929	443,021	128,210	28,688	11,514	17,339	18,801	24,637
Export Producers	43,649	24,517	16,232	32,233	7,887	7,319	8,849	8,706
Others	30,000	-	-	-	-	-	-	-

TABLE 5.5 (CONTINUED)

	1988	1989	1990	1991	1992	1993
NO. OF FIRMS	616	1,007	755	489	389	386
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	77	118	101	77	51	60
Export Producers	539	806	524	354	296	270
Others	-	83	130	58	42	56
PROJECT COST (P)	10,565,669	21,022,209	29,852,967	19,012,233	9,412,396	16,691,622
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	4,541,895	5,655,086	8,005,728	9,741,558	3,550,374	5,448,326
Export Producers	6,023,774	13,017,897	7,749,595	2,798,445	2,027,910	4,266,548
Others	-	2,349,226	14,097,644	6,472,229	3,834,112	6,976,748
GNP deflator	271.825	296.372	334.625	390.146	420.985	420.985
EMPLOYMENT	128,052	153,490	113,290	59,944	46,512	55,166
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	22,045	19,705	11,960	7,776	4,040	6,528
Export Producers	106,007	127,636	84,216	46,882	40,407	44,990
Others	-	6,149	17,114	5,286	2,065	3,648

TABLE 5.5 (CONTINUED)

	1988	1989	1990	1991	1992	1993
K/L	83	137	264	317	202	303
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	206	287	669	1,253	879	835
Export Producers	57	102	92	60	50	95
Others	-	382	824	1,224	1,857	1,912
AVERAGE COST PER FIRM (P)	17,152	20,876	39,540	38,880	24,196	43,243
Agricultural Producers	-	-	-	-	-	-
Domestic Producers	58,986	47,924	79,265	126,514	69,615	90,805
Export Producers	11,176	16,151	14,789	7,905	6,851	15,802
Others	-	28,304	108,443	1[illegible],590	91,288	124,585

Note: From 1981 to 1986, projects were approved under P.D. 1789.
For 1988, 1989, and 1990, projects were approved under E.O. 226.
For 1991, 1992, and 1993, projects were under E.O 226, R.A. 7103 and M.O. 157.

Source: Board of Investments (BOI).

ment proposals to hard economic analysis, using shadow prices to reflect market failures and social goals.

An examination of the IPP list shows that a majority are protected by a higher tariff rate and/or a QR. That is, the IPP tended to reinforce the trade policy bias. This tendency, however, is mitigated somewhat to the extent that the granting by BOI of incentives is biased toward export producers.

Looking at the distribution of BOI-approved projects between export and domestic producer, data for 1988 showed P12 billion worth of projects for domestic producers and around P16 billion worth of projects for export producers. Domestic producers account for a substantial share. The share of export producers has decreased (from more than half in 1988) to only around one fourth by 1993 at P17.96 billion, compared to P22.94 for domestic producers and P29.37 billion for other producers. The "others" category mainly includes services such as tourism, which could, be considered indirect exports. In any case, the share of export manufacturers has declined substantially over the years.

Implications for Reforms in the Investment Incentives System

There appears to be two general areas for reform in the investment incentives system. The first is in the form of incentives granted. The second is in the determination of preferred industries, or the IPP listing.

With regard to the first, the previous section provides some analysis of the provisions under the 1987 OIC. In general, the conclusion is that there are weaknesses in the incentives provided. In sum, the key incentives of the OIC — income tax holiday and tax-free importation of capital equipment — have reintroduced the bias toward capital-intensity.[17] Moreover, the income tax holiday incentive will not benefit much those enterprises that need help, possibly incurring income losses in the early years (which is likely to be the case for many new enterprises). Rather, the principal beneficiaries will be those enterprises that are amply profitable from the outset and, therefore, may not need incentives in the first place.

With respect to the second area for reform, too much emphasis has been placed on the kind of incentives to be provided, and too little on the determination and selection of preferred sectors. Given scarce resources, it is absolutely necessary to attach equal (if not greater) importance to the

17. This could be somewhat mitigated by a deliberate preference for export producers in the IPP areas, as export production tended to be labor-intensive.

selection process itself. The target areas should be well studied, well defined and judiciously determined. Instead, the selection process seems to have been given a secondary role. Indeed, the process appears ad hoc. For example, a firm applies for inclusion in the IPP and BOI incentives for a certain project/activity. Then, BOI reviews the application and decides for the inclusion or rejection of the activity in the IPP. Although the BOI criteria used may be objective, such an ad hoc system could only be a fragmented and weak means for carrying out the ideal role of the investment incentives system. This is manifested in the large number of investment areas in the IPP. The procedure has resulted in the selection of up to as much as 234 investment areas in the IPP in 1989. Some improvements have been made recently. The IPP list has been drastically reduced to only around 60 investment areas. Still, this is a lot of investment areas to cover.

As earlier pointed out, the ideal role of the investment incentives system is to correct for market failures and distortions. The discussion led to three general cases for possible intervention: (1) "infant industries" with potential comparative advantage hampered by these market failures, (2) interdependent investment decisions, and (3) the export sector.

The earlier discussion points to the general penalty to exports arising from policy-induced distortions caused by the overall protection system. Positive externalities could be sufficient justification as well for the promotion of export industries. Such externalities are found in the strong link between exporting and productivity growth. Export orientation keeps industries highly competitive and abreast in the adaptation of best-practice technologies, resulting in faster productivity increases. This is verified in Hooley (1985) which found higher productivity growth for export manufacturing industries.

The relevant question, then, is how much has the IPP selection of industries catered to these ideal cases for promotion. Which category of these three cases do the selected investment areas (234 in 1989) in the IPP fall in?

Exports are easy enough to identify. In terms of project cost, export producers accounted for around half until around 1988, down to around one-fourth in 1993. Hence, domestic producers account for a substantial share. What justification is there for granting incentives to these domestic sectors? Were they "infant" industries with promise needing some incentives to induce investors to come in? Or perhaps, industries which would make a whole lot of other socially profitable but privately unprofitable activities financially viable? These are difficult questions to answer. Identifying the

first two cases — promising "infants" and key sectors in the cluster of industries with interdependent investment decisions — is extremely complex. And with so many investment areas, it is doubtful that these considerations formed the basis for their inclusion in the IPP.

Unfortunately, given available data, it is very difficult to determine whether a domestic-oriented industry included in the IPP falls under case 1 (promising infant industry) or case 2 (key industry in the cluster of activities with interdependent investment decision). One could, however, make some judgement about how optimally (or otherwise) the IPP has reallocated investments by comparing some measure of social profitability for those industries within and outside the IPP. If those industries within the IPP prove more socially profitable, then at the very least, the IPP has had no adverse effect in resource allocation, and could very well even have led to a better investment allocation. Otherwise, it would be a clear indication of error, on the whole, in the selection of industries.

This was done for this study, using some rough estimate of the domestic resource cost (DRC) and some approximation of where the IPP activity belongs in the 5-digit PSIC classification of manufacturing industries.[18] The DRC, which is the value of domestic resources used, in shadow prices (i. e., real scarcity value, or social value), per unit of net foreign exchange earned or saved, is taken as a ratio to the shadow exchange rate (SER) to indicate comparative advantage. Results show that, using 1988 NSO establishment data from the census of manufacturing establishments, industries included in the IPP have even higher DRC/SER of 2.3, compared to only 1.5 for all manufacturing (Table 5.6).

Another interesting result is the estimate of the effective protection rate for the activities within the IPP. The effective protection rate (EPR) coming from trade policy[19] for activities within the IPP is relatively higher, at around

18. This entails matching the IPP investment areas (we used the 1989 IPP list) with the 5-digit PSIC industry. There are cases when a 5-digit PSIC sector does not fully correspond to the IPP activity. It could include activities other than those in the IPP. This is the reason we only estimated the overall DRC for the whole set of activities within and without the IPP. Hopefully, in the aggregation, some errors would cancel each other out. The estimate is also bound by the same limitations and assumptions as those for the industry studies (*Catching Up with Asia's Tigers*, Vol. II). Also, refer to Vol. II for further explanation of concept and estimation methodology of the DRC.

19. The EPR is a measure of protection on value-added estimated by the percentage difference between protected domestic value-added and unprotected "free-trade" value-added. Refer to Volume II for further explanation of concept and methodology.

TABLE 5.6

DRC/SER AND EPR OF PROJECTS INCLUDED IN THE IPP (1988)

	DRC/SER	EPR
Industries within IPP (1988)	2.3	35.6
All industries (within and outside IPP)	1.5	28.3

36 percent, compared to the EPR of around 28 percent for the whole of manufacturing. This lends empirical support to the conclusion that the investment incentives system tended, in general, to support the biases of trade policy.[20]

The DRC/SER measure as estimated could not discriminate between exports (which comprise around half of project cost approved by BOI in 1988) and domestic-oriented activities. The DRC/SER for exports would be low, at around one. (They would otherwise be unable to compete in the world market.) This means that the DRC/SER for the domestic producers in the IPP would be even higher. This indicates that these domestic-oriented sectors, by and large, should not have been included in the IPP.

This is not entirely surprising. For such a formidable task as selecting the "right" industries, mistakes are likely to be made, more so with such a large number of selected activities.

This brings us to two of our major recommendations:

- The key and major target sector for selective intervention should be the export sector.

Perhaps the most important role of the investment incentive system is to provide support for the promotion of exports. As mentioned earlier, there are at least two very strong arguments for targeting production for exports. The first is the general export penalty resulting from the overall protection system. The second involves the externalities associated between exports and productivity. To the extent that trade reforms are carried out, the need for such export incentives would be reduced. Furthermore, they are much

20. The investment incentives system and the protection structure could be considered mutually reinforcing. There is a tendency for BOI to use post-operative tariff protection for selected activities in the IPP.

easier to identify and the actual exportation gives proof of the merits of having been granted incentives.

There are various export promotion programs outside the BOI designed to at least grant exporters access to inputs at world prices (Box 5.2). Such measures should be continually improved to cover a wider range of new exports and increase the automatic availment of duty drawbacks.

Should the government choose to include cases 1 and 2 for promotion, the second recommendation is that:

- The number of activities selected for promotion should be few, say 3 to 5 industries at a time, and the incentives should be timebound.

It should be added that the attainment of "dynamic efficiency," defined in terms of achievement of international competitiveness within a definite and explicit time period, be made an immutable guideline for such selective intervention. The small number would reduce the probability of errors in judgment that could be made; should a mistake be made, it limits the

BOX 5.2

OTHER EXPORT PROMOTION PROGRAMS

Outside the BOI, there are other export promotion programs aimed at granting exporters access to inputs at world prices. For example, tax and duty-free importation of intermediate inputs and capital equipment could be availed of under various schemes such as:

(1) locating in an export processing zone,

(2) using bonded manufacturing warehouse (BMW) facilities, and

(3) importing under Customs Administrative Order 3-78 (CAO 3-78).

Or, an exporting firm could avail of tax and duty drawback for intermediate inputs used in export production under the individual drawback scheme of the Bureau of Customs. These schemes, however, (including the BOI export incentives) are often found to be tedious and burdensome (Manasan 1990), owing mainly to the numerous signatures and documentary requirements. Major improvements have been achieved with the implementation of the one-step shop for exporters, greatly reducing the time spent for incentives availment. Still, the procedures remain complex. These export promotion measures should be continually improved to (1) reach a wider coverage of new exports, and (2) increase the automatic application of the duty-drawback system. Efforts to streamline export procedures should be given priority. These include the greater application of the standard duty drawback and the more extensive use of common bonded manufacturing warehouses.

magnitude of losses. The specific and definite time period should hold whether the selection is a success or a failure.

A further reason for limiting the list of eligible industries at any time is the consideration that promotion becomes diluted the more broadly it is extended. Because of the costs of financing the promotion and the competition for scarce resources, promotion in the end can be only relative. It is impossible to promote everything at once.

This in itself does not prevent government promotion from eventually reaching a wide range of new industries. What is required is that the promotion be of limited duration so that in a sequential process some are phased out as others are phased in.

The set of recommendations would imply some radical changes on the functioning of the DTI and the BOI. It would require some retraining of personnel for them to become more adept in the financial, technical and economic evaluation of projects. It will require a different relationship with the private sector. Ideally, DTI and BOI should work very closely with the private sector, in the screening, prescreening, evaluation, and numerous other processes that lead to the final selection of industry.

A large part of the BOI function would deal with the exporting activity. It could then be geared to become more of a promotional body. The DTI and BOI could serve as an important source of information, e. g., on markets, technology, and others. The international trade section could be strengthened so as to be actively seeking markets, monitoring possible threats to our exports and acting on them. This would require a lot of training. A more detailed program should be planned before it can be implemented.

The difficulties of identifying cases 1 and 2 are so great that it is not surprising that most countries simply identify "pioneer" industries as especially deserving of promotion without much regard for their potential for future improvements in relative efficiency. It should be possible, however, to improve on this through studies of experience elsewhere, information on production-functions, forecasts of world demands and supplies and identification of market price distortions that can be remedied.

Going back to forms of incentives, fiscal incentives have traditionally formed the major part of the Philippine investment incentives system. Despite the weaknesses which were earlier pointed out in the study, they could remain part of the package. Some changes could be made — e. g., replacing the income tax holiday with tax credit on value-added or local content as was provided under BP 391. Studies should be made regarding which incentives are more efficient in terms of both administrative and economic efficiency. Still, so long as the IPP areas have

been correctly identified and selected, such weaknesses become less critical.

Over and above these BOI incentives, there are nonfiscal incentives and forms of assistance which have proved equally, if not more, important and effective — e.g., credit access, technology and information assistance, incentives for research and development, a more dynamic government role in human resource development. Experiences of the NIEs show the effectiveness of automatic credit access for exporters with documented export orders and the critical role of human resource development (World Bank 1993). These are further discussed in the following chapter.

CHAPTER 6

Reinforcing Other Policies for Industrial Development

The preceding chapters focused on the three major policy instruments which shape the overall industrialization policy — trade policy, the exchange rate regime, and the investment incentives system. This chapter turns to other government policy measures which could be critical to the achievement of industrial development. The main thrust of the analysis is to determine how these policy measures could be enhanced within the context of a consistent policy framework for industrial development which has emerged from the discussion in the earlier chapters.

In particular, this chapter looks at monetary policy and the role of technology. Undoubtedly, there is a host of other policies and factors affecting industrial performance including, for example, infrastructure, labor policy and industrial relations. The present study, however, is mainly concerned with policies and factors which could have systematic and non-uniform impact across industries. These could affect resource allocation within the industrial sector. The presumption is that resource misallocation has been the most serious constraint to a strong industrial performance.

Role of Monetary Policy in Industrial Development

There are certainly other important government policies affecting the performance of the manufacturing sector aside from trade, exchange rate, and investment policy. Some economists would even argue to the extent that improving the overall macroeconomic policy, as delineated by monetary and

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fiscal policy, is the single most important policy reform to foster economic growth, including industrial performance. It is not the objective of the present study to argue for or against this. Monetary and fiscal reforms should be part of the whole package of policies for economic development. The impact of these reforms on interest rate and the supply of investments would directly affect industrial performance. Indeed, macroeconomic stability which promotes savings and investment has been a basic ingredient in the success of the successful East Asian economies (World Bank 1993).

However, while trade, exchange rate and investment policies generally affect individual industries diversely, the impact of the overall macroeconomic policy, unless specifically altered, is more or less nondiscriminatory. Trade policy for example could favor the pulp and paper industry more than yarn production through higher tariffs for the former. The lower exchange rate would favor nontradables over tradables. Investments under the IPP are favored with fiscal incentives. The overall macroeconomic policy, however, would not generally differentiate between sectors, nor should it be designed to target specific sectors for promotion.

A problematic area is the monetary-fiscal-and-exchange-rate-policy nexus. Bound by stringent fiscal and monetary ceilings, the liberalization of capital account[21] has led to an extended trend of peso appreciation. Removing the barrier to the exit of capital added much to the perceived security of foreign stockholders in keeping their money here and encouraged the inflow (rather than the outflow) of capital. This is manifested, for example, in the sharp rise in portfolio investments. Given the budget deficit and monetary ceiling, this contributed to the current appreciation of the peso.

It is unfortunate that the capital account liberalization came at a time when trade liberalization has not been more fully implemented and when the impact of trade reforms has not been more fully realized. The process, however, is irreversible. The timing of reforms is often more dependent on political readiness. Doubtless, the economy would in time adjust to a more realistic exchange rate level. In the meanwhile, the export sector is being hurt. Hopefully, export producers would respond by increasing their productivity and becoming more world competitive, so that by the time the exchange rate has adjusted, they would be able to cope more advantageously with the global liberalization brought about by GATT.

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21 The capital account liberalization is brought about largely by the foreign exchange liberalization. There are still government regulations concerning capital flows. However, with the liberalization of the foreign exchange market, barriers to capital outflows became practically nil

However, what concerns the present study more is the use of policies which could directly discriminate between industrial sectors, affect the allocation of resources between them, and thus affect the overall industrial development. It is thus enough for the purposes of this study to ensure that the overall macroeconomic policy would maximize the supply of investment funds and determine interest rates reflective of the real scarcity of capital. Furthermore, monetary and fiscal reforms and reforms for the development of the capital market are ongoing, designed to improve the overall macroeconomic policy environment in general, which would work as well for the industrial sector.

This is not to say that monetary and fiscal policy could not be used as special instruments for selective promotion of industries. Indeed, several aspects have been used for this purpose. Fiscal incentives, for one, represent the major element of the investment incentives system. The agri-agra scheme has been a direct government intervention favoring agriculture; so is the CB rediscounting window for export an attempt to provide better credit access to exporters. Their impact, however, on the entire monetary and fiscal sector is minimal with respect to interest rate and the available investment funds.

How these instruments could be used for selective promotion is the focus of this section. The area of fiscal incentives has been discussed in the previous chapter on the investment incentives system. What remains is the use of monetary policy as such an industrial policy tool. Such would relate mainly to credit access. Easier access to credit for selected activities has been identified by various studies (World Bank 1993) as among the most effective promotion tools.

The previous chapter identified the nontraditional export producing activities as the key and target sector for selective intervention. If carried out successfully, export financing requirements for both long-term and short-term are expected to grow with the expansion into new export activities. Addressing this need would ease the bottlenecks before they are felt. Indeed, a program granting automatic credit access for exporters seems to have been a key element for almost all the successful Asian economies (Japan, South Korea, Taiwan, Thailand, Malaysia, and Indonesia). In varying ways for these countries, credit is automatically made available to firms with confirmed export orders (World Bank 1993).

The Philippines has had some experience in selective credit allocation for exports through the CB rediscounting window (Table 6.1). It comprises the most important export financing scheme for short-term working capital in the Philippines, accounting for 80 percent of preshipment and 100

TABLE 6 1

CENTRAL BANK REDISCOUNTING OF EXPORT LOANS IN THE PHILIPPINES

Year	Average Exchange Rate (P/$)	(a) Central Bank Export Loans Outstanding to Commercial Banks (P M)	(US$ M)	(b) Total Central Bank Loans Outstanding to Commercial Banks (P M)	(US$ M)	(c) Total Loans Outstanding of Commercial Banks (P M)	(US$ M)	(d) Commodity Export (US$ M)	(a)/(b)	(a)/(c)	(a)/(d)
1975	7.30	1,438	196.99	2,305	315 75	-	-	2,294	0.62	-	0.09
1980	7 57	6,318	834.61	9,321	1,231 31	77,198	10,197 89	5,788	0.68	0.08	0 14
1981	7.96	5,846	734.42	12,063	1,515 45	86,505	10,867 46	5,720	0 48	0 07	0 13
1982	8 60	6,122	711 86	13,296	1,546 05	98,240	11,423 26	5,021	0 46	0 06	0 14
1983	11.19	3,844	343 52	8,812	787 49	115,390	10,311 89	5,005	0 44	0.03	0 07
1984	16.85	2,092	124.15	4,835	286 94	120,355	7,142 73	5,391	0 43	0 02	0 02
1985	18 86	2,162	114.63	5,425	287 65	91,827	4,868 88	4,629	0 40	0 02	0 02
1986	20.40	1,174	57.55	3,487	170 93	88,325	4,329 66	4,843	0 34	0 01	0 01
1987	20.57	1,736	84.39	3,994	194 17	101,112	4,915 51	5,720	0 43	0 02	0 01
1988	21 07	1,999	94.87	3,678	174 56	126,615	6,009 25	7,074	0 54	0 02	0 01
1989	21.74	2,687	123.60	4,459	205 11	165,858	7,629 16	7,821	0 60	0 02	0 02
1990	24 38	4,594	188.43	6,814	279.49	199,645	8,188 88	8,186	0 67	0 02	0 02
1991	28.00	4,955	176.96	6,949	248 18	144,306	5,153 79	8.840	0 71	0 03	0 02
1992	25.92	1,905	73 50	3,115	120.18	236,117	9,109 45	9,824	0 61	0.01	0 01

Source: 1992 Central Bank Selected Philippine Economic Indicators

percent of post-shipment working capital export loan (Ali 1988). The availability of export financing for working capital could prove to be crucial to the extent that even confirmed export orders may not be filled without it. The amount of CB rediscounting export loans, however, has not been enough nor very consistent.

The CB outstanding export loans to commercial banks peaked during the period 1980-1982 at around P6 billion, going down to P1.9 billion in 1992, with up and down movements in between. Moreover, although this accounts for around half of total CB outstanding loans to commercial banks, the amount is minimal compared to the total outstanding loans of commercial banks (only around 1 percent in 1992). Furthermore, the amount represents only around 1 percent of commodity exports in 1992, indicating a very low export coverage. This also meant a very small number of exporters (around 200-300 out of around 4,000) with access to the CB export loans (Ali 1988). In contrast, export financing in Thailand reached up to around 40 percent of export value. Clearly, some improvements to granting credit access to exporters are needed.

The problem of export financing is, of course, more complex than simply providing access. There are inherent institutional distortions involved in lending to exporters which are predominantly small. Moreover, there are additional difficulties with respect to reaching indirect exporters. Commercial banks have by and large been unable to service the financing needs of the export sector. Their conservative approach has been a major problem which the various guarantee schemes have been unable to remedy. The efforts to improve risk pooling, e. g., by way of gathering and providing information on creditworthiness of exporters, have been ineffective. Ali (1988) suggests supplementing guarantee schemes with risk-reducing activities like technical assistance.

In general, a more detailed study is needed to examine further the options and solutions available which would lead to a more automatic credit access for exporters. Some practical suggestions are provided by Ali (1988) in Box 6.1.

Role of Technology in Industrial Promotion

Few would argue against the conclusion that the process of industrial development brings about structural change. Neither would there be much disagreement with the perception that structural change, brought about by technological change, induces economic growth and industrial develop-

BOX 6.1

REFORMS FOR ASSURING AUTOMATIC ACCESS TO EXPORT FINANCING

Reforms for assuring automatic access to export financing will involve modernization of the preshipment export financing system. Modernization of the export financing system is the first step in achieving equal and automatic access to preshipment export loans because it: (i) saves funds by eliminating waste and misuse; (ii) provides indirect exporters with access to export financing (taken up in Chapter XVII); (iii) reduces risk associated with lending to small exporters by using the input or output being financed by commercial handling banks as physical collateral; and (iv) institutes efficient and automatic administrative mechanisms.

Key elements in the modernization of the preshipment export financing system would include (i) disaggregating export loans; (ii) introducing automatic export loan disbursing mechanisms and automatic export loan pay-off mechanisms; (iii) creating quasi-physical collateral by using commodities financed by exports loans; (iv) introducing a domestic letter of credit (L/C) system; (v) developing a plan to combine export loans based on actual export orders with loans based on expected mechanism with speed and administrative convenience.

The automatic loan disbursement mechanism prevents abuse. Disaggregation of export loans amounts to classifying them by type of expense and granting these loans at the time payment is made. By eliminating waste arising from granting a loan before it is actually needed, the automatic loan disbursement mechanism increases efficiency.

To assure equal access to export financing for small producers, the conservative lending practices of commercial banks will have to be altered. An alternative to physical collateral must be provided because of smaller exporters who can play an important role in the country's export efforts, and those larger exporters who have already borrowed up to their collateral limits and who may find that even with confirmed orders from buyers abroad, they are turned down for preshipment loans. To overcome the hesitation of commercial banks, an effective preshipment export finance guarantee scheme should be established. While the design of the scheme will be influenced by information gathering and dissemination, risk pooling and risk-reducing activities, it should have certain characteristics: (i) preshipment guarantee should be optional, and not a mandatory requirement for receiving preshipment export loans; and (ii) underwriting risks needs to be shared between the guarantee agency and the commercial banks.

Lifted from Ifzal Ali, Sept. 1988, ADB.

ment. More than this, however, is the view that structural change is a necessary condition for economic growth and industrial development. This is the so-called "structuralist" view of economic development which is increasingly gaining ground (Justman and Teubal 1991). Over and above the orthodox market failures per se as a rationale for promoting industrialization, the "structuralist" view sees more fundamental failures in the process of growth and structural change which require specific intervention and an appropriate industrial policy.

In the structuralist perspective, the growth process of rising incomes, capital accumulation and structural change is not smooth but, rather, "kinked" at certain stages. That is, there are junctures or "nodes" in the production function where increases in the marginal productivity of capital and accelerated growth could occur. At these junctures, discrete choices have to be made. The optimal structural change need not happen automatically and may even be retarded if left alone to market forces. Specifically, a concerted accumulation of critical mass for a number of resources — labor skills and capital, for example — may be required to overcome this kink. The profitability of the investment in one area may depend on the level of investment in another. Thus, left to the market, the required critical mass for both would not automatically and simultaneously be reached (Justman and Teubal 1991). Thus, in addition to creating a favorable macroeconomic environment and correcting for orthodox neoclassical market failures, there is a need for an industrial policy that would stimulate such optimal structural change. Generally, this involves government involvement in generating skill-specific infrastructure.

This does not imply that the government should carry out the task of analyzing and then selecting the "right" development path. Few governments would have the resources and/or capability for such a complex task. Also, pointed interventions toward predetermined solutions are inferior to an "enabling" approach that promotes the participatory process in addressing development problems. The primary role of government should be one of coordination, serving as a catalyst for interaction among economic, as well as political, players. It also has a primary role in human resource and skills accumulation (to reach the critical mass).

The question is, how well or how able is the government in fulfilling this role? At least, the data on the expenditure on basic education as a percentage of GNP do not show the Philippines to be far behind (Table 6.2). It has been at par with Thailand, Korea, and even Singapore in this respect. Of course,

TABLE 6 2

PERCENTAGE OF GNP ALLOCATED TO EDUCATION SAVED DUE TO LOWER FERTILITY RATES

Economy		Expenditure on Basic Education as a Percentage of GNP
Hongkong		
	1975	2.0
	1980-1981	1.7
Japan		
	1975	4.2
	1988-1989	2.8
Korea, Republic of		
	1975	1.9
	1988-1989	2.8
Malaysia		
	1980-1981	4.4
	1988-1989	4.0
Singapore		
	1975	2.1
	1980-1981	2.2
Thailand		
	1975	2.8
	1988-1989	2.6
Philippines*		
	1975-1982	2.0
	1990-1992	2 8

*Taken from the budget on education as a percentage of GNP.

given their much higher level of incomes, this results in lower per capita education expenditure and possibly lower quality of education. Even in terms of average number of schooling and percentage of tertiary graduates, the Philippines fares better than most Asian countries, and well above the average for developing countries (Table 6.3). Other indicators of technology are less promising. The number of scientists and technicians engaged in research and development (R & D) in the Philippines has been less than half that of the average for developing countries for the period 1986 to 1989. The R & D expenditures as a percent of GNP averaged at less than 0.2 percent in the 1980s (Table 6.4). This is much lower than the 0.5 average for developing

TABLE 6.3

HUMAN CAPITAL FORMATION

Country	Mean Years of Schooling (25+) 1992 (total)	Tertiary Graduates (as % of corresponding age group) 1987-1990	R&D Scientists and Technicians (per 10,000 people) 1986-1989
Philippines	7.6	6.7	1.3
Thailand	3.9	5.0	1.6
Malaysia	5.6	1.4	4.0
Korea	9.3	-	22.0
Singapore	4.0	5.8	18.7
Indonesia	4.1	0.6	-
Aggregates			
Developing Countries	3.9	1.2	3.0
Industrial	10.0	19.2	41.0
World	5.2	3.8	12.0

Source: *Human Development Report, 1994.*

TABLE 6.4

R & D EXPENDITURES AS PERCENT OF GNP (1984)

Country	%
Philippines	0.12
Thailand	0.37
Indonesia	0.33
Singapore	0.89
Sri Lanka	0.18
Aggregates (1985)	
World	2.22
Developing Countries	0.54
Developed Countries	2.62

Source: *1991 UNESCO Statistical Yearbook.*

countries and lower than that of our successful Asian neighbors.

The structuralist view would take this as an explanation for the low level of technology of Philippine industries. The argument would be that government had not invested adequately in specific skills accumulation to spur the corresponding investment in new technology which would have induced structural change and industrialization. This could be possible, but only to a small extent. Our more successful Asian neighbors were very much in the same state as the Philippines had been. Indeed, in terms of level of education, up to the 1960s, the Philippines was second only to Japan. A large part of the explanation for the low level of technology of our industries would lie on the protracted protectionist, inward-looking industrialization policy the Philippines adopted for more than three decades. The lack of competition, the small domestic market, the penalty on exports, and rent-seeking activities, which were all the result of such policy prevented investment in new technologies and in more productive industrial activities.

This highlights, again, our original conclusion that a move toward a more open and liberal trade policy is necessary to propel industrial and economic development.

Nonetheless, the government recognizes at least the important role of science and technology (S & T) in economic development. Among other things, articulated in the Philippine Development Plan are the strategies for:

"(1) the expansion of S & T education and training, and

(2) the development of higher quality S & T manpower in areas which offer vast growth opportunities in the near future."

This implies that the government is at least aware of the need to take a positive role in technology and skills infrastructure building. Again, it cannot be overemphasized that the task of identifying which sectors to select is very difficult. The government could as well choose to simply concentrate on fulfilling its primary role in coordination, serving as a catalyst for interaction among economic as well as political players, and providing better quality, basic education.

CHAPTER 7

Efficiency, Competitiveness, and Structure of the Philippine Manufacturing Industries

Introduction

A stellar performer during the early 1950s, the manufacturing sector appears to have taken the course of a drifting star. The consistently declining total factor productivity (TFP) of the economy as a whole since the early 1970s has been traced by Hooley to the negative productivity growth of the manufacturing sector which had fully offset the positive productivity gains of the agricultural sector. Not surprisingly, the country's record of industrial growth has been the lowest among ASEAN within the past two decades or so. Little structural change seems to have taken place. Light consumer goods industries (such as food and apparel) have increased their share of manufacturing output while the capital goods sector (metal products and machinery) has suffered a decline. There is hardly any of the diversification and deepening of the industrial structure that has been observed in those of our more successful ASEAN neighbors. Employment creation by the sector not only stagnated but also declined in terms of share of economy-wide employment, from 12 percent in the 1960s to 10 percent in the 1980s. The sector has thus failed to make a dent on the equity problem that continues to plague the country (Balisacan 1993). A consequence of such mediocre performance has been the loss of the country's competitiveness in world markets, as evidenced by the country's declining share of world exports.

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What has hindered the manufacturing sector from unleashing the potentials that are believed to lie behind its lackluster performance? Our hypothesis is that this has been due mainly to the weakness of the competitive forces to which most domestic industries and firms have so far been subjected to. As a result of a confluence of historical factors and policy choices, manufacturing industries had become concentrated and oligopolistic (SGV 1992). And even where numerous small firms coexisted with a few large-scale firms in most industries, they accounted for only about a tenth of manufacturing value-added in the early 1980s. Given the thin layer of medium-sized firms in between, the large firms easily accounted for about four-fifths of value-added in the manufacturing sector.

Such an industrial structure would not have been as injurious to efficiency and competitiveness had the external market remained largely open. That is, import discipline would have provided the challenge of effective competition to large, oligopolistic firms. Moreover, domestic firms would have been exposed to international best practice which is a necessary ingredient to achieving world- class competitiveness. Unfortunately, however, this had not been the case. As noted in Chapter II of this volume, the Philippines, in contrast to other Asian success economies, had opted for a protracted application of import-protection policy. In so doing, it also reduced its chances of taking full advantage of the third possible source of competitive discipline, i.e. the export market. Exporters were put at a disadvantage vis-a-vis other foreign exporters who faced free-trade prices for their inputs. Moreover, domestic currency tended to become overvalued, discouraging exports on two counts. First, overvaluation rendered exporting a less attractive alternative to selling in domestic markets which were made lucrative by protection. Second, by artificially making the domestic currency expensive, overvaluation also made export goods less attractive to foreign buyers. By thus failing to subject domestic firms to the discipline of competition, protection policy has blunted the edge that cuts in the arena of world markets.

Of course, there is the counter-hypothesis offered by strategic trade policy that import protection policy can act as export promotion. Protection policy in the presence of scale economies might allow producers to go down their marginal cost curves leading to an increased share of both domestic and export markets (Krugman 1984). But though there have been some suggestive results in support of this hypothesis (Krugman 1987; Baldwin and Krugman 1988; Venables and Smith 1986), more recent empirical testing has put such results into question. Dick (1994) found little support for the

hypothesis in either US import-competing industries in general or in industries characterized by the strongest increasing returns. Besides, empirical tests of infant industry protection in developing countries, with a few exceptions, have failed to find the expected positive links between productivity and import protection. In any event, the country's experience with infant industry protection does not offer much room for the belief that it is numbered among these few exceptions.

In this chapter, we attempt to provide empirical support to our hypothesis by presenting the results of the PIDS-DLA studies on the effects of the Trade Policy Reform (TPR) on the manufacturing sector and eight selected industries. The studies analyze how the dismantling of much of the import-protective mechanism during the 1980s had infused a good deal of competitive discipline into the industrial sector, and ultimately had a generally positive effect on the market structure, efficiency, and competitiveness of manufacturing industries. In addition, the different industry studies examine the price and nonprice factors that determine the industries' and firms' ability to adjust to such a major policy change.

Methodology

The study has employed a number of indicators of protection, efficiency, competitiveness, and market structure (see Technical Appendix, Vol II. of *Catching Up With Asia's Tigers*, for details). Implicit and effective rates of protection are computed at the plant and industry (5 and 3 digit PSIC) level. Efficiency is likewise measured and evaluated using the domestic resource cost (DRC) criterion. Domestic resource costs, measured in shadow prices, per unit of net foreign exchange earned or saved, are compared with the shadow exchange rate. The direction of changes in efficiency is then analyzed in relation to corresponding changes in effective protection. In particular, the individual industry studies examine at some length the market structure effects of protection in terms of import penetration ratios, price-cost margins, and concentration indices (four-plant concentration ratios and the Hirschman-Herfindahl index). From these are inferred the changes in the degree of competition faced by the firm after the policy reform. We also address the important question of how the policy reform might have affected the small and medium-scale enterprises (SMEs), in view of the possibility that, as some studies have shown (e.g. Ho 1974 for Taiwan), trade liberalization might be inimical to the growth of SMEs.

Data

The study, to our knowledge, constitutes the first attempt ever to utilize plant-level data from industrial censuses of the country to analyze the effects of the trade policy reform. However, a number of data limitations must be noted. First, although the TPR was officially launched in 1981, detailed plant-level data before 1983 are no longer in usable form. Thus, we were obliged to use 1983 data to represent pre-reform conditions. In a sense the representation is not too far-fetched since most of the protective barriers were restored on that year as the country entered into the deepest economic recession in its postwar history. Relaunched in 1986, the policy reform would normally take a number of years to have its effects felt. Moreover, the reform has been undergoing several phases of implementation well up to the 1990s. Unfortunately, the only other set of census plant-level data available is that of 1988. The results should therefore be seen as representing only the partial effects of the ongoing trade reform. Some attempt had been made to supplement these with data from a sample survey of firms for the years 1986 and 1991 in the eight industries chosen for analysis. However, the small number of firms willing to respond to our survey severely limited its representativeness and, in certain cases, led to results inconsistent with those derived from census data. A second important caveat is the difficulty, if not the impossibility, of disentangling the effects of the trade policy reform from those of the overall recovery of the economy in 1988 as a result of the package of macroeconomic stabilization measures adopted after 1985. Similarly, it is practically impossible to dissociate the general inefficiency and lack of competitiveness of manufacturing industries observed in 1983 from the overall weakness of the economy at the time

Trade Policy Reform and the Structure of the Manufacturing Sector, 1983 and 1988

As a result of the TPR, which consisted of the tariff reform and the simultaneous dismantling and tariffication of quantitative restrictions (QRs) on a wide range of imported goods (see Tan, Special Paper No. 1 and Cataylo-de Dios, Special Paper No. 2 of this volume for a detailed discussion of the tariff reform and import liberalization policies, respectively), the average implicit tariff in the manufacturing sector declined from 32.2 percent in 1983 to 29.3 percent in 1988 (Table 7.1) Furthermore, the sector's effective protective rate (EPR) on the average went down from 42.8 percent in 1983 to 28.3 percent in 1988. There was also a corresponding reduction in the inter-

TABLE 7 1

POLICY AND MANUFACTURING SECTOR INDICATORS
1983 and 1988

Policy Indicators	**1983**	**1988**	**1988/1983**
EPR (Manufacturing Ave)	42.20	28.30	0.66
Standard deviation	80.10	54.60	0.68
Manufacturing (1+EPR)/Aggie (1+EPR)*	143.60	135.10	0.94
NTM Coverage	32.50	10.80	0.33
Nominal Effective Exchange Rate (NEER)	100.00	189.80	1.90
Real Effective Exchange Rate (REER)	100.00	119.40	1.19
Manufacturing Sector Indicators			
Manufacturing Value-added			
Current prices	P55,478 M	P133,824 M	2.41
Constant (1972) prices	P14,634 M	P16,310 M	1.11
Real Imports/Real GDP*	12.59%	26.10%	2.07
Real Exports/Real GDP*	8.31%	22.63%	2.72
Manufactured Imports/Total Imports	62.00%	77.00%	1.24
Manufactured Exports/Total Exports	63.00%	72.00%	1.15
Number of manufacturing plants	5,733	11,488	2.00
4-Firm Concentration Ratio	70	63	0.90
Total Number of Workers*	700,895	854,951	1.22
Workers per Plant**	122	74	0.61
Census Value-added per Plant*			
Current prices	P9.677 M	P11.649 M	1.20
Constant (1972) prices	P2.553 M	P1.420 M	0.56
Census Value-added per Worker**			
Current prices	P79,153	P156,528	1.98
Constant (1972) prices	P20,879	P19,077	0.91

*Price indices at 1985 base year.

**Includes plants with 5 or more workers.

Sources of data: Census of Manufacturing Establishments, 1983 and 1988.
NEDA Statistical Yearbook, 1992.
ADB Key Indicators of Asian and Pacific Countries, July 1991, vol. xxvi.
Medalla, Erlinda (1991).
de Dios, Loreli (1994).
Tan, Elizabeth (1993).
World Bank Country Report for the Philippines, 1993.

industry dispersion of EPRs. These indicate a reduction not only of the absolute levels of protection, but perhaps more importantly, of the differences in relative protection and hence of the differential incentives to resource flows across industries. In addition, the import liberalization policy (ILP) brought about a sharp decline in non-tariff measure (NTM) coverage of manufactured products in 1988, with a concentration on imports of intermediate inputs to production especially since 1986. In relative terms, the greater degree of protection traditionally accorded to the manufacturing sector vis-a-vis the agricultural sector was also reduced (Medalla 1992).

Although the TPR had been generally divorced from a deliberate exchange rate policy, some nominal and real depreciation of the peso occurred between 1983 and 1988. However, the real effective exchange rate (REER) rose at a lower rate than that of the nominal effective exchange rate (NEER), indicating that the country had failed to take full advantage of the possible effects of simultaneous import-substituting and export-enhancing effects of the currency depreciation.

The initial impact of the policy reform is evident in the increase in the share of real imports to real GDP after 1986. To be sure, part of this may be due to the overall improvement of the economy as it moved out of the recession. However, the increased pressure on the manufacturing sector can be gleaned from the unmistakable rise in the share of manufactured imports (SITC 5-9) to total imports between 1983 and 1988. It can therefore be presumed that the import competition faced by the manufacturing sector in 1988 was much stronger than that in 1983.

As noted earlier, the competition from increased imports would have subjected the sector to the discipline of cost-reduction and improved efficiency. In addition, the TPR was accompanied by a boost to internal competition among firms within industries through a process of deconcentration of manufacturing industries. This can be observed from the decline in the average 4-plant concentration ratios between 1983 and 1988, a finding that had been first noted by the World Bank in their country report of 1993. Again, such a phenomenon could not be attributed wholly to the TPR. The deep recession that occurred between 1983 and 1985 in itself must have caused a radical industry shakeout, forcing the exit of an untold number of unprofitable and inefficient firms and facilitating the adjustment toward a healthier manufacturing sector. Nevertheless, without the TPR, one would perhaps not have been able to observe such drastic changes that altered even the size-structure of industry itself. The eventual recovery starting 1986 caused a net entry of plants that not only doubled the number of manufac-

turing establishments (with five or more workers) between 1983 and 1988 but also exhibited characteristics radically different from those of 1983. As a general rule, average plant sizes were smaller in 1988, when measured in terms of average size of workers or value-added per plant. Such changes are consistent with the overall deconcentration of industries noted earlier.

Furthermore, as a result of the reduction in the biases against exports originating from protection policy, an improvement in competitiveness in world markets can be observed from the increased export orientation of the economy in 1988. There is a substantial rise in the ratios of real exports to real GDP and of manufactured exports to total exports. Thus, the TPR can be said to have greatly contributed to the intensification of the competitive pressure on the manufacturing sector from domestic and foreign sources.

Did such an increase in competitive pressure lead to greater efficiency in the country's manufacturing industries? In the following sections, we shall attempt to provide an answer to this question. We shall first trace the links in the chain of adjustment responses of manufacturing industries and firms to the TPR. Then we shall proceed to examine the implications of such adjustment process on the efficiency and competitiveness of the country's manufacturing industries.

Industrial Structure and the Trade Policy Reform

Manufacturing industries in the Philippines had been observed to be highly concentrated due to a number of initial conditions and policy decisions. (Lindsey 1977; de Dios 1986). Government itself had been identified in a number of cases as having been responsible for the setting up of entry barriers through privileges and incentives granted to specific industries and firms or through deliberate rules on 'overcrowded industries' (SGV 1992). Moreover, a number of authors have traced the tendency toward capital-intensity in manufacturing to the capital-cheapening policies (Power and Sicat, 1971; Bautista, Power, and Associates 1979), possibly raising entry barriers in the form of sunk costs or excess capacity. In addition, limits were set to the number of participants in certain industries, the more well-known of which was the progressive car manufacturing program. But most relevant to the topic of trade protection is the government's policy of direct intervention in the importation of principal raw material imports by industries and firms. In an import-dependent environment that had characterized the country's manufacturing sector, quantitative restrictions on crucial intermediate inputs served as powerful entry barriers to industries.

Moreover, the tariff structure before the trade reform was found to be biased against small and medium-sized enterprises (SMEs). The industries that were found to be least protected were those in which SMEs were relatively important (Anderson and Khambata 1981). This phenomenon can be explained in part by the better organization and stronger lobbying power of the large establishments (LEs) for higher protection. Furthermore, the prevailing system of QRs inevitably involved a scale bias, since SMEs are always at a disadvantage vis-a-vis large establishments when confronted with nonmarket, bureaucratic decisions on import allocation of intermediate inputs and capital goods.

While a number of these policies have remained in force in 1988, the TPR, by narrowing down the tariff differential across industries and by gradually dismantling the import allocation system, helped to reduce the scale-bias of the protective system.[22] It provided freer access to and lower prices of imports of capital equipment and other inputs to production to firms of all sizes. This by itself reduced the height of entry barriers to SMEs and encouraged their entry into industries. The result is the big jump in the number of manufacturing establishments observed in 1988, mostly belonging to the small and medium-size category. Indeed the size distribution of the manufacturing sector also underwent a shift in 1988 toward an increased

22. This can be verified from the results of regression analysis using the share of SMEs in the value-added of 5-digit PSIC industries as dependent variable, and corresponding industry EPR as independent variable. The following results were obtained:

1983. $SMESHR_j = 0.1888 - 0.0003\ EPR_j$
$(0.0350)\ (0.0003)$
$t = 13.967 \quad t = -1.018$

$\bar{R}^2 = 0.0001$
$F = 1.037$

1988: $SMESHR_j = 0.2828 + 0.0064\ EPR_j$
$(0.0906)\ (0.0018)$
$t = 3.120 \quad t = +3.496$
$\bar{R}^2 = 0.0396$
$F = 0.0006$

where $SMESHR_j$ = share of SMEs in the value-added of 5-digit PSIC industry j
EPR_j = effective protection rate of 5-digit PSIC industry j

The equation for 1983 shows some tendency for the system of effective (tariff) protection to be biased against SMEs. The low level of significance may be due in part to the tariff reform that had started in 1981. In 1988, this bias has disappeared and the system might even have tilted in their favor.

TABLE 7.2

SIZE STRUCTURE OF PHILIPPINE MANUFACTURING INDUSTRIES
1978, 1983, and 1988

	1978	%	1983	%	1988	%
Number of Establishments						
Total Manufacturing	4,327	-	5,593	-	9,141	-
10-99 employees	3,583	83.0	4,368	78.1	7,639	83.6
100-199 employees	307	7.0	506	9.0	680	7.4
Subtotal: SMEs	3,890	90.0	4,874	87.1	8,319	91.0
200 or more employees	437	10.0	719	12.9	822	9.0
Total Employment						
Total Manufacturing	428,107	-	699,491	-	842,888	-
10-99 employees	94,590	22.0	126,218	18.0	202,910	24.1
100-199 employees	42,568	10.0	70,949	10.1	97,670	11.6
Subtotal: SMEs	137,158	32	197,167	28.1	300,580	35.7
200 or more employees	290,949	68.0	502,324	71.8	542,308	64.3
Census Value-added (000 pesos)						
Total Manufacturing	8,629,169	-	55,455,313	-	132,763,175	-
10-99 employees	1,251,713	15.0	5,876,413	10.6	15,610,512	11.8
100-199 employees	1,023,160	12.0	4,680,762	8.4	14,847,563	11.2
Subtotal: SMEs	2,274,873	27.0	10,557,175	19.0	30,458,075	23.0
200 or more employees	6,343,296	74.0	44,898,138	81 0	102,305,100	77 1

Sources: National Census and Statistics Office. *Census of Establishments*, Manila, Philippines.
Tecson, Valcarcel, and Nuñez "The Role of Small and Medium-Scale Industries in the Industrial Development of the Philippines," ADB.
World Bank "The Philippines An Opening for Sustained Growth," 1993.

contribution of the SME sector, as can be readily observed from Table 7.2. While there had been a declining trend in SME participation in manufacturing industries in terms of number of establishments, employment and value-added between 1978 and 1983, this seems to have been reversed in 1988. As a further consequence, we observed a deconcentration of the structure of the country's manufacturing industries.

In addition, a deconcentration of industrial activity from Metro Manila and the National Capital Region (MM-NCR) could also be noted. LEs have always been observed to be more highly concentrated in the MM-NCR than SMEs. This has been attributed to the bias of past trade and industrial policies toward large-scale, capital-intensive industrialization, which depended heavily on imported sources of inputs and equipment. This necessitated locating in and around the metropolis to reduce the cost of transporting inputs from ports and airports. Furthermore, being domestic market-oriented, firms tended to stay close to the main market. To a certain degree, such geographic concentration might also be partly attributed to the need of large firms to stay close to the sources of bureaucratic decision making on industrial incentives and even on protection itself. In contrast, SMEs tend to be more footloose and hence, geographically dispersed. The increased importance of SMEs in industrial activity observed earlier is thus consistent with the decline in the share of MM-NCR's share of manufacturing sector output from 45 percent in 1983 to 41.5 percent in 1988. It follows that sustaining the momentum of the TPR would contribute to more regional dispersal of industries because of further reduction of biases against SMEs. Corollary effects would be the spread of rural industrialization and the creation of more off-farm employment, leading to a more equitable distribution of industrial activity and incomes across regions of the country.

Efficiency and Competitiveness of Manufacturing Industries

The different indicators provided in the preceding section seem to point to one conclusion: that the domestic market environment in 1988 was more conducive to competition than before it. The next logical question to ask is whether the TPR also enhanced efficiency in manufacturing industries.

Table 7.3 classifies industries according to their degree of efficiency and relative effective protection 'before' (i.e., 1983) and 'after' (1988) the reform of trade policy. We relaxed the strict efficiency criterion (i.e.,

TABLE 7.3

3-DIGIT MANUFACTURING INDUSTRIES CLASSIFIED BY RELATIVE EFFECTIVE PROTECTION AND EFFICIENCY 1983 and 1988

EPR	DRC/SER					
	Efficient* (0<D/S<1.2)		Inefficient* (1.21<D/S<2.0)		Very Inefficient* (2.01<D/S)	
	1983	1988	1983	1988	1983	1988
High*		314	314	342	321	321
				381	355	371
					356	386
					361	
					369	
					386	
Medium*		313	313	341	341	363
		352	353	353	342	383
			354	384	351	
					362	
					363	
					381	
					384	
Low*	322	311	311	323	382	351
	331	312	312	331	383	385
		322	352	361		
		332	371	362		
		355	390	369		
		356		382		
				390		
Penalized*	324	324	323	372		
	332	354	372			
	385					

*See text for explanation of classification scheme.

Source of basic data: *Census of Manufacturing Establishments*, 1983, 1988.

DRC/SER = 1.0) in order to take into consideration possible measurement errors. Thus, the following efficiency classification scheme is adopted:

DRC/SER	Efficiency Classification
0 < DRC/SER < 1.2	Efficient
1.21 < DRC/SER < 2.0	Inefficient
DRC/SER > 2.0	Highly inefficient
DRC/SER < 0	Foreign exchange dissaver

As will be noted in this admittedly arbitrary classification, a less stringent criterion for efficiency is adopted by admitting a 20 percent excess of DRC over SER. An industry whose DRC exceeds the shadow exchange rate by more than 20 percent is considered inefficient, while one with a DRC more than twice the SER is classified as highly inefficient.

Considering that the EPR is a relative concept, its value, taken in isolation, cannot be used to judge whether an industry is receiving high or low protection. Hence, we compared an industry's EPR with that of the manufacturing sector average and derived a classification scheme of relative effective protection, consisting of high, medium, or low protection. Average EPRs were 42.8 and 28.3 for 1983 and 1988 respectively. An industry is classified as receiving 'high' effective protection if its EPR exceeds twice the manufacturing sector average for the year. On the other hand, an industry receiving less than the average EPR is classified as receiving 'low' effective protection. In between them are industries with 'medium' protection. An industry with a negative EPR, however, is being penalized by the protective system. Thus the following protection classification scheme for 1983 is adopted:

EPR	Relative Effective Protection Classification
85.6 < EPR	High protection
42.8 < EPR < 85.6	Medium protection
0 < EPR < 42.8	Low protection
EPR < 0	Penalty

Because the average EPR is lower at 28.3 in 1988, the lower limit for high protection becomes 56.6.

Following the above classification, Table 7.3 yields a number of observations on the possible links between efficiency and relative effective protec-

tion. In 1983, most of the highly inefficient 3-digit PSIC industries were receiving either high or medium effective protection. In contrast, no efficient industries were highly protected. Instead, they were either receiving lower protection than the average manufacturing industry or were being penalized by the protective structure. In the 'post-reform' year 1988, there is a conspicuous reduction in the number of highly inefficient industries, i.e., from 15 to 7. On the other hand, the number of efficient industries more than doubled in 1988 from 5 to 12, although the number of inefficient industries increased from 11 to 12. Moreover, about half of the industries were receiving low protection in contrast to less than a third in 1983. Overall, therefore, industries in 1988 tended to congregate in the efficient and inefficient ranges and were generally receiving less protection than the average manufacturing industry. There was also a decline in the number of industries being penalized by the protective structure.

The aforementioned observations suggest an inverse relationship between protection and efficiency. This hypothesis is confirmed by the results of regression analysis. In 1983, DRC/SER of 3-digit PSIC industries was found to be directly and significantly determined by effective protection (EPR). The equation for 1983 was:

$$\text{DRC/SER} = \underset{(0.7860)}{1.2145} + \underset{(0.0020)}{0.0177}\ \text{EPR}$$
$$(R^2 = 0.7200)$$

However, in 1988, this relationship was no longer significant.

$$\text{DRC/SER} = \underset{(0.8036)}{1.4630} + \underset{(0.0056)}{0.00093}\ \text{EPR}$$
$$(R^2 = 0.0867)$$

(Figures between parentheses under the coefficients are standard errors.)

This can be explained by the simultaneous decline in both DRC/SER and EPRs after the TPR and the observed narrowing down of their inter-industry differentials, as attested to by the decline in their standard deviation.

To determine whether the trend toward improved efficiency among industries could be attributed to the decline in their effective protection resulting from the TPR, the *changes* in DRC/SER were subsequently re-

gressed against corresponding *changes* in (absolute) EPR. The following estimate was obtained:

$$\% \text{ change DRC/SER} = \underset{(0.0694)}{0.0789} + \underset{(0.2355)}{1.3662^{*}} \% \text{ change EPR}$$

* t value: 5.800, significant at 0.1%

Adjusted R^2 = 0.5383
F = 33.643

Efficiency levels are thus seen to have been highly responsive to changes in effective protection.

A more detailed observation of shifts in efficiency (inefficiency) levels at the 5-digit PSIC level of aggregation is provided for in Chapter 1, Vol. II of this book. We summarize below the observed results:

Table 7.4 indicates that in 1988, 41 percent of 5-digit industries were efficient, in contrast to only 22 percent in 1983. Moreover, the majority (i.e., 165 industries) were previously inefficient industries that became either efficient or less inefficient in 1988. Thus, three-fourths of the total number of industries for which DRCs could be estimated in both years moved in the direction expected by policy.

Determinants of Allocative Efficiency of Manufacturing Industries

To further explore the question of what factors determine inter-industry differences in allocative efficiency, we performed a multiple-regression analysis with sectoral DRC/SERs as dependent variable. In addition to sectoral EPRs[23] which are assumed to capture the effects of protection policy, we introduced measures of productivity, export orientation, and import penetration as independent variables.

We hypothesized that being a labor-abundant country, the Philippines' comparative advantage lies in labor-intensive production, so that it will tend to be less efficient in capital-intensive industries. Thus, *ceteris paribus*, capital intensity is hypothesized to influence DRC/SER negatively.

23. Because of the absence of export and import data in the Census of Manufacturing, we had to match 5-digit PSIC industries with I-0 sectors and used I-0 data for the regression analysis.

TABLE 7.4

CHANGES IN EFFICIENCY CLASSIFICATION OF 5-DIGIT PSIC INDUSTRIES

Efficiency Classification 1983	1988	Number of Industries (5-Digit PSIC)	Share (%)
Efficient	Efficient	32	12
Inefficient	Efficient	75	29
Inefficient	Less inefficient	90	34
Subtotal		197	75
Efficient	Inefficient	27	10
Inefficient	More inefficient	40	15
Subtotal		67	25
TOTAL		264	100

Source: Chapter 1 of *Catching Up With Asia's Tigers*, Vol. II.

The influence of labor productivity on efficiency is straightforward: the more productive an industry's labor force, the greater its efficiency.

Industries that are able to compete in world markets are also bound to be efficient. The greater an industry's export orientation (i.e., measured as the ratio of its exports to total output), the greater the probability that it will have a lower DRC/SER.

The greater the ability of competing imports to break into the market of a domestic industry, the more likely the industry would be inefficient. Thus, one can expect import penetration (measured as the ratio of imports to total domestic demand for the industry's output) to have a negative influence on industry efficiency. Yet, greater exposure of an industry to imports induces it to become more efficient, so that higher import penetration might also make for lower DRC/SER ratios. The influence of the import penetration variable on industry efficiency is thus, ambiguous.

Finally, as already discussed and verified through simple regression analysis, the structure of 'pre-TPR' effective protection tended to give more protection to the more inefficient industries. Precisely to remove such a bias

against efficient industries, the TPR was designed to provide lower and more uniform effective protection across industries. One could therefore hypothesize that the 'post-TPR' structure of EPR would no longer show any tendency to provide more effective protection to inefficient industries than to efficient ones.

In equation form, the hypothesis to be tested is as follows:

$$DRC_j/SER = f\,(\underset{(+)}{EPR_j},\ \underset{(+)}{(K/L)_j},\ \underset{(-)}{(Q/L)_j},\ \underset{(+)}{(X/Q)_j},\ \underset{(?)}{(M/Q)_j})$$

where

DRC_j/SER = ratio of an I-O sector j's DRC to the shadow exchange rate;

EPR_j = effective protection rate of sector j;

K_j/L_j = ratio of sector j's capital cost to number of workers;

Q_j/L_j = ratio of sector j's output to number of its workers;

X_j/Q_j = ratio of sector j's exports to its output value;

M_j/Q_j = ratio of sector j's competing imports to output value;

(The sign between parentheses provides the hypothesized direction of influence of each variable. Where the relationship is ambiguous, a question mark is provided.)

The results of the multiple regression analysis for 1983 and 1988 are presented in Table 7.5 and appear generally to confirm the hypothesized relationships. The structure of effective protection in 1983 explained very significantly inter-sectoral differences in efficiency levels. That is, the protective structure was such that the more inefficient an industry, the higher the effective protection it received.[24] EPR turned out to be an even more significant explanatory variable of inefficiency than capital-labor ratio which was usually the most powerful determinant in the rest of the equations. In contrast, EPR lost its significance as an explanatory variable in 1988. The negative sign of the regression coefficient might even indicate the effects of some adjustments to redress the previous tendency of the protective structure to discriminate against efficient sectors, by providing less protection to inefficient ones. However, the explanatory power of the 'post-TPR' structure of EPR is too weak to warrant any importance to be attached to the sign.

24. It must be noted that the 1983 regression equations did not include export-orientation and import-orientation. This was due to the absence of export and import data in the 1983 I-O table.

TABLE 7 5

DETERMINANTS OF EFFICIENCY OF PHILIPPINE MANUFACTURING INDUSTRIES

Independent Variables	Regression Coefficients			
	1983	1988 (1)	1988 (2)	1988 (3)
Intercept	0.019 (0.2744) t = 0.069	2.3295* (0.6001) t = 3.882	1.8511* (0.1977) t = 9.361	2.0039* (0.2717) t = 7.377
Effective Protection (1 + EPR)	0.0120* (0.0014) t = 8.850	-0.0032 (0.0038) t = -0.845		-0.0032 (0.0038) t = -0.836
Capital Intensity (K/L)	7.30 E-7* (2.30 E-7) t = 3.242	6.558 E-8* (2.00 E-8) t = 3.450	6.6391 E-8* (2.00 E-8) t = 3.503	6.610 E-8* (2.00 E-8) t = 3.462
Labor Productivity (Q/L)	-0.0052* (0.0018) t = -2.888	-0.0051*** (0.0027) t = -1.912	-0.0053*** (0.0027) t = -1.993	-0.0051*** (0.0027) t = -1.900
Export Orientation (X/Q)[a]		-0.1699** (0.0676) t = -2.513	-0.1441** (0.0602) t = -2.392	-0.1789** (0.0703) t = -2.544
Import Orientation (M/DD)				0.0155 (0.0238) t = 0.483
$\bar{R}^2$	0.4260	0.0896	0.0917	0.0840
F Value	31.681*	4.151*	5.309*	

[a]Dummy variables used: 0 if X/Q = 0 to 5% ; 1 if 5.1% to 10%;
2 if 10.1% to 20% , 3 if 20.1% to 30%;
4 if 30.1% to 50% ; 5 if 50.1% to 70%;
6 if 70.1% to 90% ; 7 if greater than 90%

Level of significance: *: 0.01% to 0.90%
**: 1 0% to 5.0%
***: 5.1% to 10%

Nevertheless, the result indicates that the TPR seemed to have removed most of the bias of the protective structure against sectoral efficiency.

The capital-labor ratio exerted a very significant influence on inter-sectoral differences in efficiency levels in both years. Similarly, except for one or two subsectors, this variable turned out to be a consistent determinant of inter-plant differences in efficiency in the eight industry studies presented in Vol. II. This result tends to confirm the conventional wisdom behind the oft-repeated caution against incentive policy biases toward capital intensity in a labor-surplus economy like the Philippines.

The level of labor productivity is also another important variable that cannot be ignored because of its significant influence on sectoral efficiency levels 'before' and 'after' the TPR. Generally, low wages paid by manufacturing sectors in a labor-surplus situation are no guarantee of comparative advantage. Only when the high productivity of a sector's workforce, everything else being the same, can translate such low wages into lower costs per unit of foreign exchange earned or saved can the sector be said to have comparative advantage.

The degree of exposure to world-class competition makes a significant difference in sectoral efficiency levels. Although the direction of causation might also run from efficiency to export orientation, there are strong reasons to suppose why the influence of the latter on the former is highly significant, as the regression results for 1988 suggest. First, exporting exposes and prods producers to move toward international best practice. Second, competition with producers from other exporting countries as well as with those of the importing country forces exporters to pay more attention to production cost and product quality than they would if they were only selling in protected domestic markets. Third, selling to the world breaks the limits of domestic market demand, allowing greater specialization to take place and scale economies to be achieved. Fourth, customers or users of a product could be important sources of information that could prove crucial for technical innovation to improve product processes or quality. Since users in export markets are generally more demanding and more exposed to international standards of excellence than domestic users in protected markets, exporting could provide the avenue for such informal (and often free) technology transfers.

Finally, as earlier hypothesized, the import-penetration variable did not turn out to be a significant determinant of inter-sectoral differences in efficiency, although the positive sign seems to support the proposition that

sectors exposed to greater import competition are those where the country has relatively weaker comparative advantage.

Change in Size Structure and Efficiency of Manufacturing Industries

It was seen earlier that due in part to the reduction in the biases against SMEs as a result of the TPR, their share of manufacturing sector employment and value-added rose. Manufacturing plants also tended to be smaller in size in 1988. Did such a restructuring of the country's manufacturing industries constitute an impediment to the achievement of efficiency?

To hazard a response, Table 7.6 is presented, showing the DRC/SER of 3-digit PSIC industries classified according to size of plants. It is immediately evident that on the whole, small plants were highly inefficient in 1983, while large plants were least inefficient, with medium-sized ones in between. However, in 1988, only SMEs experienced a marked improvement in efficiency, even coming close to the efficient range. In practically all the efficient industries, small and/or medium enterprises were at least as efficient as, if not more so than LEs. In many inefficient industries, the small and medium ones also turned out less inefficient than LEs in 1988.

Because of the bias of the protective system against small enterprises, the TPR, by eliminating some of these biases, could be expected to have a more pronounced effect on them. We confirmed this from the relatively greater improvement in their efficiency levels than LEs and their increasing share of manufacturing sector activity in 1988. Simple regression analysis of changes in DRC/SER against changes in EPR by size also tends to confirm this, as can be observed from Table 7.6.

Small plants seemed to have been most responsive in efficiency adjustments to reduction in effective rates of protection under the TPR. The greater flexibility of SMEs in adjusting costs when confronted by more intense competitive pressure may explain this. Box 7.1 provides evidence from the industry studies of the behavior of SMEs under the policy reform. It may also be explained by the down-sizing response of LEs, whose size might have been determined in part by previously more favorable protective and incentive regimes. Unfortunately the difference in enterprise codes used in the 1983 and 1988 Censuses prevents us from observing the behavior of specific enterprises over time. Nevertheless, it seems clear from all the aforementioned results that the restructuring of the country's manufacturing sector toward smaller-sized plants did not impede the attainment of

efficiency after the TPR. Indeed such restructuring might even have favored the emergence of leaner, more efficient manufacturing plants.

Impediments to Attaining Efficiency

While the majority of the industries responded favorably to policy expectations, the exceptions (i.e., 67 industries constituting 25 percent of the total) to the general movement do throw some important light into the analysis. They raise the inevitable question of why some industries and firms did not respond to the Trade Policy Reform as expected, even while the majority did so. Moreover, although there seems to be a general tendency toward greater efficiency (or less inefficiency), more than half of the total number of industries (for which DRCs could be computed in both years) were found to be inefficient in 1988. A number of explanations, possibly in the nonprice factors, that might be constraining their movement toward the efficiency frontier must thus be sought elsewhere.

First, it should be noted that the reform in 1988, though admittedly substantial in scope and depth, was far from being completed. De Dios (Special Paper No. 3) reports that 250 products under QRs have remained untouched as of 1994. Moreover, a number of commodities previously under QR had been tariffied in the interim period so that tariffs had momentarily been raised. Subsequent lobbying on the part of some of the affected parties have even succeeded in delaying, if not actually reversing, the direction of the reform .

Second, generally speaking, one can expect a worsening of efficiency positions if during the trade reform, any of the following takes place (Bautista and Tecson 1979):

(a) a decline in the international price of the commodity in question;

(b) a rise in the market and/or shadow price of the inputs, including that of production factors;

(c) a true worsening of efficiency.

Indices of implicit deflators of imports between 1983 and 1988, however, do not show substantial changes in import prices. Some input prices rose (by at most 10 percent) while others declined, particularly mineral fuels whose 1988 prices were about half of their 1983 levels. In contrast, the domestic wholesale price index in 1988 was 139 percent higher than that in 1983. Nominal wages in nonagriculture, both in and outside Metro Manila, also rose by a little more than 100 percent. Opportunity cost of capital, however,

TABLE 7.6

SIZE STRUCTURE AND EFFICIENCY OF MANUFACTURING INDUSTRIES AT 3-DIGIT PSIC CLASSIFICATION
1983 and 1988

PSIC	INDUSTRY	1983 DRC/SER				1988 DRC/SER			
		All	Small	Medium	Large	All	Small	Medium	Large
	ALL	**1.72**	**2.02**	**1.86**	**1.68**	**1.54**	**1.29**	**1.29**	**1.64**
311	Food	1.60	2.36	2.14	1.40	1.07	1.25	0 98	1.03
312	Food	1.28	1.79	2 19	1.20	1 02	1.25	1.20	0.96
313	Beverages	1.89	1.73	1.73	1.90	1.21	0.79	0 98	1.24
314	Tobacco	1.73	1.01	1.09	1.74	1.22	1.20	1 04	1.23
321	Textiles	4.86	3.31	3 72	5 23	3 55	2 00	7.40	3.53
322	Apparel	0.92	0.95	0.96	0.90	1.04	0.91	0.92	1.18
323	Leather products	1.26	1.11	1.85	1 24	1.58	2 53	2.61	0 93
324	Footwear	0.91	1.12	1.17	0.82	1.13	1.08	1 31	0.87
331	Wood products	1.12	1.02	0.89	1.20	1.35	1.15	1 18	1.49
332	Furniture and fixtures, exec. metal	0.92	1.14	0.71	0.87	0.94	1.11	0.81	0.89
341	Paper products	2.75	3.80	2.72	2.60	1.86	1.90	2.87	1.76
342	Printing, publishing	2.68	3.09	1.86	3.20	1.91	1.81	1.37	2.45
351	Industrial chemicals	2.16	1.98	3.14	1.93	3.08	1.36	1.14	4.10
352	Other chemicals	1.66	2.25	1.60	1.60	1 16	1 07	1.13	1.20
353	Petroleum refining	1.51	-	-	1.51	1.76	-	-	1.76
354	Coal products	2.00	2.31	1.50	-	0 59	0.57	-	-
355	Rubber products	2.10	2.56	2.03	2.06	0.91	0.78	1.43	0.89
356	Plastic products	2.61	2.84	3.14	2.36	1.23	0.99	2.61	0.89

TABLE 7.6 (CONTINUED)

PSIC	INDUSTRY	1983 DRC/SER				1988 DRC/SER			
		All	Small	Medium	Large	All	Small	Medium	Large
361	Pottery and china	6.56	4.35	2.10	7.18	1.29	1.40	1.39	1.28
362	Glass products	2.63	4.90	1.78	2.51	1.61	2.16	4.28	1.55
363	Cement	3.38	21.54	-	3.31	3.09	-7.28	-	2 96
369	Other nonmetal mineral products	6.61	4.66	5.45	10.79	1.77	2.08	1.09	1.81
371	Iron and steel	1.75	2.36	2.06	1.69	2.27	1.45	1.96	3.08
372	Nonferrous metal basic products	1.28	1.11	1.42	1.29	1.75	1.08	1.00	1.76
381	Fabncated metal products	2.57	1.93	3.17	2.88	1.78	1.67	1.81	1.83
382	Machinery except electrical	2.76	2.30	4.07	2.79	1.40	1.37	2.25	1.30
383	Electrical machinery	2.88	2.29	1.45	3.03	3.94	1.16	1.97	4.40
384	Transport equipment	2.40	2.15	2.27	2.43	1.40	1.24	1.25	1.44
385	Professional equipment	1.06	1.05	1.04	1.08	2.72	1.12	-8.37	1.11
386	Furniture and fixtures, metal	4.10	3.34	1.28	7.16	2.68	4.14	1.25	-
390	Other manufacturing machinery	1.32	1.33	-	1.34	1.17	1.53	1.17	1.02

Note. Employment size of plants is defined as:

Small: 10-99 workers Medium 100-199 workers Large: 200 or more workers

Source: National Statistics Office's tapes of the "1983 Census of Manufacturing of Establishments."

BOX 7.1
"SMALL IS ALSO EFFICIENT"

Garments and Textile Industry

For the garments industry, an increase in the percentage share of efficient plants was observed after the reform. Allocative efficiency was driven by the majority of plants — mostly small firms employing less than 100 workers — in the industry. Small plants increased their share of the total number of plants as well as of the total number of *efficient* plants, while large plants reduced their share on both counts.

In the case of textile-primary interprises, improvements in efficiency were registered after the reform. Small firms registered the largest increase in number after the TPR and this entry of new plants may have caused the increased efficiency in the industry. This is seen from the rise in the share of small efficient plants to the total number of plants from 17 to 27 percent between 1983 and 1988. On the other hand, the share of very inefficient small plants declined from 24 to 20 percent.

For the textiles-secondary, majority of the plants were already efficient before the reform and these were mostly small ones. Their share of total number of plants as well of efficient plants increased, while those of large ones decreased in 1988.

Austria, M., in Chapter 2
of *Catching Up With Asia's Tigers,* Vol. II.

Packaging Industry

In the packaging industry, the majority of efficient plants in 1983 belonged to the small-scale category. Moreover, the share of small efficient plants in the total number of plants in the industry rose from 14 to 29 percent between 1983 and 1988.

The TPR may have indeed improved the atmosphere of competition in the local packaging industry, allowing entry mainly to efficient plants and likewise inducing already existing plants to reduce inefficiency. The easier access to raw materials resulting from the deregulation of packaging raw material importation might have enabled small plants to enter the industry. In view of the threat of competition resulting from lower tariff rates on finished goods, however, these plants were forced to adopt efficient practices and thus contributed to the rise in the level of efficiency in the industry in 1988.

Medilo, C., in Chapter 6
of *Catching Up With Asia's Tigers,* Vol. II.

BOX 7.1 (CONTINUED)

Synthetic Resin and Plastic Industry

Small and medium-sized plants improved more than large plants in terms of efficiency. The proportion of low-cost, small plants and the proportion of high-cost large plants rose in the resin industry. Meanwhile, the proportion of low-cost plants rose across all plant sizes in the plastic industry. These suggest that large plants are not necessarily more efficient than small and medium plants in the resin and plastic-processing industries.

Banzon, C., in Chapter 7
of *Catching Up With Asia's Tigers*, Vol. II.

Agricultural Machinery Industry

In the power thresher industry, there are no large-scale plants recorded by the Censuses. Among 16 small-scale plants in 1983 only five (31 percent) were efficient while eight were inefficient, and three were dissavers of foreign exchange. However in 1988, the number of efficient plants rose to 13 percent (59 percent of 22 plants) and foreign-exchange dissaving plants disappeared.

Three out of four hand-tractor producing plants were found to be dissaving foreign exchange in 1983, while the fourth one was inefficient. However, the scenario changed in 1988; three of the four small-scale plants were efficient while only one remained inefficient.

Trabajo, M., in Chapter 8
of *Catching Up With Asia's Tigers*, Vol. II.

declined somewhat from 12 to 10 percent with the normalization of economic activity.

Since most industries and firms were subjected to the above general price changes, though in different degrees, one can surmise that industry- and plant-specific factors were at work, leading some industries and firms to adjust in a direction different from that expected from theory or even from the direction taken by the majority. The different studies included in this volume, which give us detailed analyses of industry and plant-specific factors, offer some insights into this question. In the following, we merely highlight two explanatory factors that constantly emerged in the industry analyses.

TABLE 7.7

REGRESSION ANALYSIS OF DRC/SER AND EPR BY SIZE
3-DIGIT PSIC INDUSTRIES

Scale of Plant	Constant	Regression Coefficient	Adj. T-Value	R^2	F-Value
SMALL	-0.1994	0.7986*	3.382	0.2646	11.435
Standard error	0.0749	0.2362			
MEDIUM	0.0405	0.7984*	2.157	0.1275	04.654
Standard error	0.1038	0.3701			
LARGE	-0.4037	0.6225*	2.668	0.1393	07.116
Standard error	0.0825	0.2334			

* Significant at 1% level.

Demand constraints

Narrowness of the market was a recurring theme of the industries that failed to become efficient. Since most of these industries were domestic market-oriented, it implied a paucity of domestic demand. Shipbuilding has become unprofitable due to the preference of buyers for second-hand imported vessels, although the latter has raised the demand for ship repair (Mendoza, *Catching Up With Asia's Tigers*, Vol. II). Domestic motorcycle demand is much lower than that in other ASEAN countries due to a variety of reasons, including 'image' problems from either the perceived risks of motorcycle-riding or the low-status of motorcycle users (Pineda, *Catching Up With Asia's Tigers*, Vol. II). On the other hand, the demand for agricultural machinery, such as power tillers and hand tractors, reached its peak during the late 1960s when the Central Bank, through the rural banks, provided credit to farmers for the purchase of farm machinery. Since then, the industry has faced falling demand which is attributed largely to the lack of a comprehensive agricultural mechanization policy on the part of government. In contrast, annual demand in Thailand for hand tractors is said to be 60,000 units in contrast to the Philippines' 2000 units (APO 1984, in Trabajo, *Catching Up With Asia's Tigers*, Vol. II). In the case of packaging, demand is said to be segmented, a situation that in turn determines the quality of packaging supplies. Large-scale exporters and multinationals, even those oriented to the domestic

market, demand higher quality and greater volume of packaging materials which are generally met by outside suppliers or in-house production. On the other hand, small-end producers, especially exporters, have small volume orders which are met by a supply of a limited variety and lower quality of packaging materials. This in turn makes their products less attractive and more expensive in export markets, reducing their competitiveness. In a vicious cycle, this prevents the packaging industry from achieving both scale economies and higher quality standards (Medilo, *Catching Up With Asia's Tigers,* Vol. II). Finally, the by now classic contrast in efficiency performance between the domestically market-oriented textile industry and the export-oriented apparel industries underlines the importance of demand expansion.

The narrowness of the domestic market is a problem that is not peculiar to the Philippines. Other developing countries have encountered a similar problem, but not a few among them, particularly the Asia's Newly Industrializing Economies (ANIEs), have turned to the export markets for enlargement of demand. Like the Philippines, they were initially hampered by a lack of competitiveness, but eventually, policies were put in place that created an environment conducive to both export and domestic-oriented firms. In some cases, as in South Korea, policies even tilted in favor of exports. The country's TPR and market-opening policy of the 1980s did provide some industries and firms incentive to export, with beneficial effects in terms of efficiency. The appliance industry, a typically domestic market-oriented industry in the country, is reported by Lapid (*Catching Up With Asia's Tigers,* Vol. II) as attempting to take a turn to the export market. Similarly, exports of motorcycle and side-car parts are said to have surged in recent years, their value having exceeded that of imports of the industry in 1991 (Pineda, *Catching Up With Asia's Tigers,* Vol. II). While this may be mainly due to the foreign exchange requirement of the Motorcycle Development Program, the fact is that firms are increasingly becoming exposed to export activity. Moreover, plastic product exports, while still lagging behind that of other ASEAN countries, nevertheless demonstrated a rising export trend particularly after 1988. All in all, the decline in these industries' price-cost margins due mainly to the competitive pressure coming from domestic and foreign sources could have forced firms to take a second look at the export market as a way of breaking out of domestic demand constraints and enlarging demand.

Without doubt, the two-pronged policy of demand expansion — in both domestic and export markets — needs to be pursued. While this basically requires sound macroeconomic management policy, the externalities of

export expansion, especially in new markets, may warrant some form of government promotion, such as that suggested in Chapter 10.

Technological constraints

In the different industries examined, capital-labor ratio (K/L) turned out to be a significant factor discriminating efficient from inefficient plants in 1988. It was not possible to identify the characteristics of plants that responded favorably (i.e., according to hypothesis) from those that did not, because the difference in the coding system of plants in the two census years made it impossible to trace their performance through time. However, discriminant analysis of efficient and inefficient plants in 1988 provides indirect information on what prevented firms from turning efficient.

Inefficient firms were characterized by significantly higher K/L ratios in packaging, whether plastic, paper, or metal-based; in agricultural machinery, in textiles and garments, in appliances, radio and TV parts, in shipbuilding and repair, and in processed meat (a significant regressor only in 1983). Firms with a high degree of capacity underutilization or an overinvestment in capital would naturally turn out to be inefficient. This is consistent with the finding that, in most cases, low capital productivity also characterized the inefficient firms. On the other hand, in plastic products, reported to be an industry characterized by a high degree of capacity utilization in 1988, K/L turned out to be directly and highly associated with efficiency (Banzon, *Catching Up With Asia's Tigers*, Vol. II). In this case, the high K/L might actually be proxying for better quality and technologically more advanced equipment. The age of equipment likewise turned out to be an important discriminating factor in radio and TV parts and shipbuilding/ship repair industries, old machinery generally being associated with inefficiency.

The continued coexistence of efficient and inefficient firms in different industries merely reflects the protracted effects of the long years of protectionism and the fact that TPR is not yet completed. By limiting market demand while allowing for comfortable profit margins, protection tended to encourage the entry of firms producing small lots and at shorter runs. For instance, Pack (1984) observed in his study of the country's highly protected textile industry in the seventies that the limits of the domestic market did not warrant specialization, leading to firms to produce many styles at short production runs. Other authors have pointed to the capital-intensive bias of protection policy. By making the price of foreign exchange and of imported capital goods cheaper (these also typically received much lower tariff rates), protection encouraged the utilization of embodied technology that was

suited to labor-scarce, developed country settings. Substantial profit margins from selling in protected domestic markets did not pressure firms to adapt such machinery to local conditions and factor proportions, further discouraging the acquisition of domestic technological capability and eventual technological mastery. Protection also reduces firms' and industries' exposure to international best-practice. As Pack again noted in the same study, some firms in a protected environment might not be able to adjust properly to trade liberalization simply because of their lack of awareness of the existing technological options. Inter-firm differences in degree of such exposure could explain in part why some industries showed a decline in technical efficiency (cf. industry studies, in *Catching Up With Asia's Tigers*, Vol. II) during the process of adjustment to the trade reform. It is possible that in response to the liberalized environment, some 'more informed' plant managers were able to improve their plants' technical efficiency by taking advantage of the greater access to capital equipment and new technology, while others failed to do so precisely because of a lack of knowledge of the technological options. As a result, the gap in technical efficiency among plants widened, showing up in a lower technical efficiency coefficient, which is measured as the average distance from best-practice plants. Constant exposure to international best-practice and increased access to it thus constitute some of the most important dynamic merits of a more open trading system.

It is in this connection that one can mention the role of foreign direct investment and other modes of technology acquisition that provide access to international best-practice. Ideally, FDI should come not only with its supply of capital, but also of technology in production, management, and marketing, including expertise in exporting and linkages with international markets. Moreover, there are other alternative modes of foreign technology transfer that are available, including nonmarket mediated ones, such as suggestions of users, particularly by those in export markets who are more discriminating and exigent than domestic buyers. Central however to the success of any technology transfer process is the availability of domestic technological capability. Even the search for appropriate technology and its sources starts with firm-level technological capability. Ultimately, mastery of the technology being transferred depends on the existing skills and the willingness (as well as the capacity) to invest in capability-building. And the many externalities involved in technology acquisition (see for instance, Pack and Westphal 1986; Lall 1992) seem to offer valid justifications for a limited role of the State, especially in the area of technological capability building.

CHAPTER 8

Toward More Broadly Based Philippine Development

Introduction

Apart from the adverse effects on economic efficiency and output growth, domestic market distortions resulting from past trade and industrial policies have contributed to the highly concentrated distribution of national income that has been a further blemish on Philippine development performance over the last four decades. Trade and industrial policy reforms can then be expected to have favorable long-run effects not only on efficiency and growth but also on income distribution. While the focus in this paper (and in the entire study) is on trade and industrial policies, we cannot avoid bringing up other relevant aspects of economic policy that also need to be reformed in any serious government effort to promote economic growth that will significantly improve the distribution of national income.

Three aspects of income distribution in the Philippines merit particular attention. The first relates to the highly unequal size distribution of household income. Estimated Gini coefficients for the mid-1980s show income inequality in the Philippines to be the highest among eight East Asian market economies (Bautista 1992). That household income distribution has remained heavily skewed (Table 8.1) reflects in part the severe underutilization of the labor force and associated high incidence of poverty which continued over the years despite seemingly impressive GNP growth at least through the late 1970s.[25]

25. This is contradictory to the positive relationship between economic growth and poverty reduction that has been observed from general LDC experience (Fields 1988) and even more significantly, from the East Asian experience (Bautista 1992).

TABLE 8.1

DISTRIBUTION OF HOUSEHOLD INCOME, 1961-1988

	Percentage of total household income				
Income Distribution	**1961**	**1965**	**1971**	**1985**	**1988**
Top 10 percent	41.0	40.1	37.1	36.4	35.8
Top 20 percent	56.5	55.5	54.0	52.1	51.8
Top 40 percent	75.8	75.6	75.0	72.4	72.5
Bottom 20 percent	4.2	3.5	3.6	5.2	5.2
Gini coefficient	0.486	0.491	0.478	0.446	0.445

Sources: National Statistical Coordination Board, *1992 Philippine Statistical Yearbook.*
Gini coefficient estimates from Balisacan (1992).

There is also an important regional dimension to the income distribution problem in the Philippines. Historically, economic activity has been concentrated in Manila and the surrounding areas. As shown in Table 8.2, there has been little change in the predominance of Metro Manila in terms of regional per capita GDP in the 1980s. Also, based on the 1988 Family Income and Expenditure Survey (FIES), the proportion of families below the (official) poverty level has been estimated at only 31.8 percent for Metro Manila (versus 49.5 percent for the entire country), the lowest among the country's 13 regions (NSCB 1992: 2.19).

A third aspect of income distribution, distinguishing between rural and urban households, is probably the most significant for development policy in the Philippines. Average income of urban households in 1971 (based on FIES data) was 2.08 times that of rural households, indicating a large urban-rural income differential; this ratio did not change much through 1988 — indeed, it even increased to 2.13. Among rural households, income inequality declined slightly from 1961 to 1988 (in terms of the Gini coefficient, from 0.386 to 0.378); a more significant reduction was observed among urban households (from 0.506 to 0.431 over the same period).[26] It is also of policy interest that rural income inequality increased (from 0.503 to 0.440)

26. The Gini estimates are from Balisacan (1992:131), which also provide estimates of other measures of income distribution that show similar changes from 1961 to 1988.

TABLE 8 2

PER CAPITA GROSS DOMESTIC PRODUCT BY REGION : 1980, 1985, 1990
(in pesos at 1985 prices)

Region	1980	1985	1990
PHILIPPINES	12,620	10,461	11,592
Metro Manila	30,655	24,372	28,273
Ilocos Region	6,891	6,478	7,030
Cagayan Valley	7,821	5,864	5,680
Central Luzon	10,968	9,743	11,135
Southern Tagalog	14,117	11,222	12,504
Bicol Region	5,265	4,663	4,675
Western Visayas	10,069	8,375	8 928
Central Visayas	9,912	8,500	10,101
Eastern Visayas	5,416	5,280	5,373
Western Minadanao	7,626	6,539	6,635
Northern Mindanao	13,348	10,164	10,528
Southern Mindanao	14,413	11,497	11,730
Central Mindanao	10,196	8,459	8,599

Source: National Statistical Coordination Board, *1992 Philippine Statistical Yearbook.*

during 1965-1971, a period of accelerated agricultural growth fueled by the "green revolution" in rice production. Based on the estimates of David, Barker and Palacpac (1987), agricultural production expanded at average annual rates of 2.5 percent in 1960-1965, 4.0 percent in 1965-1970, and 6.5 percent in 1970-1975.

As late as 1988, nearly two-thirds of Philippine households were in the rural areas, and they contributed from 66 to 70 percent to total poverty, depending on the poverty measure used (Balisacan 1992: 135). In the absence of a broadly based, rural-oriented development, it is difficult to see how the most pressing objective of Philippine development policy at the present time, i.e., a rapid, more egalitarian, and sustained economic growth, can be achieved. Accelerated agricultural growth will not suffice; as the country's experience during 1965-1980 has demonstrated, it does not neces-

sarily lead to rapid growth of the national economy that is equitable and sustainable (Bautista 1990).

Many factors influence the ability of developing countries to achieve rural-based economic growth that can redress income inequities such as those that have just been described for the Philippines. In the following section, we present an analytical framework that focuses on (1) the effects of trade and industrial policies on rural and urban nonagricultural growth, and (2) the nonagricultural supply response to the demand stimulus generated by agricultural growth. This is followed by a discussion of how Philippine trade and industrial policies have biased production incentives against rural industries and enterprises, concluding that policy reforms toward neutrality in industrial incentives and a more liberal trade regime can be expected to have a positive effect on rural industrialization. We then bring up the other principal mechanism, relating to the consumption linkage effects of agricultural growth, that influences on the demand side the pattern of industrialization and the overall growth process. Some of the possible factors underlying the failure to translate the accelerated agricultural growth in the past into rapid growth of rural industries are identified. The final section gives some concluding comments emphasizing the strategic importance of agriculture and drawing attention to the need to address other policy-induced impediments to broadly based economic development in the Philippines.

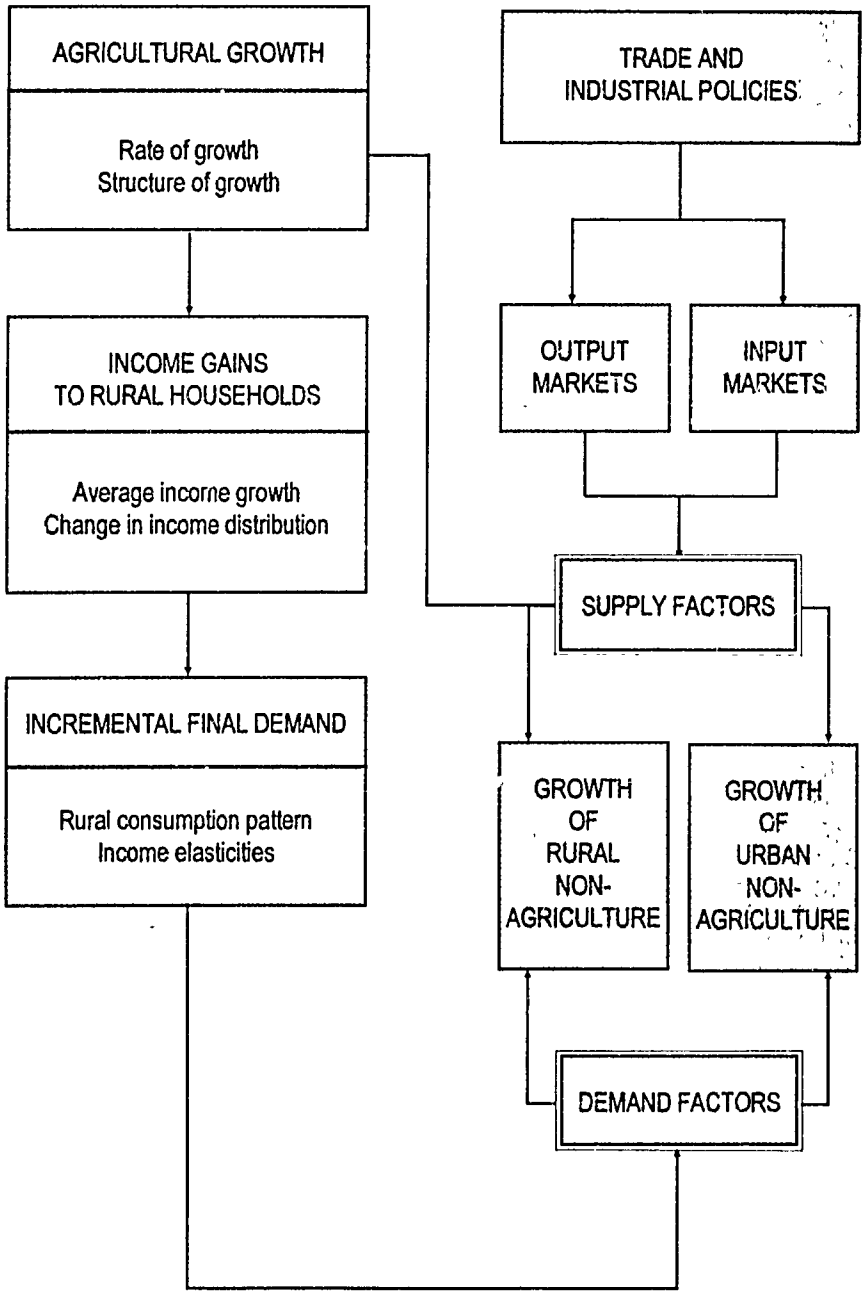
Analytical Considerations

Figure 8.1 depicts the transmission of the effects of trade and industrial policies on agricultural and nonagricultural growth, distinguishing between rural and urban nonagriculture, through the induced changes in output and input markets. Also represented in the block diagram are some elements in the transmission of demand-side effects of agricultural growth on rural and urban nonagricultural growth.

Not all possible influences on agricultural and nonagricultural growth (such as the external economic environment, political instability, weather disturbances, and others) are included in the basic analytical scheme given in Figure 8.1. On the supply side, given the subject of the present study, the focus is on trade and industrial policies as they affect output and input markets, which in turn influence the economic decisionmaking of households and enterprises, affecting thereby the structure of agricultural and nonagricultural growth Trade and industrial policies have direct and indi-

FIGURE 8 1

BASIC ANALYTICAL SCHEME



rect repercussions on access to private and public inputs, as well as on the sectoral patterns of output, income, and expenditures. For example, import-protection policies adopted in many LDCs to encourage industrialization generally served to benefit import-substituting industries to the detriment of export producers, capital goods industries, and agriculture.

High tariff rates and QRs on imported industrial products discriminate against agriculture in the following ways: (1) the rise in the domestic price of protected industrial output reduces the relative price of farm products; (2) the cost of industrial inputs to agricultural production (fertilizer, farm equipment, etc.) increases; and (3) the induced appreciation of the real exchange rate lowers the domestic price of tradable agricultural products relative to home goods. To the extent that QRs favor large firms located in major cities (or near the principal ports) the relatively small and geographically dispersed rural nonagricultural enterprises are also effectively penalized.

On the demand side the focus of the analytical scheme in Figure 1 is on the "consumption linkage" mechanism, based on the agricultural income gains to rural households which lead to increased (final) demand for nonagricultural products, especially labor-intensive consumer goods. As shown in the seminal work of Mellor and Lele (1973) on India, in the results of counterfactual model simulations for South Korea and Mexico done by Adelman (1984) and Adelman and Taylor (1991), respectively, and in the recent survey of empirical evidence by Ranis, Stewart and Reyes (1989), consumption linkage effects are critical to the extent and nature of the influence of agricultural growth on the overall development process. An important determinant of the magnitude of these effects is the distribution of rural income gains from agricultural growth. A concentration of income growth to the richer segment of the rural population is not likely to result in a significant demand stimulus for nonagricultural production in the rural economy since affluent households, whether in rural or urban areas, tend to spend more on capital-intensive goods produced by urban industry or imported from abroad. On the other hand, a wider sharing of the agricultural income gains among rural households will imply higher employment and income multipliers from a given increase in rural expenditure. On this basis, "support for small-farmer agriculture is associated with important growth linkages in a Mexico-type economy" (Adelman and Taylor 1991:155).

There are of course other sources of interaction between agriculture and the rest of the economy. "Production linkages," which generate the demand for nonagricultural inputs to agricultural production ("backward

linkage") and expand the supply of agricultural products to nonagricultural production ("forward linkage"), are not represented in the aforementioned basic, analytical scheme. The reason is that agriculture is characterized by relatively weak production linkages; in the words of Hirschman (1958:110), "the superiority of manufacturing in this regard is crushing." Consumption linkage effects are also found to dominate the production linkages in past surveys of rural nonagricultural activities, as reviewed by Ranis, Stewart and Reyes (1989).

Also not represented in Figure 8.1 are the linkages operating in the reverse manner, i.e., from nonagriculture to agriculture. The induced expansion of nonagricultural output will generate increased demands for agricultural products through the same mechanisms of production and consumption linkages as described above from agriculture to nonagriculture. Indeed, in production, the forward linkage of agriculture corresponds to the backward linkage of nonagriculture. On the consumption side, the income gains to nonagricultural producers can lead to increased food demand, providing the stimulus for the expansion of food crops or livestock production. Again, it seems reasonable to assume, on the basis of the low *marginal* budget share of food among urban (nonagricultural) households, that the consumption linkage effect in nonagriculture is relatively weak. A general equilibrium approach is needed to incorporate fully the intersectoral linkage effects.

The upshot of the above analytical discussion is that at least two factors need to be given particular attention in promoting broadly based economic development in the Philippines. One is the reform of trade and industrial policies, aimed at improving supply conditions in various markets for the benefit of rural nonagriculture. As will be discussed in the next section, this would entail the "undoing" of past policy mistakes that effectively hindered the expansion of rural industries. The other factor relates to the demand side, and the policy challenge is to ensure a wider sharing of income gains from agricultural growth. This would strengthen the linkage effects on the rural economy and lead to a more rural-oriented industrialization. Again, the country's past development experience indicates that rapid agricultural growth is not enough, as will be discussed in the following pages.

Redressing the Anti-Rural Bias of Trade and Industrial Policies

As earlier discussed, trade and industrial policies since the early 1950s have contributed to the substantial incentive biases toward large-scale, capital-intensive manufacturing industries and enterprises located in urban areas, most particularly in Metro Manila. These three related aspects of the industrial incentive structure imply an effective discrimination against rural industries and enterprises, which are inherently smaller-sized, more labor-intensive, and make greater use of local materials than their urban counterparts (Ranis and Stewart 1987).

The sudden profitability of producing industrial consumer goods for the domestic market, made possible by the imposition of import and foreign exchange controls in the 1949-1950, attracted large investments of capital from domestic sources that were already established in the financial and commercial fields. In addition, foreign (primarily U.S.) firms which used to supply manufactured imports but found their Philippine markets abruptly closed, invested heavily to serve the same markets by producing from within the country. By contrast, the smaller-sized firms did not have the economic and political resources needed to exploit the profitable investment opportunities. A more natural import substitution process would have encouraged gradual growth and modernization of small-scale industries and enterprises.

The "essentiality rule" governing the allocation of import licenses and foreign exchange in the 1950s also created a strong bias toward the importation of capital equipment and machinery. Given the highly overvalued domestic currency,[27] imported capital goods were made available at artificially low prices (in peso terms). Thus, the trade and industrial policies effectively subsidized capital-intensive industries and biased the choice of technologies and production techniques toward greater use of capital.

In view of the heavy reliance on imported material inputs and capital equipment among the favored industries and enterprises, there was a natural attraction to locate in Manila, close to the principal port. This in turn provided the stimulus for the development of nearby areas through agglomeration economies and spill-over effects (Pernia, Paderanga and Hermoso 1983). Moreover, Metro Manila offered the largest regional market for domestically produced industrial consumer goods that benefitted from

27. Despite the high inflation rates during and immediately after the postwar years, the prewar exchange rate of P2 per U.S. dollar was maintained as the control measures were adopted throughout the 1950s.

import restrictions. The more geographically dispersed and inherently small-scale and labor-intensive rural industries that did not depend on imported producer goods were effectively penalized by these policies.

Even after the dismantling of the control system in the early 1960s, the biases in the structure of industrial incentives remained. A highly protective tariff system, which was made redundant by the import restrictions in the preceding decade, continued to underprice capital goods imports and encouraged import-dependent, capital-intensive production of industrial consumer goods in and around Manila. Relatively small and dispersed industrial producers did not benefit much from the fiscal incentives granted to BOI-registered firms under the Investment Incentives Act of 1967 and the Export Incentives Act of 1970. It reflected the inherent difficulties of the small and the remote, including rural-based industrial establishments, in obtaining BOI certification and in dealing generally with bureaucratic requirements to qualify for government incentives.

Furthermore, several of the BOI-incentives have a capital-cheapening effect. In a quantitative evaluation of the combined effects of fiscal incentives accorded to BOI-registered firms, Gregorio (1979) finds that the user cost of capital is reduced by 49 to 71 percent (depending on whether the project is pioneer or nonpioneer, capital is imported or not, it is exporting or not, and others) while labor cost declines by 3.5 percent for nonexporting firms and up to 22 percent for exporting firms. In 1983, BOI incentives were modified under BP 391, replacing many of the capital-cheapening incentives with performance-based incentives. However, the 1987 investment code under EO 226 retreated from the performance-based incentives, the fiscal incentives package including the income tax holiday and duty free importation of capital equipment (see Chapter 5).

The trade and industrial policy bias toward large-scale manufacturing is reflected in the differential incidence of sectoral effective protection. Based on Anderson and Khambata's (1981) calculations using Tan's (1979) EPR estimates for 1974, about 80 percent of employment in small industries, compared to only 45 percent in large industries, can be found in the "unprotected" sectors (defined to include those with EPRs of less than 25 percent) and that "68 percent of those employed in small industries are in sectors with negative EPRs" (p.121).[28]

28. With the trade reforms in the 1980s, the present study indicates that the bias seems to have been minimized and possibly reversed (see Chapter 7). Regression analysis shows slight negative relationship between EPR and share of small enterprises in value-added in 1983 which became positive (and significant) in 1988. Hence, positive effects from trade reforms in this regard are also becoming apparent.

With respect to location choice favoring Metro Manila, some indication of the incentive effect arising from trade and industrial policies can be discerned from the positive correlation of EPRs for manufacturing industries at the three-digit PSIC level and the degree of establishment concentration in Metro Manila for 1980.[29] The four industries having the highest percentages of establishments located in the capital region (namely: plastic material — 83.1; soap and other washing and cleansing compounds — 80.6; batteries and other electric machinery apparatus, appliances, and supplies — 79.2; and other chemical products — 79.1) were all in the industrial category of high EPRs (more than 40 percent). For the latter group of 17 industries, the degree of concentration in Metro Manila averaged 42.3 in 1980. For the 13 industries with EPRs of less than 40 percent but more than 10 percent, the corresponding figure was 37.3 percent, and for the nine industries with the least protection (EPRs of less than 10 percent), the concentration measure averages only 22.3 percent.

The inference that can be drawn from all these is that effective discrimination due to trade and industrial policies existed against small-scale, labor-intensive industries and enterprises based outside Metro Manila. This served as an impediment to rural industrial growth that could have contributed significantly to the structural transformation and long-run growth of the national economy. Considering that the Philippine economy has long been plagued by the severe problem of labor unemployment and underemployment, a heavy concentration of income and wealth in Metro Manila, and a highly inequitable distribution of household income, it is ironic that the observed policy biases and their effects have tended to reinforce the uneven pattern of the country's economic development. It would have been more appropriate (in a socially optimal sense) to adopt policies favoring rural industries and enterprises.

The ongoing trade and industrial policy reforms will have a positive effect on social welfare if they contribute to the reduction of income inequities and promote broadly based development of the Philippine economy. In principle, a shift from import-protection to export-promotion policies will lead to the expansion of labor and resource-intensive export industries, in accordance with the country's comparative advantage. This increases the real rewards to the abundant factors, labor and natural resources. There will be a narrowing of urban-rural and interregional income

29. Based on the author's calculations, using EPR estimates in Bautista (1981b) and NCSO (1980) data on regional location of manufacturing establishments.

differentials to the extent that industries and enterprises in rural areas and outside Metro Manila are more labor-intensive and make greater use of local materials. A more effective market competition and more neutral incentives will also challenge the favored position of the powerful and the rich that typically reside in urban areas, especially Metro Manila.

The effect on household income distribution cannot be readily established, given that the analytical relationship between the functional and size distributions of national income is ambiguous. However, the increased employment generation and eventual mopping up of excess labor surely would represent favorable conditions for reducing income inequality.

As previously indicated (see Chapters 3 and 7), there are visible signs of a significant reduction in the industrial concentration ratio and of a dispersal of industries from Metro Manila. While these results are encouraging, it cannot be claimed that economic power and political influence are no longer being used to keep existing monopoly positions in the domestic market. Some project findings on the remaining regulated imports (i.e., subject to nontariff barriers) indicate that a significant majority of the competing domestic products can be attributed to large-scale, capital-intensive, and highly concentrated industries in which foreign firms are heavily represented (de Dios, Special Paper No. 2). Apart from not being conducive to favorable equity effects, this is likely to make more difficult the successful completion of the import liberalization program.

Agricultural Growth as a Demand Stimulus to Rural Industrial Growth

As has been documented for an increasing number of developing countries,[30] trade and industrial policies are a major influence on agricultural incentives and performance. In the Philippines, traditional agricultural products were subject to export taxes from 1970 to 1986, which served to reduce their prices for domestic producers. More importantly, however, the heavy protection accorded import-substituting industries effectively penalized agricultural producers by lowering the price of farm products relative to the price of protected industrial output, by increasing the cost of industrial inputs to agricultural production, and by inducing real exchange rate appreciation that reduces the domestic prices of agricultural export and import-competing products relative to the price of nontradables. Based on

30. See, for example, Krueger, Schiff and Valdés (1988) and Bautista and Valdés (1993).

the work of Intal and Power (1990), industrial protection and exchange rate overvaluation during 1960-1986 indirectly lowered domestic agricultural prices by 24 percent on average; on the other hand, direct taxation was responsible for only a 3 percent average reduction in the agricultural price index.

Trade and industrial policy reforms would redress the price bias against agricultural production and enhance the growth performance of agriculture. As shown in the basic analytical scheme in Figure 8.1, agricultural growth can provide a demand stimulus to nonagricultural production in both rural and urban areas. The extent to which rural nonagricultural production can be given a boost from the demand side would depend not only on the magnitude but also on the distribution of income gains from agricultural growth.

Based on the survey findings of the Philippine studies, as reviewed by Ranis, Stewart and Reyes (1989), the consumption linkage effects of agricultural output and employment dominate the production linkage effects, attributable in part to the greater labor intensity of consumption-oriented rural industries. A greater stimulus to local production is associated with income growth among lower-income rural households, owing to the tendency of the richer households to spend more on goods produced outside the local area.

As pointed out previously, increased rural income inequality accompanied rapid improvements in agricultural productivity in the Philippines from 1965 to 1971, although income distribution improved slightly during 1961-1988. This would explain in part why the accelerated agricultural growth during the green-revolution period did not lead to a significant expansion of rural industry and to rapid, self-sustained growth of the national economy (Bautista, forthcoming). Because the increases in agricultural income accrued largely to the more affluent rural households, the pattern of effective consumer demand that evolved was biased toward the products of urban-based, capital-intensive industries as well as imported goods.

The distribution of income gains from agricultural growth was influenced by a number of factors. In the first place, the dramatic productivity increases associated with the green revolution in rice bypassed a large segment of the farming population that did not have access to irrigation water. Although there was widespread adoption of modern seed varieties even in small, rainfed farms (Herdt 1987), the new technology was notably much less effective in raising yields where water levels could not be strictly regulated. In 1966, only 10.4 percent of total arable lands in the Philippines

was irrigated; despite the expansion of irrigated area subsequently, the irrigated to arable land ratio could only increase to 18 by 1980.

Moreover, the greater availability of the effective subsidies on credit and fertilizer for large farmers as well as their greater access to infrastructure investments (irrigation, electricity, and roads) also contributed to the bias in the structure of income growth against small farmers. Public sector infrastructure expenditures were also notably concentrated in relatively progressive areas close to primary markets.

Among the poorest of the poor in the Philippines, as in most LDCs, are the landless rural families that depend on wage labor as their main source of income (about 20 percent of rural households in 1965). It would appear that they also did not benefit much from the accelerated agricultural growth, agricultural wage rates having fallen significantly in real terms from the mid-1960s to 1974 (Reyes, Milan and Sanchez 1989: 40). Agricultural labor use has not been helped by the substantial mechanization of some farm operations, particularly in rice land preparation and threshing. On the supply side of the labor market, the sustained high growth of the rural population (2.8 percent annual rate between the census years 1960 and 1980) would have contributed to the failure of the real wage to exhibit an upward trend.

Another significant factor bearing on the distribution of income gains from agricultural growth is the distribution of landholdings. The unequal distribution of land (and the return to capital) but not the real wage can be expected to worsen the distribution of rural income. As late as 1980, only 3 percent of all farms in the Philippines were larger than ten hectares, but they accounted for about one-quarter of the total agricultural land area. Redistributive agrarian reform was attempted by the Marcos government under Operation Land Transfer that began in October 1972. It was a tenancy reform, so that the landless continued to have no access to land. Moreover, only rice and corn were covered; the exclusion of farms growing other crops, constituting about half of the total crop land area, severely reduced the program's effectiveness in redistributing land ownership. More recently, the Aquino administration adopted the Comprehensive Agrarian Reform Program which not only includes all agricultural lands but also goes beyond tenancy to include other production arrangements such as profit-sharing and stock transfers. Program implementation has been disappointingly slow, owing to the considerable difficulties it has encountered. In particular, financing the program has been a major constraint, related to the govern-

ment's overall budgetary problem, heavy debt-service burden, and inability to mobilize additional financial resources.

Broadly based income and employment gains from the rapid agricultural growth in 1965-1980 was not achieved also in part because of the major presence in the export crop sector of foreign firms engaged in plantation farming and large-scale processing. An interesting comparison between the Philippine and Taiwanese experiences in the production and exporting of pineapples and bananas indicate a sharp contrast between the "dispersed smallholder production and decentralized processing facilities with low levels of capital and technology in Taiwan, and multinational dominated organizations in the Philippines using sophisticated and expensive equipment and securing supplies mainly from large-scale farmers or plantations" (Ranis and Stewart 1987:159).

During the 1980s, agricultural growth in the Philippines slowed markedly — from the 4.9 percent average annual rate in 1970-1980 to 2.1 percent in 1980-1990. The latter figure is the lowest among 12 East and South Asian countries (Bautista 1993: 351), most of which suffered from a severe deterioration in the terms-of-trade for their agricultural product exports during the decade. The latter was accompanied, in the Philippine case, by a significant reduction in public expenditure in agriculture. The agricultural share in national government expenditure declined from 8.3 percent in 1979-1981 to 6.3 percent in 1989-1991; over the same period, which was characterized by fiscal retrenchment, total public investment was more than halved. Not surprisingly, the Philippines also showed a lower GDP growth rate in 1980-1990 (1.1 percent, average annual) relative to both its 1970-1980 performance (6.3 percent) and that of the other 11 Asian countries in 1980-1990 (from 3.8 to 9.7 percent).

That there is some urgency to the problems of slow growth of national income as well as of large income inequities in the Philippines is now widely recognized. Improving the growth performance of the economy will not necessarily lead to a reduction of income inequality among various household groups and geographic regions, and between rural and urban areas. But economic growth that is broadly based — to which agriculture and rural industry, at this stage of Philippine development, can have a significant contribution — will help improve the distribution of incomes over time. Agriculture being the predominant source of income and employment for the rural population, "getting agriculture moving" is necessary to generate the demand stimulus for a decentralized, rural-based industrialization. Agricultural growth has to be sufficiently egalitarian, however, to enable the

linkage mechanism to work effectively and promote the structural transformation and long-run growth of the national economy. Based on the above discussion, this process will be helped by redressing the price bias against agriculture through trade and industrial policy reforms, by improving the access of small farmers to irrigation water, credit, fertilizer, and other inputs, by redistributing landholdings through an effective agrarian reform, and by promoting small-scale, labor-intensive agricultural production and processing.

Concluding Remarks

The importance of agriculture, at this stage of Philippine development, derives from the need to promote rural-based industrial growth and reverse the past pattern of industrialization that has been too concentrated in Metro Manila, large-scale, and capital intensive. Such restructuring of industrial development will be stimulated from the demand side by agricultural growth. The more the agricultural income gains to rural households are widely shared, the larger is the growth linkage effect on local and industrial policies can be expected to improve production incentives not only for rural-based industries and enterprises but also for agriculture. Depending on the latter's supply response and the associated incremental rural income, an additional demand stimulus to rural nonagricultural production is generated. All this will contribute to the achievement of a rapid, equitable, and sustained economic growth — which is undoubtedly the most pressing objective of development policy in the Philippines at this time.

While our analysis is focused on trade and industrial policies, we recognize that other relevant aspects of economic policy also need to be given due attention. In particular, credit policy and public investment are important determinants of both agricultural and rural nonagricultural supply responses to the improved price incentives arising from trade and industrial policy reforms. To the extent that past anti-rural biases in credit allocation and infrastructure expenditure have remained,[31] it is necessary that policy reforms redressing those biases be also implemented. Adequate access to credit and infrastructure may not make unprofitable rural performance and reduce the effectiveness of trade and industrial policy reforms.

31. For a discussion of how past credit policy and public investment in the Philippines have discriminated against rural producers, see Bautista (forthcoming).

A final point is worth emphasizing. Given the present structure of the Philippine economy, including the severe underutilization of the labor force and the income inequities described in the beginning of this chapter, one can readily agree that the social desirability of labor-intensive, small-scale, and rural-based production exceeds its private profitability. This positive externality provides an economic rationale for policies to discriminate in favor of rural-based industries and enterprises. The irony is that for too long, development policy in the Philippines has been strongly biased in the opposite direction.

CHAPTER 9

Scope for Regional and Multilateral Cooperation for Export Expansion

Among the major findings of the industry studies of the project is that demand-side constraints arising from the limits of the country's small domestic market have effectively hampered the growth of industries and their attainment of efficiency. This was verified for consumer products such as dairy products, for the machinery and transport industries such as agricultural machinery, motorcycles and parts, ships and boats, household electrical appliances, as well as for the intermediate industries that constitute the packaging sector.

Asian NIEs and the more successful ASEAN economies of Malaysia and Thailand had all experienced such an impasse under the domestic market-oriented phase of their industrialization process. A striking commonality in their ability to break out of this impasse was their adoption of an export-push strategy that led to an expansion of demand in world markets. It could be argued, however, that since then the opportunities for growth into export markets have substantially decreased with the global decline in economic growth and the increasing protectionism worldwide.

It is true that the world market that confronted the Asian NIEs during their export-promotion drive in the 1960s and 1970s was generally characterized by moderate income growth of industrial economies and declining protectionist barriers. In the 1980s, the second-tier Asian NIEs (ASEAN's Thailand and Malaysia), while being faced by decelerating growth in developed country markets, nevertheless had the advantage of rapid structural changes and exchange rate adjustments in the Asian NIEs and Japan. These

allowed them to move into export sectors that were being abandoned by these countries due to waning competitiveness while simultaneously attracting their financial resources to export-oriented sectors, thus strengthening further ASEAN's industrial efficiency. In contrast, the decade of the 1990s started off with a severe recession in the developed economies, which together with the formation of regional trading blocs, increased the anxiety of developing countries as to possible displacement in their major trading partners. Moreover, the start of the re-integration of China, Vietnam, the East European and former Soviet republics into the world's free market added a new complication to the highly competitive struggle for export markets. In the face of all these, do market opportunities still exist to warrant the Philippines' pursuit of an export-push strategy? In the following sections we shall consider various dimensions of the problem. We first examine the growth prospects of world and regional incomes and trade. Then we look at the drift of protectionism in world markets, particularly in the light of the Uruguay Round. In a third section we analyze the possible effects of regional trading blocs on the country's trade and investment prospects.

Growth Scenarios for the 1990s and Beyond

After a protracted recession in the major industrial economies, growth indicators showed, at the time of writing, a perceptible upward movement starting mainly with the US. A growth rate of 5.9 percent has been reported in manufacturing output for the last three months of 1993. Although this will probably be scaled down somewhat in 1994, the upward trend is generally believed to be on solid course. Germany, likewise, has predicted an imminent recovery and other European countries have shown signs of slowly emerging from the recession. Japan, though still in the throes of pessimism over near-term prospects of recovery, is nonetheless bent on recharging the economy with a pump-priming package consisting, among other things, of 14 trillion yen (approximately $127 billion at the current rate of Y 110/$ 1) of government expenditures and various tax cuts.

Indeed, the long-term forecast of GNP by the UN Project Link Model as of September 1993 warrants optimism over the growth prospects of the world economy. World GNP is expected to grow at an average rate of 2.9 percent from 1990 to 2002, with developed market economies growing at 2.5 percent and the developing countries at 5.5 percent. South and East Asia are still expected to be the fastest growing regions, growing at an average of 6.3

percent over the same period. And China is forecast to grow even faster at an average of 8.7 percent.

These income growths translate into an even higher growth in world trade, averaging 8.5 percent and 5.9 percent in nominal and real terms, respectively, from 1993 to 2002. Developed market economy imports will grow at an average of 7 percent annually, and developing country imports still more at 12 percent. Japan's average import growth rate of 9 percent for the period will be higher than the world average, while China's import growth of 13.6 percent is expected to outstrip those of East and Southeast Asian NIEs. All these imply that a country seriously and resolutely embarking on an export-oriented strategy should be able to find export markets in both developed and developing countries. In particular, markets in the latter group — particularly in the high-growth East and Southeast Asian regions — appear promising.

It is worth stressing however that even under the less attractive trading environment of 1990-1993, some countries — notably, Hongkong, Thailand, and China — managed to maintain their double-digit export growth rates. There is therefore even less reason for the Philippines not to grow export-wise now that the prospects for world demand and trade are brighter.

Protectionist Sentiments

The above growth forecasts, however, assume that trading nations, especially the major industrialized ones, do not become severely more protective than at the time the forecasts were made. Are there indications that this is a valid assumption?

It was noted earlier that in the 1980s, industrial economies had become more protective of their domestic industries than during the high-growth period of the 1960s and 1970s. Although tariffs had basically gone down through several rounds of market-opening negotiations (e.g., the Dillon Round, the Kennedy Round, the Tokyo Round), nontariff barriers of varying stripes and potency began to proliferate and seriously threaten the viability of the global trading system.

Toward the end of the 1980s, however, a fresh initiative was taken to put more order into world markets via the Uruguay Round of negotiations. However, up to the end of 1993, no end seemed to be in sight to the tough negotiations that started seven years earlier. Finally, on January 16, 1994, a trade deal was struck among 17 nations, promising an expansion of global trade and allaying fears of further escalation of protectionist sentiments. As

an example of the Round's achievements, a stronger dispute settlement mechanism will be put in place which hopefully would effectively curb the use of unilateral retaliatory measures, such as the US' super 301 of 1988. This is provided for in the creation of the Dispute Settlement Body, a subgroup of the Multilateral Trade Organization that is supposed to replace the General Agreement on Tariffs and Trade (GATT) system in 1995. Moreover, gray areas such as anti-dumping actions and use of other NTBs were not covered by the former GATT. New rules will now be set to limit the overuse of such actions. The MFA, which in the past, had put a cap on developing country textile and garment exports to developed countries through bilateral quota arrangements, will now be absorbed into the GATT accords and gradually phased out over a ten-year period beginning 1995. This is expected to boost further developing country exports of textiles and garments,but will also make competition fiercer among participants.

Although the negotiations were primarily undertaken by the smaller group of developed countries, market-opening measures that resulted from the Uruguay Round would benefit developing countries under the MFN rule. One could cite a number of examples on the concessions made by Japan, which is still widely considered to be a relatively closed market. For instance, although rice trade was basically spared by the UR negotiation, Japan's rice market which had been a tightly protected fortress for decades was, for the first time, opened definitely to imports. Moreover, Japan has agreed to tariffy 22 farm products and reduce such tariffs by 15 percent over a six-year period. Japan had also agreed to a tariff-reduction in 1,500 agricultural products by an average of 36 percent during the period 1995-2000. On industrial products, Japan will unilaterally remove tariffs on scientific devices, electronic products, films and certain types of toys and rubber product and slash tariffs by 50 percent on leather goods. Other developed economies will likewise reduce tariffs on scientific devices and electronic products, and on a reciprocal basis, abolish tariffs on pharmaceuticals, construction machinery, medical equipment, steel furniture, agricultural machinery, beer, distilled spirits, and others.

Thus, from a global viewpoint, the completion of the Uruguay Round promises to create a more open world trading system from which developing countries embarking on an export-push strategy would stand to benefit.

It must also be mentioned in this connection that even before the start of the UR negotiations, a number of developing countries in the 1980s have unilaterally taken the path of trade liberalization, the Philippines being one of them. This has opened further many new opportunities for greater trading

activity among them, an opportunity that is not inconsequential considering the above-average growth rate of developing economy incomes and imports. This phenomenon has not been lost to the four Asian NIEs whose share of exports to these countries have been showing an upward shift during the late 1980s. Moreover regional trading arrangements among developing countries are seen as offering another venue for greater interpenetration of developing country markets (World Bank 1993b).

Regional Trading Arrangements

A number of initiatives toward the strengthening of or formation of regional trading blocs had been undertaken during the end of the 1980s and early 1990s. The creation of the Single European Market (SEM) was approved in 1986 and scheduled for completion by end-1992. In 1988, the Canada-US Free Trade Area was formed and subsequently enlarged to include Mexico in December 1992, with the creation of the North American Free Trade Area (NAFTA). In January 1993, the process that leads to the creation of the ASEAN Free Area (AFTA) was set in motion.

While regional trading arrangements are primarily intended to liberalize trade among member-nations, almost instinctively, nonmembers react with a fear of possibly being left out of and discriminated against in the process. Right from the beginning, the announcement of the SEM was hounded by the specter of a 'Fortress Europe' looming in the minds of policymakers and businessmen in the US and other developed countries. On the other hand, developing countries not in the preferential list of EC were anxious over the possible diversion of trade and investment flows toward the relatively less developed economies of the Community, such as Portugal, Spain, and Greece, or even to the neighboring Eastern republics which were coincidentally being reintegrated into the world's trading system. Similar sentiments have been expressed over the formation of the NAFTA due to the unrivalled position of Mexico, a developing country with free access to the huge North American market.

From a theoretical standpoint, the effects of the formation of a free trade area can be viewed in terms of static (trade creation and trade diversion) and dynamic effects on welfare of the member-countries. Nonmember countries, however, could be adversely affected through the trade diversion effect of not being accorded the same free access to member-country markets. On the other hand, dynamic effects of the free trade area (FTA) can have both positive and negative effects on nonmembers. As for dynamic

effects on member-countries' welfare, increased competitiveness and productivity are expected to result from greater exposure to competition or from scale economies, from the spread of technological innovations and from the increase in intra-regional investments undertaken by both members and nonmembers. As a result, member-country real incomes grow, leading to a rise in import demand for both intra and extra-regional output. But nonmember countries may lose markets in the region with the improvement of competitiveness and the lowering of prices of competing goods produced by member countries. In addition, diversion of investment flows might take place as the free trade area becomes a more attractive investment site for both members and non-members.

To examine the possible implications of the formation of regional trading arrangements on Philippine opportunities for export expansion, we shall briefly discuss the prospects for increased trade and investment under each of the three regional trading blocs mentioned earlier, as well as other developments in the Asia Pacific region.

The Single European Market (SEM)

The formation of the SEM is not exactly the same as the formation of a customs union although there are clear analogies (Davenport and Page 1992). Tariff barriers had already been eliminated with the formation of the EC, so that creating the SEM entails mainly the removal of nontariff barriers (NTBs), including public procurement regulations, national standards, certain taxes, border controls, and institutions. Thus, Davenport and Page (1992) redefined trade creation and trade diversion effects of the SEM for developing countries, not in the static sense of the customs union analysis cited earlier, but in terms of its dynamic effects. In their study, trade creation refers to the increased demand for exports generated by increased incomes and output stimulated by the SEM. On the other hand, trade diversion refers to the reduction in import demand for nonmember goods arising from the improved productivity of EC's own capital stock. Terms of trade effects are also examined, consisting of the effects on developing-country exports of the rise in prices of primary goods resulting from the rise in Community demand and the lower import bills arising from the lower EC export prices for manufactures.

Their results indicate a positive effect on developing country exports of both primary and manufactured goods. However, the authors are quick to add that under the most optimistic estimate of SEM's impact on the Com-

munity's GDP growth, the increase of developing country exports to EC will not be substantial, constituting only 3.7 percent of their exports of goods and services to the Community. A caveat to this conclusion is the assumption of a once-and-for-all increase in EC's GDP as a result of the SEM. Other analysts such as Baldwin (1989) have argued that the SEM could lead to higher long-term growth through the intensified flow of innovations, and to new processes and products, which could result to a long-term increase in member countries' import demand.

In the case of manufactured goods trade, trade diversion effects are found to swamp the trade creation effects, leading the authors to argue that the "less the present significance of its manufacturing exports, the more a country will benefit from the locomotive effect of 1992" (Davenport and Page 1992: 10). Malaysia, for instance, turns up with a negative overall effect on its trade flows while Thailand could expect an increase of 1.5 percent of its exports to EC (based on 1987 data). On the other hand, the results are brighter in the field of service exports, such as tourism.

The Philippines, not being a major developing country exporter to the Community, had not been included in the quantitative analysis of the study. However, from an examination of the commodity structure of Philippine exports to EC, one can hazard a few guesses as to the likely impact of the SEM. The main exports of the Philippines to the three major EC markets (Republic of Germany, Netherlands, and United Kingdom) are apparel, electronic products (mainly semiconductor devices), and food products (coconut products or fish and other marine products). The Multi Fibre Agreement (MFA) has been the main trading arrangement in the case of apparel exports. This trading arrangement, as mentioned earlier, will be managed by the GATT for eventual phaseout after ten years. Thus, the anxiety over a more restrictive regime with global Community quotas replacing national quotas is basically unfounded. On the other hand, the sourcing of semiconductors is closely linked to global investment strategies of EC multinational firms and is most likely independent of the integration taking place within the Community. Finally, food product exports are mainly limited to tropical and other natural-resource intensive products of the Philippines which could not be easily diverted to member-country production sites. Thus, as a whole, we may expect little perceptible effects on Philippine-EC trade of the SEM. However, definitive judgment can only be reached through a more formal and possibly quantitative analysis of the effects of the SEM on Philippine export opportunities.

As against the modest but positive impact on developing country exports, the authors point to a possible threat of damage to the multilateral system as a result of the SEM. The Community's strengthened bargaining hand as well as the Community's 'new self-confidence' could lead to more protectionism, such as in the setting of rules of origin or national composition, extension of coverage of quotas, or even in a more zealous application of health and hygiene rules. This could take place under pressure of adjustment problems in some member states or persuasion of the strong protectionist bent of certain powerful members. However, as mentioned earlier, a strengthened GATT should work toward reducing the possibility of such a threat.

The North American Free Trade Area (NAFTA)

The NAFTA is a comprehensive free trade pact that envisions the elimination of both tariff and nontariff barriers to trade among regional partners US, Canada and Mexico over a period of ten years. A number of sensitive products, however, have been given a 15-year transition period. It essentially improves and expands the Canada-US FTA and reinforces the market-oriented policy reforms of Mexico adopted since 1985. It is expected to accelerate the pace of change already observable in the Mexican economy by widening the reforms to include such sectors as autos, textiles and apparel, finance and telecommunications. It offers Mexico freer access to the huge American and Canadian markets, more than what any other nonmember country can achieve through bilateral negotiations. The US, on the other hand, would strengthen her foothold in an already important and rapidly growing Mexican market while benefitting from the improved resource allocation effects and industrial restructuring that the free trade area will demand. Canada, for her part, can look forward to a reinforcement of preferences in the US market while opening up export opportunities in the Mexican market in such areas as financial services, autos, and government procurement (Hufbauer and Schott 1993).

In terms of gains, estimates using CGE models give a range of 1 percent to 7 percent of GDP of the participating countries, depending on the differences in the structure of the models used (Lustig, Bosworth, and Lawrence, eds. 1992). As to NAFTA's trade effects on nonmember countries, it is said to hinge on the degree of liberalization that will be achieved under the free trade agreement as well as on the success of the Uruguay Round in being able to keep the world trading system fairly open. The main source of

anxiety by third countries is in the degree of restrictiveness of the NAFTA's rules of origin. These will determine the goods that will qualify for preferential treatment under the NAFTA as well as determine the amount of foreign-sourced components that will disqualify goods from NAFTA benefits. Two sectors have been cited as prominent examples of the restrictiveness of NAFTA rules of origin: textiles/apparel and autos. In the case of textiles, a "yarn forward" rule is adopted for most products whereby an item will qualify for regional preferences if produced from yarn made in a NAFTA member country. On the other hand, for autos the rule adopts a 'net cost approach' for calculations of origin, but this requires a NAFTA value-added test even higher than the 50 percent requirement under the Canada-US FTA. Moreover, tracing requirements are adopted in such a way that foreign components of engines, transmissions, and other specified parts are subtracted to arrive at the new content requirements of autos. All these tend to work against third country interests by raising substantially the regional content requirement to avail of the NAFTA benefits. Computers, however, do not seem to suffer from such potentially discriminatory requirements. A common external tariff is adopted for such imports, thereby reducing the problem of trade deflection (Hufbauer and Schott 1993).

There are no quantitative estimates of the trade effects of the NAFTA on the Philippines. However, considering the importance of the US market for Philippine exporters as well as the competitive standing of Mexico as a developing economy, sounds of alarm have been raised in some quarters over the possible trade diversion effects of the NAFTA. A quantitative assessment of possible trade and investment diversion effects of the NAFTA on the electronics industry predicts a decline in profitability of nonmember countries in Asia, and especially so in the ASEAN, particularly for Thailand and Indonesia, vis-a-vis Mexico (Fujita 1994). The expected increase in profitability of the Mexican electronics industry results from its enhanced accessibility into the US and Canadian markets, as well as from the improved access to intermediate inputs produced by American and Canadian firms.

The most important exports of the Philippines to the US are apparel and semiconductors. In the case of apparel, most exports are under consignment so that the 'yarn forward' rule should not pose much of a problem. However, the value-added component from the Philippines is levied a tariff, giving Mexico an edge. On the other hand, whatever apparel subcontracting could be diverted to Mexico as a result of NAFTA would already have been entering the US at close to free trade rates even before NAFTA. Thus, the possible trade diversion of apparel exports under consignment would be

minimal. For those not under consignment, the managed trade under MFA, as mentioned earlier, would be placed under the purview of the GATT which envisions its abolition over a ten-year period. As for autos and parts in which the risk of trade diversion is equally strong, the Philippines is not yet an important exporter of auto parts to the North American market.

In general, there seems to be consensus among analysts that the trade diversion effects on nonmember countries could take place in only a few sectors, because in many areas, the NAFTA merely codifies the already relatively free trade between the US and Mexico. Hufbauer and Schott believe that, on balance, the income effects on import demand for extra-regional goods would be more important than the possible trade diversion effects. Thus, they expect little change would take place in terms of nonmembers' access to the US market than what would otherwise have taken place without the NAFTA. In any case, they think that whatever trade diversion effects will take place would result more from the increased competitiveness of the North American industries rather than from increased trade barriers. Moreover, future risks on trade diversion may be mitigated by another factor, namely the internal pressure within NAFTA to reduce MFN rates to the lowest-rate country in order to avoid trade deflection.

What about the possibility of investment diversion effects of the two regional arrangements discussed above? It can be argued that investment flows could be diverted toward the regional blocs away from nonmembers. First, the two areas would become more attractive to investors, both members and nonmembers. Second, global adjustments of investment flows in favor of member countries can take place as business firms rationalize their production location and distribution activity given the new trade regime. A spate of mergers and acquisitions was observed in the Community after the announcement of the SEM, especially since financial and investment-related services were also bound to be liberalized. Nonmember firms, afraid of being left out of the regional market, can be expected to step up investment flows into the region. Japanese increased investments in the UK's auto industry are believed to have been undertaken in anticipation of the SEM. In NAFTA, Mexico could expect to draw investments especially from the US by both American and nonmember firms in labor-intensive processes and products. Moreover, to the extent that investment flows are usually trade-related, investment diversion may also induce some trade diversion.

It is always difficult to ascertain, let alone quantify, the occurrence of investment diversion. Davenport and Page (1992), after examining the geographical distribution of US, German, and Japanese FDI flows between

1981-1988 tended to perceive no clear evidence of a diversion of investments from developing countries in favor of the EC, inspite of a conspicuous increase in the Community's share of all of the three countries' FDI flows after 1985. Examination of more recent data by Agarwal et al. (1994) undertaken to determine the possibility of trade diversion into the Community from both developed and developing countries, under various assumptions on global and sectoral bases, similarly concluded that in spite of the evident increase in intra-Community FDI after the announcement of the SEM, trade diversion at the expense of nonmember countries has remained "fairly limited with few exceptions at the sectoral level." The conclusion being arrived at is that the globalization strategies of EC firms, especially in the fast growing East and Southeast Asian economies, seem to be taking place independently of the integration occurring in the Community.

The ASEAN Free Trade Area (AFTA)

The recent initiative toward the formation of the AFTA at least indicates that ASEAN member countries are becoming more aware of the need for an integration of their economies through trade and investment. Past efforts at regional cooperation failed to go far enough to make a dent on member-countries' trade and production structures. The question that arises is whether the effort that will involve much structural adjustment in each member-country's industrial structure is worth the gains promised by regional integration. So far, the economic modelling of the possible effects of the AFTA have yielded positive but not substantial effects on regional trade and production. Imada, Montes and Naya (1991), employing two models with differing methodology, base years, and coverage of goods, conclude that there will be a significant increase in intra-ASEAN trade as a result of the AFTA but with intra-ASEAN trade making up only a small share of total ASEAN trade; with extra-ASEAN trade slightly declining, only marginal changes in total trade can be expected. However the results may hinge on the fact that the models do not allow possible dynamic effects or feedbacks. Yap and Edillon (1992) simulated the effects of a 100 percent gradual reduction of tariff rates on ASEAN goods traded within ASEAN over a period of seven years, with the use of the (APDC) Link model. The experiment indicated a net gain for all countries in terms of long-run GDP growth but which again turned out not to be substantial. Teh (1993) attempted to quantify the effects of the Common Effective Preferential Tariff (CEPT) applied to industrial and processed agricultural products of the Philippines

using a CGE model. He reported very little resource allocation or efficiency gains for the Philippines as a result of the implementation of CEPT. The value of trade induced by the lowering in tariff rates turned out to be similarly modest. The weaknesses of the model may, however, be partly responsible for such results, as the author indicates. These are the failure to consider the effects of the removal of nontariff barriers among ASEAN countries as well as the influence of scale economies. All these models, however, suffer from their inability to capture the dynamic effects of the formation of the free trade area, which are widely considered to be far more significant than the net static effects.

On the other hand, it has been argued that a unilateral, multilateral lowering of trade barriers will bring about greater welfare gains for a country than the formation of regional trading blocs. However, it is highly debatable whether a truly significant market opening can be accomplished unilaterally, without the pressure of a regional commitment to a free trade area, given the reality of the existence of powerful industrial lobbies in the country. The reciprocal nature of access to the advantages of market-opening moves under AFTA might seem to be more palatable to interest groups than unilaterally undertaking increasingly deeper cuts into the country's trade barriers. In any case, what should not be missed in all these efforts is the underlying trend toward freer trade. The AFTA may thus be considered as only a step toward a more significant opening of the Southeast Asian region's economies to global trade and investment.

Preoccupation with the AFTA, however, should not be allowed to conceal the potential significance of the formation of 'growth triangles' or sub-regional economic zones (SREZs) to dynamize ASEAN trade and investments. Without any formal agreement of their governments, Singapore and Malaysia have developed border trade to such an extent as to stimulate the movement of financial and human resources to the Johor area. This has been extended to the Batam Island with the tacit approval of the presidents of Singapore and Indonesia but managed by the private sectors of the two countries (Yamazawa 1993). A similar 'Northern Triangle' is being considered by Malaysia to link its northern Islamic business areas with northern Sumatra and southern Thailand as well as another one led by the Malaysian capital covering the border areas of Cambodia and Vietnam. Likewise, work is underway to realize the growth triangle linking Mindanao with Sabah and Sarawak. In most cases, these are reinforcements of the border trade that had naturally arisen over the years between neighboring territories. Greater consciousness of the possibilities for increased trade and more cooperative

effort toward realizing these potentials will serve to strengthen the basic movement toward a more liberal and hence, wider and more intense trading activity in the region.

We can now offer a more definite answer to the question raised at the beginning of the section: Are there market opportunities that still remain to warrant the Philippines' pursuit of an export-push strategy? The answer, on balance, is an unequivocal yes. While there will always exist potential threats to the viability of the global trading system, the degree to which protectionism could wreak havoc on the system has been greatly minimized by the accords reached under the Uruguay Round. Of course, this depends to a large degree on the willingness of GATT-member countries to honor their commitments and to inject more strength into the World Trade Organization that will replace the GATT. With this premise, the expected moderate to high growth in global and regional incomes and trade could be realized, with the resulting expansion of trading opportunities.

CHAPTER 10

Summary, Conclusions and Recommendations

Philippine economic development literature abounds with studies on trade and industrial policy and the manufacturing sector. Major studies have contributed to a greater understanding of the effects of the trade policy regime on industrial efficiency that has led to the rethinking and formulation of more appropriate policies for industrial development. Specifically, this relates to the two principal conclusions which have emerged from these past studies:

(1) That the more than three decades of protection had been very costly in terms of its inherent penalty to exports, with serious adverse impact on resource allocation, and dynamic efficiency losses arising from lack of competition; and

(2) That a reform toward a more liberal and neutral trade policy is necessary to propel the economy to a higher level of industrialization.

In line with these conclusions, the continuing thrust of the country's trade and industrial policy reform is to provide an environment conducive to industrial growth and productivity by eliminating at least the policy-induced distortions to resource allocation. This thrust is the spirit behind the tariff and import liberalization policies of recent years.

With little evidence on the impact of these reforms from past studies, owing mainly to the necessary lag time for such impact to be felt, difficult questions remain on why the industrial sector remains sluggish, when will it take off, or even whether it will ever manage to come out of the slump and catch up with our dynamic Asian neighbors.

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This study is yet another attempt to plough through these questions. Its major objective is to provide a better understanding of, as well as more perceptive empirical findings, about Philippine industrialization policy, the state of the manufacturing sector, the impact of reforms, and what more needs to be done. The study, to our knowledge, represents the first attempt to utilize plant-level data from industrial censuses of the country to analyze the effects of the trade policy reform.

Summary of Findings

The empirical findings of the DIA project lend strong support to the two aforementioned major conclusions.

From the point of view of resource allocation alone, the cost of decades of protection is very evident. This is indicated by the estimates of DRC/SER (domestic resource cost as a ratio of the shadow exchange rate) across sectors. The average ratio for manufacturing is significantly above 1 (1.7 for 1983 and 1.5 for 1988) showing an inefficient conversion of domestic resources to foreign exchange in general. Moreover, the DRC/SER ratio varies widely both across and within industries. Some are efficient, in that they use little resources to earn or save (usually earn) a net unit of foreign exchange, just equal or even less than the value in pesos of the net foreign exchange earned or saved. Others are inefficient, using even more resources than the value of net foreign exchange they save. Such a wide variation clearly indicates an inefficient allocation of resources since resources would have been put into better use if more were used in activities with low DRC/SER ratio and less in those with high DRC/SER ratio. The more widely divergent are the ratios, the more inefficient would be the allocation of resources.

It is very encouraging to note, however, that the findings also show improvements in industrial resource allocation and performance between the two end-years considered and that a favorable impact on the manufacturing sector could already be discerned. This is borne out by results from both the macro and micro studies of the impact of trade liberalization on industrial performance.

On the macro side, with appropriate exchange rate policy, Tan (Special Paper No. 1) estimates that trade liberalization, as effected by E.O. 470, could contribute an additional growth in income of around 1.8 to 3.0 percentage points (depending on the demand and supply elasticities), which is substantial by any standard. A slight negative impact of -0.2 percent is the worst scenario estimate, assuming a fixed exchange rate, but this is still much lower

than what was suggested by those opposing the trade reform. Indeed, even with a fixed exchange rate, if resource allocation among industries responds more to changes in relative protection, rather than to absolute protection, a positive increase in income growth of up to 1.4 percentage points, could still be gained.

On the micro side, the DIA studies on selected industries and on the overall manufacturing sector find favorable indications of the impact of reforms on competitiveness and overall industrial performance. While trade liberalization may increase imports and restrict the market for locally produced goods, it also increases competition and induces greater efficiency among domestic producers. At the same time, trade liberalization would lead to export expansion which widens the market, resulting in lower production costs and higher efficiency. Thus, improved resource allocation is expected on the whole in the sectors using resources more efficiently, which is indeed what is indicated by the estimates of DRC between 1983 and 1988.

For the whole manufacturing sector, the DRC/SER ratio went down from around 1.7 in 1983 to around 1.5 in 1988, clearly an indication of an increase in the overall level of competitiveness of the manufacturing sector. To illustrate further, the share of establishments whose DRC/SER ratio falls within the range of zero and one (i. e., those with allocative efficiency) rose substantially between 1983 and 1988, in terms of both value of output and number of firms. In terms of value of output, the share of efficient firms increased significantly from 18.8 percent in 1983 to 39.5 percent in 1988. This again clearly indicates a very real and desirable resource reallocation accompanying trade reforms (see Chapter 7 for more details).

Trade policy reform is also expected to reduce barriers to entry in existing industries, especially for small-scale producers who are invariably penalized by restrictive trade policies (such as QRs on imports of material inputs). Increased market contestability afforded by a more open trade regime does not necessarily have to be accompanied by a reduction in industrial concentration, since the mere threat of import competition is sufficient to keep monopolistic tendencies in check. Nonetheless, the evidence points to a significant deconcentration of manufacturing industries taking place between 1983 and 1988, as reflected in the sharp decline in the four-plant, value-added concentration ratio at the 3-digit PSIC level. Furthermore, the large majority of new entrants into industries were relatively small-scale plants. While the number of manufacturing plants increased by 63 percent from 1983 to 1988, employment grew by only 21 percent. This led to a significant decline in the average employment size of manufacturing

plants from 125 to 92 workers per plant during the period. The compositional shift toward smaller plants served to reduce the large-scale bias of Philippine manufacturing industries, which presumably would have had positive employment and income distribution effects. This did not generally involve a tradeoff in efficiency, inasmuch as small and medium-scale plants have been found to be at least as efficient as the large scale plants in a wide range of 3-digit PSIC industries.

Another point with regard to the impact of trade reforms is worth noting. This relates to the finding of a decline from 45 to 41 percent during 1983-1988, in the contribution of Metro Manila to manufacturing-sector output indicating a discernible regional dispersal of industries. Because past import-protection policies favored industries that relied heavily on imported inputs and capital equipment, there was a strong inducement to locate plants near Manila, the principal port. It is to be expected, then, that trade policy reform would reduce the incentive bias toward Metro Manila-based enterprises and the effective penalty to the more geographically dispersed industries that make greater use of indigenous materials.

Furthermore, trade policy reforms are consistent with a broadly based economic growth (see Chapter 8 for more discussion). By improving access of small farmers to irrigation water, credit, fertilizer, and other inputs, and promoting small-scale, labor-intensive agricultural production and processing, trade and industrial policy reforms would redress the bias against agricultural production and enhance the growth performance of agriculture. In turn, agricultural growth can provide a demand stimulus to non-agricultural production in both rural and urban areas.

The present study recognizes the difficulty of disentangling the effects of trade reform proper from those attributable to macroeconomic and other policies. Moreover, the data for 1988 would capture only the interim results of the ongoing trade policy reform. Nonetheless, the results are unequivocal. (Regression results show that the percentage change in EPR is a very significant explanatory variable for the percentage change in the DRC/SER ratio.) What makes the results even more encouraging is the fact that there was hardly any adjustment assistance to accompany the trade reforms during the period considered.

We now turn to the findings on the investment incentives system. There are two basic areas of concern — (1) the type of incentives granted, and (2) the determination of the IPP (Investment Priorities Plan).

With respect to the first concern, in general, the conclusion is that there are weaknesses in the incentives provided. In sum, the key incentives of the

OIC — income tax holiday and tax-free importation of capital equipment — have reintroduced the bias toward capital-intensity. Moreover, the income tax holiday incentive will not benefit much those enterprises that need help, possibly incurring income losses in the early years (which is likely to be the case for many new enterprises). Rather the principal beneficiaries will be those enterprises that are amply profitable from the outset and, therefore, might not have, in the first place, needed incentives.

As to the second concern, there seems to have been too much emphasis placed on the kind of incentives to be provided, and much less on the determination and selection of preferred sectors. Although the BOI criteria used may be objective, the BOI system of reviewing applications for inclusion in the IPP seems ad hoc which could only be a fragmented and weak means for carrying out the ideal role of the investment incentives system. This is manifested in the large number of investment areas in the IPP.

To analyze how optimally (or otherwise) the IPP has reallocated investments, the study compared some measure of social profitability for those industries within and outside the coverage of the IPP. This was done by using some rough estimates of the domestic resource cost (DRC) and some approximation of where the IPP activity belongs in the 5-digit PSIC classification of manufacturing industries. Results show that, using 1988 NSO establishment data from the census of manufacturing establishments, the industries included in the IPP, on the average, have higher DRC/SER ratio — 2.3 for those industries included in the IPP, compared to only 1.5 for all manufacturing (see Table 5). The DRC/SER measure as estimated could not discriminate between exports (which comprise around half of project cost approved by BOI in 1988) and domestic-oriented activities. The DRC/SER for exports would be low, at around one. (They would otherwise be unable to compete in the world market.) Hence, the DRC/SER for the domestic producers in the IPP would be even higher. This implies that the domestic oriented sectors in the IPP, by and large, should not have been included in the list.

Another interesting result is the estimate of the effective protection rate for the activities within the IPP. The effective protection rate (EPR) coming from trade policy for activities within the IPP is relatively higher, at around 36 percent, than that for the whole manufacturing sector, at around 28 percent. This supports the conclusion that the investment incentives system tended, in general, to reinforce the biases of trade policy.

Recommendations of the Study

Based on the findings of the study, a continued policy thrust toward greater trade liberalization remains the most important element of industrial policy. This would reduce the bias against exports and constitute the major policy reform toward export orientation. Also, rural industrial growth would be encouraged, contributing to the dispersal of industries from the Metro Manila area.

The ultimate goal is one where quantitative restrictions are limited to reasons of security, health and sanitary regulations, and where tariffs are near uniform. There are proposals to bring the tariff rates within the 3 to 30 percent range within the next two years. This means lowering tariffs for those still outside this range and setting the minimum tariff rate at 3 percent. There could be problems with respect to limiting the tariffs for some agricultural commodities within this range owing to new developments including agriculture within GATT discipline. Still, where it could be implemented, this is generally a move in the right direction, further narrowing down the protection rates across sectors. The general guideline is that tariff rates should be as uniform as feasible, and not too high as to impose a serious effective penalty to exports.

This flows well into the second major recommendation of the study: The key and major target sector for selective intervention should be the export sector. Perhaps the most important role of the investment incentives system is to provide support for the promotion of exports.

As pointed out in the study, there are at least two very strong arguments for targeting production for exports. The first is the general export penalty resulting from the overall protection system. This contributed greatly to the serious misallocation of resources from the efficient producers of foreign exchange (exports) to the much less efficient savers of foreign exchange (highly protected import-substituting industries). The second involves the externalities associated between exports and productivity. To the extent that trade reforms are carried out, the need for such export incentives would be reduced. Furthermore, they are much easier to identify and the actual exportation of a commodity gives proof to the merits of granting it incentives. The export push strategy ties together most of the other recommendations of the study.

The continued thrust toward greater trade liberalization constitutes the major policy reform toward export orientation. Very much relevant to trade liberalization is the plan to shift from HCV to transaction value as the basis

for customs valuation. Such a reform has trade-facilitating effects which are greater than that of the proposed lowering of remaining tariffs to the 3 to 30 percent range.

Although the overall direction for trade reforms is set, even tariff policy could be rationalized to answer some of the needs of the growing export sector. Policy reform in the area of export promotion should include seeking measures to increase the automaticity of granting access to inputs at world prices to exporters and the feasibility of granting equivalent tax credits for locally produced inputs. One way to do this is to directly grant zero to five percent tariff in the tariff code, for a specified time period, to commodities which are mainly used as inputs to the export sector. The DTI with the support of the Export Development Council (EDC) has begun preliminary work in this area. The 15 DTI export winners have identified such commodities for consideration. The next step is to choose from these commodities those which are eligible by determining which are primarily inputs to export production.

The other export promotion measures should be continually improved to (1) reach a wider coverage of new exports, and (2) increase the automaticity of the duty-drawback system. Efforts to streamline export procedures should be given priority. One of the more effective ways to do this is to widen the applicability of the standard duty-drawback scheme. The computation of the standard rate could even be deliberately biased upwards to grant more generous tax credits. This has at least two advantages. One, the bias against exports, which is inadequately offset by the duty-drawback system, is reduced and two, the computational requirements are simplified.

Other suggestions were made in this regard during the policy symposium of the DIA project which are worth considering. One suggestion is to implement more liberal guidelines on the operation of the bonded manufacturing warehouses. Another suggestion is to make export tax credits completely *transferable.* As noted in the symposium, the problem in the present system is that tax credits are negotiable only across BOI-registered firms, which are also usually awash with tax credit certificates. Finally, there is also a suggestion to provide export services including training and technical assistance.

Over and above the BOI incentives, are nonfiscal incentives and other forms of assistance which have proven equally important and effective — e.g., credit access, technology and information assistance, incentives for research and development, a more dynamic government role in human resource development. This would be specially beneficial to the develop-

ment of rural industries along the lines of comparative advantage. The anti-rural biases of existing policies (see Chapter 8) prevent rural industries and enterprises, which are more labor-intensive and make greater use of indigenous materials than their urban counterparts, from reaching their export potential.

A vigorous export push would not be contrary to the ratification of GATT. As a developing country with per capita income less than $1,600, the Philippines could still grant export subsidies for a period up to eight years. In this regard, the timing of GATT ratification would even be fortuitous. GATT would ensure that trading nations, especially the major industrialized ones, do not become more protective. It could even open market access which would benefit greatly the export push strategy.

Going back to the investment incentives system, the ideal role of this system is to correct for market failures and distortions. The discussion led to three general cases for possible intervention: (1) "infant industries" with potential comparative advantage hampered by these market failures, (2) interdependent investment decisions, and (3) the export sector. The study has strongly recommended pushing for exports.

With regard to selective intervention to target the other two cases, the study has emphasized the difficulty in such a task. As also pointed out in the study, the Philippines has been doing selective intervention for the past decades with the use of the investment incentives system. The empirical results show that the selection has not been nearly optimal, again highlighting the difficulty in selecting and targeting industries for promotion.

Should the government continue to choose to selectively intervene in cases other than new exports, it should strive to improve the selection process which would most closely include real and deserving cases of promising "infants" and key industries with interdependent investment decisions for promotion. This leads to our next major recommendation: The number of activities selected for promotion should be few, say three to five industries at a time, and the incentives should be time-bound.

It should be added that the attainment of "dynamic efficiency," defined in terms of achievement of international competitiveness within a definite and explicit time period be made an immutable guideline for such selective intervention. The small number would reduce the probability of errors in judgement that could be made, and should a mistake be made, limit the magnitude of losses. The specific and definite time period should hold whether the selection is a success or a failure.

A further reason for limiting the list of eligible industries at any time is the consideration that promotion becomes diluted the more broadly it is extended. Because of the costs of financing the promotion and the competition for scarce resources, promotion in the end can be only relative. It is impossible to promote everything at once and at the same time.

This in itself does not prevent government promotion from eventually reaching a wide range of new industries. What is required is that the promotion be of limited duration so that in a sequential process some are phased out as others are phased in.

A suggestion made during the policy symposium, as an alternative to limiting the number of industries, is to require BOI to work within a specified 'budget of incentives' to be granted annually. This budget of incentives is to be accompanied by a rationalization as to how much benefits are expected from the activities granted these incentives. This approach has its own merits. It brings about transparency, accountability and rationality in the selection process. The difficulty is in setting the optimal 'budget' level. There is also question of which is the more feasible and efficient approach to implement.

The set of recommendations would imply some radical changes in the functioning of the DTI and the BOI. It would require some retraining of personnel for them to become more adept in financial, technical and economic evaluation of projects. It will require a different relationship with the private sector. Ideally, DTI and BOI would work very closely with the private sector, in the screening, pre-screening, evaluation, and numerous other processes that would lead to the final selection of industry.

A large part of the BOI function would deal with the exporting activity. It could then be geared to become more of a promotional body. The DTI and BOI could serve as important sources of information, e. g., on markets, technology, etc. The international trade section could be strengthened so it can better actively seek markets, monitor possible threats to our exports and possibly act on them. This would, of course, require a lot of training. And a more detailed program should be planned before it can be implemented.

The difficulties of identifying cases 1 and 2 are so great that it is not surprising that most countries simply identify "pioneer" industries as especially deserving of promotion without much regard for their potential for future improvements in relative efficiency. It should be possible, however, to improve on this through studies of experience elsewhere, information on production-functions, forecasts of world demands and supplies, and identification of market price distortions that can be remedied.

Going back to forms of incentives, fiscal incentives have traditionally formed the major part of the Philippine investment incentive system. Despite their weaknesses which were earlier pointed out in the study, they could remain part of the package. Some changes could be made — e. g., replacing the income tax holiday with tax credit on value-added or local content as was provided under BP 391. Studies should be made regarding which incentives are more efficient in terms of both administrative and economic efficiency. Still, so long as the IPP areas have been correctly identified and selected, such weaknesses become less critical.

Finally, there is the question about what the continuing peso appreciation implies about trade and industrialization policy, particularly with respect to implementing further trade reforms. The monetary-fiscal-and-exchange-rate-policy nexus is a problematic area. Bound by stringent fiscal and monetary ceilings, the liberalization of capital account has led to an extended trend of peso appreciation. It is unfortunate that the capital account liberalization came at a time when trade liberalization has not been more fully implemented and when the impact of trade reforms has not been more fully realized. The process, however, is irreversible. Still, as has been suggested in the policy symposium, some further reforms could be implemented on the capital account to 'clean up the dirty float' and reduce the pressure for the peso to appreciate. This pertains to allowing investments to be retained in foreign exchange. At present, for example, investments in initial public offerings (IPOs) must be in pesos. So should direct foreign investments be converted to pesos to be registered. The huge inflows from such activities has largely contributed to the recent peso appreciation.

While a complementary exchange rate adjustment would have been ideal to accompany trade liberalization, the current peso appreciation should not prevent the government from pursuing further trade policy reforms. Postponing trade liberalization will not help set the exchange rate on the more realistic level. On the contrary, given that the capital account has been liberalized, there is no choice but to proceed further with trade liberalization. Only this can prevent if not reverse the further trend toward more peso appreciation. No doubt, the economy will in time adjust to a more realistic exchange rate level. Meanwhile, the export sector is being hurt. Hopefully, export producers will respond by increasing their productivity and becoming more world competitive.

Becoming more integrated with the global economy will very likely raise productivity especially if supported by appropriate investments in human resources. Indeed, such dynamic impact of increased competition from a

more liberal trade regime is already indicated in the results of the analysis for the manufacturing sector. There was not much accompanying exchange rate adjustment between 1983 and 1988. The manufacturing sector has been forced to adapt and become more competitive. The momentum for change has been triggered.

Thus there is reason to be hopeful with respect to the prospects for the Philippine industrial sector. This optimism is bouyed up by recent developments. The first is with respect to the new GATT which brings back the option for export subsidies (an option closed to our successful Asian neighbors — Thailand and Malaysia) and complements well the export push strategy. By the time the exchange rate has adjusted, Philippine exports will be able to cope more advantageously with the global liberalization brought about by the new round of GATT. Then, there is the very robust increase in direct foreign investments reported by BOI in the past several months.

With all these reforms and in all indications, there seems to be no major reason why the Philippines should not be able to catch up with Asia's tigers in the near future.

PART 1

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- 166 -

PART II: SPECIAL PAPERS

Special Paper No. 1

Trade Reform in the 1990s: Effects of E.O. 470 and the Import Liberalization Program

Elizabeth S. Tan

166A

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167

CHAPTER 1

Trade Policy and Trade Policy Reforms: 1950s-1970s

Introduction

The Philippines has not been an exception to the economic mood sweeping the 1980s when many developing countries engaged in trade policy reform as part of a broader structural adjustment program. The trade reform that began in the 1980s, the second attempt,[1] continues in the 1990s and the objectives remain: one, to reduce the distortions on relative prices created by a protective trade regime, thereby increasing the efficiency with which the economy can use its resources; and two, to improve the trade balance or increase the competitiveness of exports and import substitutes. This is important because of the growth constraints posed by import substitution and more recently, the country's foreign debt problem.

The objective of this study is to assess the short-run and medium-term impact of the implementation of Executive Order (E.O.) 470 and the lifting of quantitative restrictions (QRs) using the Chunglee model. A simulation model allows the study to quantify effects of trade reform assuming a flexible exchange rate.

This paper is organized into five chapters. The first chapter reviews briefly trade policy and trade policy reforms from the 1950s to the 1970s and focuses on the experiences of the 1980s. The second chapter reviews trade reform

1. The first attempt was in the early 1960s.

policies pursued in the 1990s: E.O. 470, E.O. 8, the ongoing import liberalization program and the lifting of foreign exchange controls. The third chapter presents the Chunglee and the simulation models, as well as the arguments and limitations of the models. The fourth chapter analyzes the empirical and simulation results from the Chunglee and simulation models, respectively. The last chapter consolidates the analyses and findings of the study; it ends with a brief conclusion.

History of Trade Policy and Trade Policy Reforms

Many studies have documented Philippine trade and industrial policies. The brief history covering the first three decades is drawn from Baldwin (1975).[2]

The character of trade policy shortly after World War II was largely determined by: one, foreign exchange shortage; two, the constraints imposed by the Free Trade Act of 1946 and a fixed exchange rate in curbing imports. Hence, the policy response was to raise domestic sales taxes on imports and to impose QRs.[3] When these two measures failed, exchange control was used. Exchange control in the 1950s started as a policy response to balance-of-payments crisis but later was used extensively to regulate imports and to protect local producers. The use of tariffs to discourage imports started upon the expiration of the Philippine Trade Act of 1946. Imports were taxed 5 percent in 1955 and increased by 5 percent every year until 1973; by 1973, tariffs on imports would have been 100 percent. This seemed redundant in the face of an overvalued exchange rate at P2 to the US dollar and pervasive QRs.

The first attempt at trade policy reform came in the 1960s, due to (1) pressure from exporters, and (2) dissatisfaction over the way exchange controls were implemented and failure to maintain high growth rates in the early 1950s. It started with a brief period of decontrol spread over three stages, where the percentage of foreign exchange transaction under the free market rate of P3 per US dollar was gradually increased from 25 to 50 percent and 75 percent. Complete decontrol was decreed on January 1962; by November 1965, the peso was formally devalued to P3.9 for every US dollar. This reform was incomplete because there was no parallel reform in tariff and nontariff policy.

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2. Baldwin, Robert E. *Foreign Trade Regimes and Economic Development: The Philippines.* (NY: National Bureau of Economic Research, 1975).

3. The Import Control Act of 1948.

The decontrol continued for two years in the next administration but exchange controls were reimposed in the middle of 1967 due to a deterioration of the balance of payments largely brought about by expansionary policies in the administration's first two years. Since the balance-of-payments situation did not improve and eventually became untenable toward late 1969, there was no choice but to devalue the peso from P3.9 to the US dollar to P6.4 by February 1970.

Trade policy in the 1970s remained inward-looking despite the initial attempt at reform. Although the Tariff Code was simplified in 1973, tariffs continued to be high: there were six tariff rates ranging from 10 to 100 percent. The 1973 Tariff Code was in effect until 1980. In the meantime, nontariff policy became more restrictive: the system of classifying commodities based on essentiality, a carry-over from the 1950s, remained but the categories increased. The number of commodities that were regulated increased from 1,307 lines in 1970 to reach 1,820 in 1980; this was the height of import restriction based on commodity line counts, slightly surpassed only in 1984 (Table 1.1).

There was a brief period of growth in the mid-1970s but toward the late 1970s, policymakers already recognized a need for reform because of major flaws and limits of past industrial policy.[4] Despite the absence of strong commitment, the second attempt at trade reform began in 1981 as part of a structural adjustment program. The reform became more difficult to implement since the economy started slowing down in 1981.

The Tariff Reform Program (TRP) of 1981 was complemented by the lifting of QRs on imports, abolition of all export taxes except on logs, and a tax reform, the objective of which was to even off levels of protection among and within sectors and achieve effective protection rates (EPRs) within the range of 30 to 80 percent. Tariff rates were reduced gradually from a peak of 100 percent to a maximum of 50 percent and a minimum of 10 percent by 1985. The reform focused on three areas:

(1) tariff rates on 177 nonessential consumer (NEC) and unclassified consumer (UC) were reduced from a peak rate of 100 to 50 percent;

(2) tariff rates on 295 lines were reduced involving 14 key industries while rates on 100 lines were increased;

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4. Montes, Manuel 1988. The 1976-1979 Extended Fund Facility from the IMF was a failed attempt to press for reforms.

TABLE 1.1

THE IMPORT LIBERALIZATION PROGRAM, 1980-1989

Year	Restricted	Re-restricted	Liberalized	Re-liberalized	NET
1980	1,820[b]				1,820[b]
1981	2		263		1,559
1982	253	52	617		1,247
1983	598	28	48		1,825
1984	6	42	1		1,872
1985			70	4	1,798
1986		4	951	28	823
1987		2	170	4	651
1988		173[a]	209	10	605
1989			56	72	477

[a]Includes 49 items which were liberalized but regulated in Lists, A, B or C, and 124 not in Circular 1029.

[b]From 1970 to 1980 to include 1,307 lines in 1970.

Source: De Dios, L. "A Review of the Remaining Import Restrictions." PIDS Research Paper Series No. 94-08, 1994.

(3) for ten residual sectors, rates on 128 lines were reduced and 13 lines were increased.[5]

The Import Liberalization Program (ILP) never really took off because of the 1983 balance-of-payments crisis and hence, was postponed for three years. A series of tax reforms from 1983 to 1985 gradually unified the sales taxes on imports and import substitutes, therefore, the additional protection from the differential sales tax rates was removed. By 1985, the mark-up rate[6] was also reduced to a uniform 25 percent on semi-essential and essential goods and was eventually removed by 1986.

5. Medalla, Erlinda M. "Assessment of the Tariff Reform Program and Trade Liberalization," TC-PIDS Staff Paper Series No. 86-03, 1986a.

6. The mark-up rate increases the tax base of imports; this effectively increases total duties paid.

The new administration established in 1986 pursued the ILP to hasten economic recovery. Many factors made the gains in this brief period more realizable: one, the initial strong political will of the new government; two, the implementation of the ILP was riding on a consumption-led recovery between 1986 and 1988; three, in late 1987, crude oil prices dropped while world prices of coconut recovered; and four, inflation rate was very low during this period.[7] In 1986, about half of the 951 commodities liberalized were manufactured goods such as textile, leather, rubber, paper, and iron and steel products; 20 percent were food products. In 1987, QRs on 170 commodities were lifted; the largest group, about 77 lines, were textile, yarn and fibers. In 1988, QRs on 209 lines were lifted, mostly textile, yarn and fibers, paper and paperboard, and iron and steel products. The remaining 673 Philippine Standard Commodity Classification (PSCC) lines were divided into lists A, B and C. Those under list A were for immediate liberalization and as of December 1989, 94 lines were liberalized; those under list B were for review and those under list C, consisting of 114 lines, were for continued regulation due to national security and health reasons.

Tables 1.2 and 1.3 show the EPR[8] structures for 1983, 1985, 1986 and 1988 assuming without and with duty drawbacks, respectively. In Table 1.2, the combined effect of the TRP of 1981 and the indirect tax reform brought down the average EPR for the economy from 50 percent in 1983 to 37 percent in 1986; the substantial change was between 1985 and 1986 largely

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7. Inflation rates were 0.75 percent in 1986, 3.79 percent in 1987 and 8.76 percent in 1988.

8. On top of tariffs, indirect taxes exerted additional protective effect in 1983 and 1985 because the sales tax on imports was paid in advance and the tax included a mark-up rate ranging from 25 to 100 percent. Hence, for 1983 and 1985, EPR of sector j (EPR_j) is computed as follows:

$$EPR_j = \frac{(1 + t_j)\,[1 + S_{mj}/\ + S_j] - \sum a_{ij}^{\beta}(1 + t_{ii})}{1 - \sum a_{ij}^{\beta}}$$

where

t_j	=	implicit rate on output
S_{mj}	=	1 + f (1+m)
f	=	the advance sales tax
m	=	the mark up rate
t_{ii}	=	the implicit rate on inputs
S_j	=	sales tax on local substitutes

Since, the mark up rate was abolished and sales taxes were unified in 1986, EPR from 1986 onwards need not include the additional protective effect of indirect taxes.

TABLE 1 2

WEIGHTED AVERAGE EFFECTIVE PROTECTION RATES, BY MAJOR SECTORS[a]
1983, 1985, 1986, 1988
(in percent)

		1983	SD[b]	1985	SD	1986	SD	1988	SD
03-96	All Sectors	49.3	115.7	46.3	101.1	36.9	71.2	33.1	61.8
	Importables	103 6	137 7	97 4	116.6	76.7	77.9	70.0	64.3
	Exportables	-10 5	17 4	-10.7	16 8	-7 5	14.6	-8.1	15.3
03-22	Agriculture, Fishing and Forestry	9.1	39 4	8.0	35.5	3.8	22.5	3.7	22.8
	Importables	85.5	12.4	76 5	8.0	44 3	10.2	45.1	8.9
	Exportables	-10.1	8.0	-9.2	9 3	-6.4	9 5	-6.7	9.6
23-27	Mining	-0.3	16.5	-1.3	14.8	-3.1	12.9	-4.2	13.1
	Importables	27.7	0 5	23 6	1.5	18.2	4.6	17.3	5.0
	Exportables	-9 9	2 6	-9.9	2 6	-10 4	2.7	-11.6	3.0
28-96	Manufacturing	75 3	133 2	70.5	117.3	57 7	79 8	51.7	67.7
	Importables	108.0	142 2	102.1	122 6	82 9	79.2	75.0	64.3
	Exportables	-11 2	27 0	-13 4	25.1	-8.9	21 0	-9.8	22.2

[a]Weight used· FTVA Qbj, EPRs were calculated using Price Comparison without duty drawback.
[b]Standard deviation

due to the indirect tax reform. Table 1.3 shows that if duty drawbacks[9] were strictly implemented, export taxes in 1983 and 1985 would continue to penalize the entire exportable sector by 4 and 4.5 percent respectively; the penalty rate increased in 1985 because export taxes on these following items were raised: coconuts and its byproducts, by 5-7 percent; animal feeds, by 6

9. Duty drawbacks, given as tax credits, are rebates on import duties paid on inputs used to produce exports

TABLE 1 3

WEIGHTED EFFECTIVE PROTECTION RATES, BY MAJOR SECTORS[a]
1983, 1985, 1986, 1988
(in percent)

		1983	SD[b]	1985	SD	1986	SD	1988	SD
03-96	All Sectors	52 8	113 7	49.3	97.4	39 8	69.1	36 3	59.2
	Importables	103.6	137.7	97 4	116 6	76 7	77 9	70 0	64.3
	Exportables	-4 0	9 5	-4.5	9 8	-1.4	10 4	-1.4	10.4
03-22	Agriculture, Fishing and Forestry	10.3	38.9	9 2	35.0	5 0	21 9	5 2	22 1
	Importables	85 5	12 4	76.5	8 0	44 3	10 2	45 1	8.9
	Exportables	-8 7	8.0	-7 8	9 4	-4 9	9 4	-4 9	9.4
23-27	Mining	7 2	12 0	6 1	10 2	4 8	8 2	4 5	7.9
	Importables	27 7	0 5	23 6	1 5	18 2	4 6	17 3	5 0
	Exportables	0 1	0 0	0 1	0 0	0 1	0 0	0.1	0 0
28-96	Manufacturing	79 2	130 0	74.1	114.1	61 2	76 4	55 5	63.6
	Importables	108 0	142 2	102 1	122.6	82.9	79 2	75.0	64.3
	Exportables	3 1	7 5	0 1	9 1	3 8	10 6	3 8	10.6

[a]Weight used FTVA Qbj, EPRs were calculated using Price Comparison with duty drawback
[b]Standard deviation

percent.[10] The penalty rate dropped to 1.4 percent in 1986 and 1988 because all export taxes, except on logs, were abolished in 1986; the export tax on logs is 20 percent. The TRP of 1981 brought down the levels of protection and dispersal of rates among sectors but the protection structure did not change: the primary and agricultural sectors and of exportable sectors were penalized relative to manufacturing and importable sectors, respectively.

10 The 2 and 6 percent export tax on coffee and fish, respectively, were abolished though.

CHAPTER 2

Trade Reform in the 1990s

The objectives of this chapter are: one, to review major attempts at trade reform in the 1990s: E.O. 470 and E.O. 8 and the progress of the import liberalization program (ILP); two, to look into their respective effects on the implicit rate and EPR structures; three, to discuss briefly the lifting of foreign exchange controls in 1992 and its effect on the process of trade reform.

Tariff Reform and Import Liberalization in the 1990s

E.O. 470, issued on July 20, 1991 became the second most significant tariff reform initiative in the country's tariff policy by providing for further tariff changes since the completion of the TRP in 1985. It was the outcome of a one-year consultation by the government with the private sector which has opposed the implementation of E.O. 413 because the tariff cuts as provided were to be implemented over one year only. E.O. 470 in effect spread the same tariff cuts over five years rather than one year. E.O. 470 came six years after the TRP of 1981; it could have been sooner but it would have been redundant since the scope and strength of import restrictions in 1985 was no different from those in 1970. After the ILP made some gains during the period 1986 to 1988, a new round of tariff cuts was seen as the next logical step to preserve the gains achieved by previous trade reforms, to sustain and to give credibility to the process of trade reform.

E.O. 470 made some policy gains as well as losses. First, E.O. 470 continues to move toward a more neutral tariff policy by reducing the

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number of commodity lines[11] with high tariffs and increasing the number of commodity lines with low tariff; nevertheless, the clustering of rates occurs only in the range of 10 to 30 percent (Table 2.1). Under the 40 percent tariff level, 480 lines in 1991 will be reduced to 0 by 1995 while commodities with 50 percent rates, from 1,177 lines in 1991 to 208 by 1995. The changes along the three other lower tariff levels are: in the 10 percent tariff level, the number of lines will be increased from 1,590 in 1991 to 1,958 by 1995; in the 20 percent level, from 972 lines to 1,041; and in the 30 percent level, from 973 to 1,962

Second, E.O. 470 broke a policy commitment provided in the TRP of 1981 by breaching the 10 percent floor rate: 311 commodities will continue to receive 0 percent, 3 percent and 5 percent by 1995. All of these are actually raw materials. Which sectors enjoy these low tariffs? Under 0 percent with a

TABLE 2.1

FREQUENCY DISTRIBUTION OF TARIFF RATES, E.O. 470

Rates in %	1991	1992	1993	1994	1995
0	45	43	43	43	43
3	277	277	304	304	285
5	11	11	16	16	16
10	1,590	1,972	1,949	1,958	1,958
15	3	3	6	32	26
20	972	744	887	918	1,041
25	30	30	103	133	19
30	973	843	1,041	1,004	1,962
35	–	102	47	620	–
40	480	385	662	31	–
45	–	622	–	–	–
50	1,177	526	500	499	208
TOTAL	5,558	5,558	5,558	5,558	5,558

Source of basic data. Tariff and Customs Code, August 1991.

11. Each line is based on the 8-digit Harmonized System (HS) Code.

total of 43 lines, 16 are fertilizers, 10 are wood products, nine are machinery and mechanical appliances/parts for tractors and power tillers, two are mineral products and one for rattan. Under 3 percent, with a total of 285 lines, 28 commodities are agricultural products, 15 are mineral products, 52 are organic chemicals, 10 are tanning or dyeing extracts, 24 are raw hides and skins and leather, 19 are wood pulp, 20 are vegetable textile fiber and man-made staple fibers, and 15 are pig iron and other ferrous products. Under 5 percent, nine are fertilizers and five are cotton.

It is interesting to note that by 1995, the second highest tariff rate is 30 percent with 1,962 lines and none for the 40 percent level. Nevertheless, there are 208 lines for the highest 50 percent distributed as follows: fruits and nuts, 17 commodities; rice, 4; vegetable fats and oils, 12; sugar and confectionery, 9; fruit and vegetable juices, 9, beverages and spirits, 13; tobacco and manufactured tobacco substitutes, 14; perfumery, cosmetic and toilet preparations, 10; articles of leather, 21; plywood, 6; footwear, 25; and tiles and marbles, 7. Although all of these items have been liberalized in 1992, except rice and plywood, a 50 percent tariff is considered prohibitive by any standard.

The progress of the ILP in the same years was minimal. In 1990 and 1991, QRs on 1 and 16 commodities were lifted, respectively. The ILP in 1992 achieved more progress as QRs on 173 commodities from list A, B and C were lifted. They are:

List B:	processed food (PSCC 01-06)	65 lines
	motor vehicles (PSCC 78),	17 lines
List C:	processed food (PSCC 01-04)	18 lines
	medicinal and pharmaceutical products (PSCC 54)	21 lines

(see Table 2.2)

As of December 1992, QRs remained for 275 commodities, nevertheless, as of June, 1993, most of the gains in 1992 were practically reversed as restrictions on 81 items were imposed again.[12] QRs on 356 commodities remained as of June 1993, broken down into 190 lines from List B, i.e., cars, trucks and diesel engines, motorcycles, chemicals, fertilizers, coffee, used tires, potatoes, onions and cabbage; 99 are from List C.[13]

12 Memoramdum Order 95, February 1993

13 De Dios, L "A Review of the Remaining Import Restrictions."PIDS Research Paper, Series No 94-08, 1994.

TABLE 2.2

THE IMPORT LIBERALIZATION PROGRAM, 1990-1993

PSCC*	1990	1991	1992 A	1992 B	1992 C	1992 Total	E.O. 8[a]	1993[b]
00 Live animals for food			1		15	16	6	15
01 Meat and preparations				29	16	45	32	43
03 Fish and preparations				33		33	29	
04 Cereals and preparations					3	3	3	1
06 Sugar honey and preparations				3		3	1	
08 Feeding stuffs for animals								22
54 Medicinal and pharmaceutical products				21	21			
64 Paper and paperboard		1						
71 Power generating machinery	1							
72 Specialized industrial machinery and equipment				1		1	1	
74 Nonelectric machinery				2		2	6	
76 Telecommunications equipment		9		2		2		
77 Electric machinery and apparatus		3		18		18	11	

TABLE 2 2 (CONTINUED)

PSCC*	1990	1991	1992 A	1992 B	1992 C	1992 Total	E.O. 8[a]	1993[b]
78 Motor vehicles			5	17		22	24	
79 Railway vehicles, aircraft and ships					4	4		
89 Miscellaneous manufactures					1	1		
90 Commodities, n e.c.		3						
94 Dogs					1	1		
95 Sidearm parts, n e.s., e g., sword blades, hilts, guards, handles, scabbards and sheaths					1	1		
TOTAL	1	16	6	105	62	173	113	81
Remaining items not liberalized	471	449				275		356

[a]The frequency distribution captures only commodities which were tariffied by E.O. 8

[b]Frequency distribution of commodities regulated by M O. 95 dated February 1993

*Philippine Standard Commodity Classification.

Source. De Dios, L "A Review of the Remaining Import Restrictions." PIDS Research Paper Series No. 94-08, 1994, and E O. 8.

E.O. 8, issued on July 1992, provided tariffication of 153 commodities and tariff realignment for 48 commodities in anticipation of the lifting of QRs.[14] The advantages of replacing QRs with tariffs are: one, trade policy becomes more transparent; two, private rents are transferred to government as revenues; and three, domestic prices are linked with world prices. The second to the last column of Table 2.2 shows commodities liberalized in 1992 but were tariffied; there were 113 commodities (by PSCC count) tariffied by E.O. 8. Table 2.3 shows the details. In general, almost all the commodities received a tariff adjustment equivalent to twice their existing rates in 1992 as provided for by E.O. 470. For commodity groups 72 (Specialized Industrial Machinery and Equipment), and 77 (Electric Machinery and Apparatus),

TABLE 2.3

TARIFFICATION UNDER E.O. 8

PSCC	Description	No. of Lines	Ave. Tariff Rate in E.O. 470 in 1992 (%)	Ave. Tariff Rate in E.O. 8 in 1992 (%)
00	Live animals for food	6	28	57
01	Meat and preparations	32	35	71
03	Fish and preparations	29	38	82
04	Cereals and preparations	3	23	75
06	Sugar, honey and preparations	1	50	75
72	Specialized industrial machinery and equipment	1	45	100
74	Nonelectric machinery	6	28	60
77	Electric machinery and apparatus	11	43	91
78	Motor vehicles	24	30	56
	TOTAL	113		

Sources of basic data: E.O. 470 and E.O. 8.

14 This count is based on the Harmonized System (HS) Code.

the tariff-equivalents were more than twice their existing rates in 1992, from an average of 45 percent and 43 percent under E.O. 470 to an average of 100 percent and 91 percent under E.O. 8, respectively. In a sharp departure from the TRP of 1981 and E.O. 470, E.O. 8 breached the 50 percent ceiling rate and granted rates between 60 percent to a maximum of 100 percent, time-bound for five years starting August 1992 (Table 2.4). In 1992, these commodities were conferred 60 percent tariffs: processed meat products, 31; fish, live or frozen, 28; public transport vehicles and trucks and their parts, 16. Those with 75 percent tariffs were corn, sugar and cereal grains, a total of 7 items. Those with 80 percent tariffs are duck meat, washing machines and electrical machinery and equipment and parts (a total of 12 items). Under the 100 percent level with a total of 68 lines are chicken, smoked and dried meat (13 items); dried fish, crustaceans, mollusks (31 items); meat, fish and crustacean preparations (11 items); and electric fans, air conditioners, refrigerators, sewing machines and beverage coolers (10 items). Basically, out of the 68 commodities that will enjoy about 80 percent tariffs in 1993 with QRs reimposed by M.O. 95 are meat and meat preparations and live animals. By 1994, their 60 percent rates will still be considered high.

In general, E.O. 8 has not negated nor delayed the effects of E.O. 470. As shown by Tables 2.1 and 2.4, the rate structure of both E.O.s is similar by 1995. It has, although temporarily, disturbed the relative protection among industries in the interim years 1992, 1993 and 1994. There have been previous similar policies of tariffication, such as R.A. 6647 in 1987, but the reimposition of QRs after higher tariffs have been granted is damaging to the whole process of trade policy reform because it reflects the absence of strong commitment and, hence, casts doubt on the credibility of the reform process. Once this kind of pattern can be discerned or established by economic agents, necessary adjustments to reform would not be forthcoming.

Effect on Implicit Tariffs and Effective Protection

The effect of E.O. 470 on implicit tariffs can be seen in Table 2.5. The weighted average implicit rate for the entire economy exhibited a general downward trend from 19.3 percent in 1990 to 16 percent in 1995. Likewise, the entire manufacturing sector and all its major groups posted a similar downward trend. Nevertheless, all the primary sectors, except logging and other forestry activities, posted increases in their implicit rates in the first two years after E.O. 470 but their respective rates in the final year 1995 were still lower than their pre-E.O. 470 levels.

TABLE 2 4

FREQUENCY DISTRIBUTION OF TARIFF RATES, E.O. 8

Rate in %	1992	1993	1994	1995	1996
0	43	43	43	43	43
3	279	306	306	287	287
5	11	16	16	16	16
10	1,973	1,950	1,959	1,960	1,960
15	3	6	32	26	26
20	743	886	915	1,037	1,040
25	30	103	133	20	19
30	769	964	927	1,988	2,004
35	101	48	578	14	–
40	381	615	95	–	–
45	580	–	14	2	–
50	526	568	514	213	211
55	–	14	2	–	–
60	80	3	72	–	–
65	–	2	–	–	–
70	–	14	–	–	–
75	7	–	–	–	–
80	12	68	–	–	–
100	68	–	–	–	–
TOTAL*	5,606	5,606	5,606	5,606	5,606

*The total number of HS lines should be 5,610 but there are 4 lines with specific rates which are not included.

Sources of basic data: E.O 8 and Tariff and Customs Code, August 1.

TABLE 2.5

WEIGHTED AVERAGE IMPLICIT TARIFFS USING BOOK RATES[a], 1990-1995

(in percent)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-96	All Sectors	19.3	23 1	19 6	23 7	18 7	22 8	17 7	21 8	16 9	21.1	16.0	20 5
	Importables	38 8	12.9	39.4	14 1	37 6	13 6	35 8	13 1	34 2	13.0	32 5	13 2
	Exportables	-2 5	6.6	-2.5	6.6	-2 5	6 6	-2 5	6 6	-2.5	6 6	-2 5	6 6
03-22	Agriculture, Fishing and Forestry	3.3	17.3	6 0	22.0	5.1	20 2	4 1	18 5	3 2	16 8	2.3	15.1
	Importables	33.1	10.6	46 6	7.9	42 1	6 8	37 5	5 8	33.1	4 5	28 6	3.3
	Exportables	-4.3	8 2	-4 3	8 2	-4 3	8 2	-4 3	8 2	-4 3	8 2	-4 3	8 2
23-27	Mining	4.3	7 6	5.2	10.6	5 2	10.6	5 2	10 6	5 2	10 6	5 2	10 6
	Importables	16 7	4.0	20 3	11 5	20 3	11 5	20 3	11 6	20 3	11 6	20.3	11 6
	Exportables	0.0	0 0	0.0	0 0	0 0	0.0	0 0	0 0	0 0	0 0	0.0	0 0
28-96	Manufacturing	29 1	20.9	28 0	21.1	27 0	20 5	26.0	19 8	25 1	19 4	24 2	19 1
	Importables	40.1	12 7	38.6	14 4	37 2	14 0	35 8	13 8	34 6	13 7	33 3	14 0
	Exportables	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0.0	0 0	0 0

TABLE 2.5 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-13	Agriculture	9 3	14.9	14 3	21 9	12 9	19 7	11.5	17.6	10 1	15.4	8 8	13.3
	Importables	30 2	9.2	46.4	7 8	41 9	6.7	37 3	5 6	32.9	4 3	28 4	3 0
	Exportables	0.0	0 6	0.0	0.5	0.0	0.5	0 0	0 3	0.0	0.5	0 0	0 5
19-20	Fishing	5.4	14 6	6 2	16.5	5.6	14.8	5.0	13.2	4 4	11 5	3 7	9.9
	Importables	42.9	9 5	49 8	0 1	44 9	0.1	39 9	0.1	34 9	0 1	29 9	0 1
	Exportables	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0 0	0 0	0.0
21-22	Logging and Other Forestry Activities	-17.7	11.7	-18.0	10.0	-18.1	9 6	-18.2	9 2	-18 2	8 8	-18 3	8 5
	Importables	41.2	0.0	32.1	0 0	30.2	0 0	28 2	0 0	26.3	0 0	24 3	0 0
	Exportables	-20 0	0.0	-20.0	0.0	-20.0	0 0	-20.0	0.0	-20 0	0 0	-20.0	0.0
28-45	Food Processing	36 8	21.1	36.8	21.1	35 5	20.4	34 2	20 0	33.0	19 7	31 7	19 7
	Importables	48.0	38.4	48.1	39 9	46.4	38.8	44.7	37 5	43.0	36 4	41.4	35 5
	Exportables	0.0	0.0	0.0	0 0	0.0	0 0	0 0	0.0	0 0	0 0	0 0	0 0
46-50	Beverages and Tobacco	26.5	25.0	26.5	25.0	26.2	24 7	25 9	24 4	25 6	24 2	25 3	24 0
	Importables	50.0	0.0	50.0	0.0	49.4	1.1	48.8	2 3	48.3	3 4	47 7	4.6
	Exportables	0.0	0.0	0.0	0 0	0 0	0 0	0 0	0 0	0.0	0 0	0 0	0.0

TABLE 2 5 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
51-55	Textile and Footwear	8.8	16 4	6 6	12 6	6 6	12 6	5 3	10.0	5 3	10 0	5.0	9 5
	Importables	39.2	1.4	29 6	5 3	29 6	5 3	23 6	3 5	23 6	3.5	22.4	3.9
	Exportables	0 0	0.0	0 0	0 0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0.0
56-58	Wood and Wood Products	0 0	0 0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0.0	0 0	0.0
	Importables	-	-	-	-	-	-	-	-	-	-	-	-
	Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0
59-66	Paper, Rubber, Leather and Plastic	27.3	10.7	28.4	11.4	26 6	10.7	24.6	10.3	23.1	9.8	21.6	9.5
	Importables	32.4	7.2	33.6	8.0	31 4	7.4	29.1	7.6	27.4	7.4	25 5	7.3
	Exportables	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0 0	0.0
67-75	Chemicals and Chemical Products	27 5	12.7	21.9	10.6	20.6	9.4	20.4	9 4	20 3	9.5	20 2	9.5
	Importables	27.5	12.7	21.9	10 6	20.6	9.4	20.4	9.4	20 3	9 5	20.2	9.5
	Exportables	-	-	-	-	-	-	-	-	-	-	-	-
76-79	Nonmetallic Mineral Products	23.7	7.1	19.1	6.8	19.4	5.3	19 2	4 5	19.0	3.6	18.7	2 9
	Importables	24.0	4.6	19.3	5 7	19.6	4.7	19.4	3.8	19 2	2.9	19.0	2.0
	Exportables	0.0	27.9	0.0	29.2	0.0	43.6	0.0	42.1	0.0	40.8	0.0	40.2

TABLE 2 5 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
80-82	Basic Metals and Metal Products	26 9	3 5	26 1	3 5	25 8	3 4	22 8	3 3	21.1	3.0	19.6	2 9
	Importables	27 3	1 0	26.5	1 4	26 2	1 1	23 2	1 6	21 4	1 4	19.9	1 5
	Exportables	0 0	0 0	0 0	0.0	0 0	0 0	0.0	0 0	0 0	0 0	0 0	0.0
83-91	Machinery Including Electrical Equipment and Transportation Equipment	18.6	12 0	16 0	11 9	13.0	10 8	13.0	9 5	12 7	9.0	12.0	8 0
	Importables	24.1	7 3	20 8	9 1	16 9	9 3	16 9	7 1	16 5	6 5	15 5	5 3
	Exportables	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
92-96	Miscellaneous Manufactures	13.4	16 9	11 2	14 2	10 6	13 3	10 0	12 5	9 3	11 6	8 7	10.8
	Importables	29.4	8 9	24 7	7 9	23 3	7 1	21.9	6 3	20 5	5 6	19 1	4 9
	Exportables	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.0	0 0

[a]Weight used FTVA Q_{bj} ; all implicit tariffs are net of indirect taxes

[b]Standard deviation

QRs remain in some sectors, therefore, it is still meaningful to look at implicit rates using price comparisons (Table 2.6). Implicit rates from price comparisons are higher than implicit rates from tariffs[15] in 1990 and 1995 for the following sectors where QRs remain: for agriculture, it was 12.8 percent and 11.1 percent relative to 9.3 percent and 8.8 percent; for chemicals and chemical products, it was 39.3 percent and 34.5 percent relative to 27.5 percent and 20.2 percent; for nonmetallic mineral products it was 79.5 percent and 79.4 percent relative to 23.7 percent and 18.7 percent; and for machinery including electrical and transport equipment, it was 23.3 percent and 16.9 percent relative to 18.6 percent and 12 percent.[16]

E.O. 470 also brought down the dispersal of implicit rates in the economy: the standard deviation for implicit rates from book rates and price comparisons dropped from 23 percent and 27.4 percent in 1990 to 20 percent and 25.4 percent in 1995, respectively. From 1990 to 1995, there is also a general downward trend in EPRs for the entire economy whether using book rates or price comparisons (Tables 2.7 and 2.8).[17] EPRs using book rates drop from 26.2 percent in 1990 to 21.8 percent in 1995; there is also a decrease in their standard deviation, from 45.3 percent to 21.8 percent for the same period. EPRs using price comparisons decrease from 32.5 percent in 1990 to 29 percent in 1995 while the dispersal rate drops from 61.7 percent to 57.3 percent. The drop in EPR from the book rates is greater than the decrease in EPR from price comparisons, about 17 percent relative to 11 percent because E.O. 470 contained more substantial changes in tariff rates while the import liberalization program in 1990, 1991 and 1992 showed very little progress in terms of lifting QRs. Exceptions to this downward trend are: (1) wood and wood products — there is a slight increase in its EPR, from 19 percent in 1990 to 24 percent in 1995; (2) nonmetallic mineral products — its EPR using price comparison increased from 162 percent in 1990 to 174 percent in 1995.

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15. Although QRs exert an upward pressure on prices, prices increase in response to other factors. It would be quite difficult to isolate price changes solely from QRs. Another aspect is that price comparisons capture quality differences and other heterogeneous features in products.

16. Generally, when implicit rates from tariffs are the same as those from price comparisons, it can be assumed that there are no QRs, or QRs have been lifted in these sectors. Nevertheless, the computation of implicit rates based on price comparisons was only possible for seven sectors.

17. The EPRs in both tables were computed assuming no duty drawbacks for exportable sectors. This is evident from the negative EPRs of exportable sectors given that their implicit rates on their outputs and inputs are zero.

TABLE 2.6

WEIGHTED AVERAGE IMPLICIT TARIFFS USING PRICE COMPARISONS[a], 1990- 1995

(in percent)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-96	All Sectors	20.2	27.4	20.3	27.9	19.5	26.9	18.6	26.3	17.9	25.8	17.2	25.4
	Importables	40.5	22.5	40.7	22.8	39.2	22.6	37.6	22.6	36.2	22.7	34.8	23.0
	Exportables	-2.5	6.6	-2.5	6.6	-2.5	6.6	-2.5	6.6	-2.5	6.6	2.5	6.6
03-22	Agriculture, Fishing and Forestry	5.0	20.2	6.0	22.0	5.4	20.8	4.7	19.7	4.1	18.7	3.5	17.8
	Importables	41.9	8.3	46.6	7.9	43.5	7.8	40.5	8.3	37.5	9.2	34.5	10.5
	Exportables	-4.3	8.2	-4.3	8.2	-4.3	8.2	-4.3	8.2	-4.3	8.2	-4.3	8.2
23-27	Mining	4.3	7.6	5.2	10.6	5.2	10.6	5.2	10.6	5.2	10.6	5.2	10.6
	Importables	16.7	4.0	20.3	11.5	20.3	11.5	20.3	11.6	20.3	11.6	20.3	11.6
	Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-96	Manufacturing	29.6	27.3	29.2	27.3	28.2	26.9	27.2	26.5	26.4	26.2	25.5	26.0
	Importables	40.8	23.9	40.2	24.2	38.9	24.1	37.5	24.1	36.3	24.2	35.1	24.4
	Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 2.6 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-13	Agriculture	12.8	19.8	14.3	21.9	13.5	20 7	12.7	19.7	11.9	18.7	11.1	17.8
	Importables	41.6	7.8	46.4	7 8	43 8	7.9	41.1	8 6	38.6	9.7	36.1	11.2
	Exportables	0.0	0 6	0 0	0.5	0 0	0.5	0 0	0.3	0.0	0.3	0.0	0.3
19-20	Fishing	5.4	14.6	6.2	16 5	5 6	14.8	5.0	13.2	4.4	11.5	3.7	9.9
	Importables	42.9	9.5	49.8	0.1	44.9	0.1	39.9	0.1	34.9	0.1	29.9	0.1
	Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-22	Logging and Other Forestry Activities	-17.7	11.7	-18.0	10.0	-18.1	9.6	-18.2	9.2	-18.2	8.8	-18.3	8.5
	Importables	41 2	0.0	32.1	0 0	30.2	0.0	28.2	0.0	26.3	0.0	24.3	0.0
	Exportables	-20 0	0.0	-20.0	0.0	-20.0	0.0	-20.0	0.0	-20.0	0.0	-20.0	0.0
28-45	Food Processing	25.1	19 2	25.2	19 2	23.9	17.7	22.7	16 4	21 5	15.2	20.3	14.2
	Importables	32.8	39.7	32 8	39.9	31.2	39.2	29.6	38.7	28.0	38.3	26.5	38.1
	Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46-50	Beverages and Tobacco	26.5	25.0	26.5	25.0	26.2	24.7	25.9	24.4	25.6	24.2	25.3	24.0
	Importables	50.0	0.0	50.0	0.0	49.4	1.1	48.8	2 3	48.3	3.4	47.7	4.6
	Exportables	0.0	0.0	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 2 6 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
51-55	Textile and Footwear	8.8	16.4	6.6	12.6	6.6	12.6	5.3	10.0	5.3	10.0	5 0	9.5
	Importables	39.2	1.4	29.6	5 3	29.6	5.3	23.6	3.5	23.6	3.5	22 4	3.9
	Exportables	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0 0
56-58	Wood and Wood Products	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0 0	0.0	0.0	0.0
	Importables	-	-	-	-	-	-	-	-	-	-	-	-
	Exportables	0 0	0.0	0 0	0.0	0 0	0.0	0.0	0 0	0.0	0 0	0.0	0.0
59-66	Paper, Rubber, Leather and Plastic	27.3	10.7	28.4	11.4	26.6	10.7	24.6	10.3	23.1	9.8	21.6	9.5
	Importables	32.4	7.2	33.6	8.0	31.4	7.4	29.1	7.6	27.4	7.4	25.5	7.3
	Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67-75	Chemicals and Chemical Products	39.3	9.7	36.3	8.9	34 9	9.6	34.7	10.0	34.7	10.1	34.5	10.4
	Importables	39.3	9.7	36.3	8.9	34.9	9 6	34.7	10.0	34.7	10.1	34.5	10.4
	Exportables	-	-	-	-	-	-	-	-	-	-	-	-
76-79	Non-metallic Mineral Products	79.5	20.4	79.7	19.7	80.1	18.2	79.8	18.7	79.6	19.2	79 4	19.7
	Importables	80.5	9.1	80.7	9.0	81.1	9.7	80.8	10.6	80 6	11.5	80.4	12.4
	Exportables	0.0	27.9	0.0	29.2	0.0	43.6	0.0	42.1	0.0	40.8	0.0	40.2

TABLE 2.6 (CONTINUED)

	1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
80-82 Basic Metals and Metal Products	26.9	3.5	26.1	3 5	25.8	3 4	22.8	3.3	21.1	3 0	19 6	2 9
Importables	27.3	1.0	26.5	1.4	26.2	1.1	23.2	1.6	21.4	1.4	19.9	1 5
Exportables	0.0	0.0	0 0	0.0	0 0	0.0	0.0	0.0	0 0	0 0	0.0	0.0
83-91 Machine Including Electrical Transportation Equipment	23.3	28.1	20.7	28.5	17.9	28.5	17.6	28.4	17.2	28.3	16.9	28.2
Importables	30.2	28.5	26.9	29.7	23 2	30 5	22.8	30.4	22.4	30 4	22.0	30.4
Exportables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92-96 Miscellaneous Manufactures	13.4	16.9	11 2	14 2	10.6	13.3	10.0	12 5	9.3	11 6	8.7	10.8
Importables	29.4	8.9	24.7	7.9	23 3	7.1	21.9	6.3	20.5	5 6	19 1	4.9
Exportables	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

[a]Weight used : FTVA Qbj; all implicit tariffs are net of indirect taxes.

[b]Standard deviation

TABLE 2.7

WEIGHTED AVERAGE EFFECTIVE PROTECTION RATES USING BOOK RATES[a], 1990-1995

(in percent)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-96	All Sectors	26.2	45.3	27.3	44.4	25.9	41.9	24.4	38.7	23 2	36.9	21.8	34.9
	Importables	57.0	40.7	57.8	39.3	55.1	36.1	52.0	32.0	49.6	29.9	47 0	27.9
	Exportables	-8.3	15.5	-6.8	15 7	-6 7	15.4	-6.5	15.1	-6.4	14.8	-6.4	14.6
03-22	Agriculture, Fishing and Forestry	1.8	19 6	5.6	24.7	4.6	22.8	3.6	20.8	2.6	19 0	1.6	17.2
	Importables	35.3	11.5	51.1	9.3	46.1	8 0	41.1	6.8	36.1	5 4	31.2	4.0
	Exportables	-6.7	9.6	-5.9	9.4	-5 9	9.4	-5.9	9.4	-5.9	9.4	-5.8	9.4
23-27	Mining	-4.2	13.1	0.5	15.2	0.5	15.2	0.5	15.2	0.5	15.2	0.5	15.2
	Importables	17.3	5.0	23.0	14.6	23.0	14.6	23.0	14.6	23.0	14.6	23.0	14.6
	Exportables	-11.6	3.0	-7.3	1 7	-7.2	1.7	-7.2	1.7	-7.2	1.7	-7.2	1.7
28-96	Manufacturing	41.6	46.4	41.0	39.0	39.3	35.3	37.4	30.2	35.9	33 0	34.3	34.3
	Importables	61.2	36.8	59.5	24.8	57.2	18.3	54.3	3.1	52.3	18.5	50.0	23.5
	Exportables	-10.4	22.6	-8.2	23.2	-8.0	22.7	-7.4	22.0	-7.3	21.6	-7.1	21.2

TABLE 2 7 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-13	Agriculture	9.3	15.9	15.0	23 7	13.5	21.3	12 0	19.0	10.5	16 7	9.1	14.4
	Importables	31.7	9 4	49.8	7 8	44 9	6 7	40.0	5.6	35.2	4.2	30.4	2.8
	Exportables	-0.7	1.0	-0.5	1.0	-0.5	1.0	-0.4	0.9	-0.4	0 9	-0.4	0.9
19-20	Fishing	3.4	17.4	6.0	20.3	5.3	18 2	4.5	16.2	3.8	14.2	3.0	12 2
	Importables	48.3	9.1	59.4	5.3	53.3	4.7	47.2	4 1	41.1	3.5	35.0	2.9
	Exportables	-3.0	2.0	-1.6	0.8	-1.6	0.8	-1.6	0 8	-1 6	0.8	-1.6	0.8
21-22	Logging and Other Forestry Activities	-22.3	12.7	-21.8	10.8	-21.8	10.4	-21.9	10.0	-22.0	9.7	-22.1	9.3
	Importables	41.7	0.0	32.6	0.0	30.6	0.0	28.7	0.0	26.7	0.0	24.7	0.0
	Exportables	-24.8	0.0	-23 9	0.0	-23.9	0 0	-23.9	0.0	-23.9	0.0	-23.9	0.0
28-45	Food Processing	43.6	49.1	42.7	48.5	41.0	44.7	39.2	41 1	37.6	38.6	36.0	36.4
	Importables	60.3	68.6	59.2	58 3	56.8	52 9	54.4	45 7	52 2	50.0	49.9	52.0
	Exportables	-11.2	25.0	-11.3	26.4	-10.9	25.5	-10.5	24 7	-10.1	24.0	-9.8	23.3
46-50	Beverages and Tobacco	45.1	56.0	43.8	58.7	43.5	58.5	43.1	58.4	42.7	58.2	42.3	58.1
	Importables	97.1	12.9	98.2	11.8	97.5	13.3	96.8	14.7	96.0	16.1	95.3	17.6
	Exportables	-13.5	3.7	-17.6	8.5	-17.6	8.5	-17.6	8.5	-17 6	8.5	-17.6	8.5

TABLE 2 7 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
51-55	Textile and Footwear	5.2	61.2	5 1	44 6	5.1	44.6	1.9	35.2	1.9	35.2	0.8	33.0
	Importables	116 4	25 8	87.5	6 6	87.5	6 6	66 7	6.4	66.7	6 4	61.6	4.1
	Exportables	-26.9	5 8	-18 8	4.9	-18.8	4.9	-16 9	4.5	-16.9	4.5	-16 8	4.3
56-58	Wood and Wood Products	18.9	11.3	23 5	10.7	23.5	10.7	23.5	10.7	23.5	10 7	23 5	10.7
	Importables	-	-	-	-	-	-	-	-	-	-	-	-
	Exportables	18.9	11.3	23.5	10.7	23.5	10.7	23 5	10.7	23.5	10.7	23.6	10.7
59-66	Paper, Rubber, Leather and Plastic	110.6	92.0	122.7	102.9	113.3	96.5	102.4	85.8	94.8	81.2	85.5	72 6
	Importables	134.9	88.2	149.7	99.5	138.5	93.3	125 6	82.1	116.6	77.8	105.6	69 0
	Exportables	-21.7	6 6	-23.8	4.1	-23.8	4.1	-23 8	4.1	-23.8	4.1	-23 8	4.1
67-75	Chemicals and Chemical Products	71.1	49.7	57 4	40.0	53.0	37 1	52 1	37.2	51.8	37 2	51 4	37.3
	Importables	71.1	49.7	57.4	40.0	53.0	37.1	52.1	37.2	51.8	37 2	51 4	37.3
	Exportables	-	-	-	-	-	-	-	-	-	-	-	-
76-79	Non-metallic Mineral Products	39.1	22.3	39.3	17.3	41.3	14.3	40.7	12.5	40.1	10.9	39.6	9.7
	Importables	40.0	11.6	40.0	13.1	42.0	10.9	41.5	8.7	40.9	6.5	40.4	4.3
	Exportables	-28.6	102.9	-18.4	97.7	-20.0	173.5	-20.0	169.7	-20.0	166.1	-20.0	164.4

TABLE 2.7 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
80-82	Basic Metals and Metal Products	72.2	12.3	78.3	12.4	77.4	12 4	66.4	11.2	60.1	10 2	54.7	9.4
	Importables	73.7	4.2	79.8	4.5	78.9	4.7	0 0	67.9	0.0	61 4	55.8	3.8
	Exportables	-20.8	0 0	-14 7	0.0	-14.7	0.0	-14.7	0.0	-14 7	0.0	-14.7	0.0
83-91	Machine Including Electrical Equipment, Transportation Equipment	35.5	29.5	32.1	31.0	24.8	30.8	24.9	27.8	24.2	26.9	22.4	25.2
	Importables	46.8	23.9	42.3	28.4	32.8	30.9	32.9	27.0	31.9	26.1	29.7	24.5
	Exportables	-2.4	0.0	-1.8	0.0	-1.8	0.0	-1.8	0.0	-1.8	0.0	-1.8	0 0
92-96	Miscellaneous Manufactures	39.5	52.4	37.6	49 4	34.8	45.7	32.0	42.0	29.3	38.4	26.5	34.8
	Importables	90.8	18.3	85.2	22.3	79.1	19.1	73.0	16.0	66.9	12.9	60.8	9.9
	Exportables	-3.4	0 0	-2.3	0.0	-2.3	0.0	-2.2	0.0	-2.2	0.0	-2.1	0.0

[a]Weight used. FTVA Qbj; EPRs were calculated assuming without duty drawback.

[b]Standard deviation

TABLE 2.8

WEIGHTED AVERAGE EFFECTIVE PROTECTION RATES USING PRICE COMPARISONS[a], 1990-1995

(in percent)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-96	All Sectors	32.5	61.7	33.9	62.9	32.6	61.3	31.2	59.5	30.1	58.4	29.0	57.3
	Importables	69.0	64.6	70.2	66.9	67.8	65.5	65.0	64.0	62 8	63.3	60.6	62.7
	Exportables	-8.3	15.5	-6.8	15.7	-6 7	15 4	-6 5	15.1	-6.4	14 8	-6.4	14 6
03-22	Agriculture, Fishing and Forestry	3.8	22.8	5.6	24.7	4.9	23.4	4.2	22.2	3.6	21.1	2.9	20.1
	Importables	45.1	9.0	51.1	9.3	47.7	9.0	44.3	9.4	41.0	10.3	37.7	11.7
	Exportables	-6.7	9.6	-5.9	9.4	-5.9	9.4	-5.9	9.4	-5 9	9.4	-5.8	9.4
23-27	Mining	-4.2	13.1	0.5	15 2	0.5	15.2	0.5	15 2	0.5	15.2	0.5	15.2
	Importables	17.3	5.0	23.0	14.6	23.0	14.6	23.0	14 6	23.0	14.6	23 0	14.6
	Exportables	-11.6	3.0	-7.3	1.7	-7.2	1.7	-7.2	1.7	-7.2	1.7	-7.2	1.7
28-96	Manufacturing	50.7	68.3	51.5	66.3	50.0	64.4	48.0	62.2	46.6	63.8	45.1	64.6
	Importables	73.7	65.4	74.1	63.0	71.9	61.2	69.0	59.3	67.0	62.5	64.9	64.5
	Exportables	-10.4	22.6	-8.2	23.2	-8.0	22.7	-7.4	22.0	-7.3	21.6	-7.1	21.2

TABLE 2.8 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-13	Agriculture	13.2	21.4	15.0	23.7	14.2	22.5	13 3	21.4	12.5	20.4	11.7	19.6
	Importables	44.4	8.5	49.8	7.8	47.0	8.3	44.3	9.4	41.6	10.8	39.0	12.6
	Exportables	-0.7	1.0	-0.5	1.0	-0.5	1.0	-0.4	0.9	-0.4	0.9	-0.4	0.9
19-20	Fishing	3.4	17.4	6 0	20.3	5.3	18.2	4.5	16.2	3.8	14.2	3.0	12.2
	Importables	48.3	9.1	59.4	5.3	53.3	4.7	47.2	4.1	41.1	3.5	35.0	2.9
	Exportables	-3.0	2.0	-1.6	0.8	-1.6	0.8	-1.6	0.8	-1.6	0.8	-1.6	0.8
21-22	Logging and Other Forestry Activities	-22 3	12.7	-21.8	10.8	-21.8	10.4	-21.9	10.0	-22.0	9.7	-22.1	9.3
	Importables	41.7	0.0	32.6	0.0	30.6	0.0	28.7	0.0	26.7	0.0	24.7	0.0
	Exportables	-24.8	0.0	-23.9	0.0	-23.9	0.0	-23.9	0.0	-23.9	0.0	-23.9	0.0
28-45	Food Processing	30.8	50.0	30.0	49.6	28.3	45 3	26.7	41.2	25.2	38.1	23.6	35.3
	Importables	43.7	100.3	42.6	98.2	40.3	95.8	38.1	92.8	35.9	95.7	33.8	97.3
	Exportables	-11.2	25.0	-11.3	26.4	-10.9	25.5	-10.5	24.7	-10.1	24.0	-9.8	23.3
46-50	Beverages and Tobacco	45.1	56.0	43.8	58 7	43.5	58.5	43.1	58 4	42.7	58.2	42.3	58.1
	Importables	97.1	12.9	98.2	11.8	97 5	13.3	96.8	14.7	96.0	16.1	95.3	17.6
	Exportables	-13.5	3.7	-17.6	8.5	-17.6	8.5	-17.6	8.5	-17.6	8.5	-17.6	8.5

TABLE 2.8 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
51-55	Textile and Footwear	5.2	61.2	5.1	44.6	5.1	44.6	1.9	35.2	1.9	35.2	0.8	33.0
	Importables	116.4	25.8	87.5	6.6	87.5	6.6	66.7	6.4	66.7	6.4	61.6	4.1
	Exportables	-26.9	5.8	-18.8	4.9	-18.8	4.9	-16.9	4.5	-16.9	4.5	-16.8	4.3
56-58	Wood and Wood Products	18.9	11.3	23.5	10.7	23.5	10.7	23.5	10.7	23.5	10.7	23.6	10.7
	Importables	-	-	-	-	-	-	-	-	-	-	-	-
	Exportables	18.9	11.3	23.5	10.7	23.5	10.7	23.5	10.7	23.5	10.7	23.6	10.7
59-66	Paper, Rubber, Leather and Plastic	110.6	92.0	122.7	102.9	113.3	96.5	102.4	85.8	94.8	81.2	85.5	72.6
	Importables	134.9	88.2	149.7	99.5	138.5	93.3	125.6	82.1	116.6	77.8	105.6	69.0
	Exportables	-21.7	6.6	-23.8	4.1	-23.8	4.1	-23.8	4.1	-23.8	4.1	-23.8	4.1
67-75	Chemicals and Chemical Products	108.9	79.1	103.6	87.1	99.2	88.2	98.3	88.8	98.1	89.0	97.6	89.3
	Importables	108.9	79.1	103.6	87.1	99.2	88.2	98.3	88.8	98.1	89.0	97.6	89.3
	Exportables	-	-	-	-	-	-	-	-	-	-	-	-
76-79	Non-metallic Mineral Products	162.6	50.5	173.5	45.2	175.5	37.8	174.9	39.1	174.3	40.5	173.8	41.9
	Importables	165.0	19.4	175.9	19.4	177.9	20.8	177.4	23.0	176.8	25.2	176.3	27.4
	Exportables	-28.6	102.9	-18.4	97.7	-20.0	173.5	-20.0	169.7	-20.0	168.1	-20.0	164.4

TABLE 2.8 (CONTINUED)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
80-82	Basic Mctals and Metal Products	72.2	12.3	78.3	12.4	77.4	12.4	66.4	11.2	60.1	10 2	54.7	9.4
	Importables	73.7	4.2	79.8	4.5	78.9	4.7	67.7	4.8	61.3	4.1	55 8	3.8
	Exportables	-20.8	0.0	-14.7	0.0	-14.7	0.0	-14.7	0.0	-14.7	0.0	-14.7	0.0
83-91	Machine Including Electrical Equipment, Transportation Equipment	48.2	72 8	44.9	75.2	38.0	76.4	37.2	76 2	36.3	75.7	34.9	74.7
	Importables	63.4	76.7	58.8	80.6	49.8	83.5	48.9	83.3	47.7	82.9	45.9	82.0
	Exportables	-2.4	0.0	-1.8	0.0	-1.8	0.0	-1.8	0.0	-1.8	0.0	-1.8	0.0
92-96	Miscellaneous Manufactures	39.5	52.4	37.6	49.4	34 8	45 7	32.0	42.0	29.3	38.4	26.5	34.8
	Importables	90.8	18.3	85.2	22.3	79.1	19.1	73.0	16.0	66.9	12.9	60.8	9.9
	Exportables	-3.4	0.0	-2.3	0.0	-2.3	0 0	-2.2	0.0	-2.2	0.0	-2.1	0.0

[a]Weight used: FTVA.Qbj; EPRs were calculated assuming without duty drawback.

[b]Standard deviation

The effect of E.O.8 on the overall implicit tariff rate and EPR is very minimal since there are only 201 lines affected out of 5,606 lines. The significance of E.O. 8 is not in the number of lines affected, but in providing policy commitment and credibility; in this aspect, it has sent confusing, if not wrong signals to the private sector. Obviously, E.O. 8 created greater dispersal of rates, both implicit tariff and EPRs, among sectors.

The disparity between the EPRs of importables versus exportables is very glaring and becomes more pronounced for certain sectors when EPRs are calculated from price comparisons. The existing trade regime has continued to confer greater protection to import-competing rather than export-producing activities because after all, tariffs and QRs are instruments contrived to protect import-substituting activities. As long as tariffs are greater than zero, the export bias will continue, unless subsidies to exports exist. Then, it follows that E.O. 470 is very limited in removing the trade bias of the existing trade regime. The provision of duty drawbacks is an attempt to mitigate the bias against exports, the effect of which is to reduce the penalty on exports. If drawbacks are implemented, the overall penalty on exports for the entire economy can be reduced by as much as 6 to 7 percent; the remaining penalty of 1.4 percent is due to the 20 percent export tax on logs (Tables 2.9 and 2.10). For the entire exportable sector of manufacturing, the penalty rate ranging from 10.4 percent in 1990 to about 7 percent in 1995 would be reduced to zero, moreover, the entire sector would receive a protection of 4 percent.

The distribution of sectoral EPRs from tariffs and taxes and price comparisons had only very minor changes for the lowest four and highest bracket; the EPRs are heavily concentrated around the extreme values of less than zero and greater than zero range with sparse distribution in the mid-range. There is only an increase in the clustering of EPRs using book rates in the 31-40 percent and 51-60 percent range: from 6 and 3 in 1990 to 13 and 10 in 1995, respectively. The distribution of EPRs using price comparisons exhibited similar patterns (Table 2.11). The distribution appears to be an inverted normal distribution curve. If trade reform is to achieve a more uniform and neutral protection across sectors, the more desirable distribution should be a heavy concentration of EPRs around a median value with few at the extremes. In this particular instance, E.O. 470 has failed to bring about a more even distribution of protection across sectors.

TABLE 2.9

WEIGHTED AVERAGE EFFECTIVE PROTECTION RATES USING BOOK RATES[a] BY MAJOR SECTORS, 1990 - 1995

(in percent, with duty drawback)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-96	All Sectors	29 4	42 2	29 8	41 7	28.4	39 2	26.8	36 1	25 5	34 3	24.1	32.4
	Importables	57.0	40.7	57.8	39 3	55 1	36 1	52 0	32.0	49 6	29.9	47 0	27.9
	Exportables	-1 4	10 4	-1.4	10 4	-1 4	10 4	-1.4	10 4	-1 4	10 4	-1.4	10.4
03-22	Agriculture, Fishing and Forestry	3.2	18 9	6.4	24.3	5 4	22 4	4 4	20 5	3.4	18.6	2.4	16 8
	Importables	35.3	11 5	51.1	9.3	46.1	8.0	41 1	6 8	36.1	5 4	31.2	4 0
	Exportables	-4.9	9 4	-4 9	9.4	-4 9	9 4	-4.9	9 4	-4.9	9.4	-4.9	9.4
23-27	Mining	4 5	7.9	6.0	12.4	6.0	12 4	6.0	12 4	6.0	12 4	6.0	12.4
	Importables	17.3	5 0	23 0	14.6	23 0	14 6	23.0	14 6	23.0	14 6	23 0	14 6
	Exportables	0 1	0 0	0.1	0.0	0.1	0.0	0 1	0.0	0.1	0.0	0.1	0 0
28-96	Manufacturing	45.5	41.0	44.3	33.2	42 5	29.2	40 5	23 5	39.0	27.5	37.3	29.3
	Importables	61.2	36.8	59 5	24.8	57.2	18.3	54.3	3 1	52.3	18.5	50 0	23.5
	Exportables	3 8	10.6	3.8	10 6	3 8	10.6	3.8	10 6	3.8	10 6	3.8	10 6

[a]Weight used. FTVA Qbj

[b]Standard deviation

TABLE 2.10

WEIGHTED AVERAGE EFFECTIVE PROTECTION RATES USING PRICE COMPARISONS[a] BY MAJOR SECTORS, 1990-1995

(in percent, with duty drawback)

		1989/90	SD[b]	1991	SD	1992	SD	1993	SD	1994	SD	1995	SD
03-96	All Sectors	35 7	59.1	36 4	60 8	35 1	59 3	33 6	57 5	32 5	56.5	31.3	55.5
	Importables	69.0	64.6	70.2	66 9	67 8	65.5	65.0	64.0	62.8	63.3	60.6	62.7
	Exportables	-1.4	10 4	-1.4	10 4	-1.4	10.4	-1.4	10.4	-1.4	10 4	-1.4	10 4
03-22	Agriculture, Fishing and Forestry	5.2	22 1	6.4	24 3	5 7	23 0	5 0	21.8	4.4	20 7	3 7	19.7
	Importables	45.1	9 0	51.1	9.3	47.7	9 0	44 3	9.4	41.0	10 3	37.7	11.7
	Exportables	-4.9	9 4	-4.9	9.4	-4.9	9.4	-4.9	9.4	-4.9	9.4	-4.9	9.4
23-27	Mining	4.5	7 9	6 0	12.4	6 0	12 4	6 0	12.4	6.0	12.4	6.0	12 4
	Importables	17 3	5 0	23 0	14 6	23 0	14 6	23.0	14.6	23.0	14.6	23.0	14.6
	Exportables	0.1	0 0	0.1	0.0	0.1	0 0	0.1	0 0	0.1	0.0	0 1	0.0
28-96	Manufacturing	54.6	64.2	54 9	62 5	53 2	60.7	51.1	58.7	49 7	60.5	48.1	61.6
	Importables	73.7	65.4	74.1	63.0	71 9	61 2	69.0	59 3	67.0	62.5	64.9	64.5
	Exportables	3.8	10.6	3.8	10.6	3 8	10.6	3.8	10.6	3 8	10.6	3.8	10.6

[a]Weight used: FTVA. Qbj

[b]Standard deviation

TABLE 2.11

FREQUENCY DISTRIBUTION OF EPRs, 1990 and 1995

	Book Rates		Price Comparison	
EPR in %	1990	1995	1990	1995
< 0	36	33	36	33
= 0	3	5	3	5
1-10	1	3	1	3
11-20	6	4	6	4
21-30	5	8	4	8
31-40	6	13	5	9
41-50	7	2	7	2
51-60	3	10	3	10
61-70	4	7	3	7
71-80	4	0	3	0
81-90	2	2	2	2
91-100	6	0	7	0
> 100	21	17	24	21
TOTAL	104	104	104	104

Sources: Tables 2.7 and 2.8.

Liberalization of Foreign Exchange

Foreign exchange controls remained throughout the 1980s and were partially lifted only in January of 1992 and completely lifted in August 1992. Most controls on trade as well as nontrade transactions were removed. No Central Bank (CB) (now the Bangko Sentral) permit is needed for banks to sell foreign exchange except when the item to be imported is still restricted. The most significant move was to allow 100 percent retention for exporters and no restrictions on how export proceeds will be used. Although substantial changes have been made in liberalizing the exchange market, the market is far from being really free. This is evident from the unevenness with which liberalization is implemented: there are no limits to capital inflows but there are to outflows; there are purchase limits but no selling limits.

The lifting of exchange controls should have accompanied the ILP in the 1980s. The difficulty is that while this may have been called for to complement trade reform, it may have been inconsistent with an existing stabilization program. The Philippines has a long experience of inflation stemming from devaluation. This would have jeopardized inflation fighting in the stabilization program, although reality was that the devaluations produced inflation because the exchange rate level was, most of the time overvalued, hence, wrong in the first place. The lifting of exchange controls materialized in 1992. The peso promptly appreciated in real terms via a nominal appreciation Table 2.12 shows that prior to the lifting of controls, the nominal exchange rate was P27.48 for every $US in 1991; three months after controls were partially lifted (i.e., March 1992), the exchange rate appreciated to P25.81 for every $US. By the time controls were further lifted in August 1992, the rate appreciated again to P24.67 for every $US and settled at around P24.94 for every $US in December 1992. On the average, the peso appreciated by 7.6 percent in nominal terms in 1992. Average inflation rate for the same year was 9 percent; this translates to at least a 16 percent appreciation in real terms.[18]

The appreciation could be traced to: one, weak demand for foreign exchange in 1992 because of a recession; two, inflow of portfolio investments which came in readily because of the reform in the exchange market, the higher domestic interest rates and consequent arbitrage opportunities[19] (Table 2.12). Net portfolio investment was only about 32 percent of net foreign investments in 1990 and 1991 with very minimal outflows. In 1992, the ratio rose to 61 percent; for the first six months of 1993, the ratio was 164 percent. Net portfolio investment stood at $152 million and $212 million in 1990 and 1991, respectively; there was a dramatic increase by 120 percent in 1992 and the surge took place in the months of November and December, after the "complete" liberalization.

The real appreciation of the peso eroded part of the gains achieved by E.O. 470 and the ILP. Hence, while liberalization of the exchange market is a step toward the right direction, it is not sufficient to complement trade reform. What is needed is real exchange rate adjustment which is beyond the scope of trade policy and the cooperation of monetary policy.

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18. This assumes that the inflation rate of major trading partners are minimal and their corresponding exchange rates do not change.

19. Diokno, B. et al. *Foreign Exchange and Exports* (Private Investments Trade Opportunities - Philippines, 1993).

TABLE 2.12

SHORT-TERM CAPITAL INVESTMENTS, 1990-1993
(in million US$)

	Foreign Investments (1)	Portfolio Investments Inflow (2)	Portfolio Investments Outflow (3)	Net Portfolio Investment (4)	(4)/(1) (5)	Nominal Exchange Rate (6)	Inflation Rate (7)
1990	480	152		152	0.32	24.31	12.4
1991	654	227	15	212	0.32	27.48	15.7
1992							
January	109	68	4	64		26.54	
February	60	18	7	11		26.16	
March	106	31	1	30		25.81	
Apnl	66	38	5	33		25.67	
May	62	35	3	32		26.15	
June	82	66	3	63		26.12	
July	21	45	8	37		25.26	
August	122	38	20	18		24.67	
September	13	27	14	13		24.73	
October	14	31	16	15		24.78	
November	-7	67	13	54		24.94	
December	89	102	21	81			
TOTAL	737	566	115	451	0.61	25.53[a]	8.2[a]
1993*	285	921	453	468	1.64	26.21	

*As of June 1993

[a]Average for the year

Source: Central Bank Statistical Center

CHAPTER 3

Theoretical Framework[20]

The Chunglee Model

In this study, the Chunglee model[21] is used to assess the effects of E.O. 470 and the lifting of QRs on output, employment, income, intermediate and final demand, exports and imports, and balance of trade given a fixed exchange rate. The model is a partial equilibrium type with the following assumptions: one, the economy is small and open; two, nontraded goods are produced in constant prices; three, imports are perfect substitutes for locally produced goods; four, factor prices are not affected by trade reform over the short run; five, the economy is composed of input-output sectors so the basic unit of analysis is the I-O sector which is characterized by a supply and demand function; and six, all policy instruments are constant, except, of course, trade policy.

The model starts with the argument that output of sector j, *(Qj)*, is a function of effective price or value-added *(Vj)* only, equation (1).

$$Q_j = f(V_j) \qquad (1)$$

20. See Tan, Elizabeth S. "Trade Policy Reforms in the 1990s: Effects of E.O. 470 and the Import Liberalization Program." PIDS Research Paper Series No. 94-11, (1994) for a specification of the estimation methodologies and data.

21. Lee, Chung H. "Impact Effects of the Tariff Reform Program: A Methodology for Estimation," (Mimeo). Tariff Commission, 1983. The model was used originally to quantify the effects of the TRP of 1981.

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V_j in unit prices is equal to $(1 + tj) - \sum a_{ij} (1 + t_{ii})$ (equation 1.1), where t_j is the tariff on the output, a_{ij} is the amount of input i used to produce one unit of output j, and t_i is the tariff on the input.

$$V_j = (1 + t_j) - \sum a_{ij} (1 + t_{ii}) \tag{1.1}$$

Change in output, $(d Q_j)$ (equation 1.2), is equal to the product of supply elasticity, (bj), Q_j, and a proportionate change in effective price $(\hat{v}_j)$.

$$d Q_j = bj Q_j \hat{v}_j \tag{1.2}$$

$\hat{v}_j$ is the ratio of the difference between V_j^1 and V_j^0, and V_j^0, where V_j^1 is post-trade reform effective price and V_j^0 is the pre-trade reform effective price (equation 1.3).

$$\hat{v}_j = \frac{V_j^1 - V_j^0}{V_j^0} \tag{1.3}$$

In equation 1.3, subtract V_j^f from V_j^1, add V_j^f to V_j^0, then multiply by V_j^f / V_j^0 to get equation 1.4.[22]

$$\hat{v}_j = \frac{(V_j^1 - V_j^f) - (V_j^0 - V_j^f)}{V_j^f} * \frac{V_j^f}{V_j^0} \tag{1.4}$$

$(V_j^1 - V_j^f) / V_j^f$ is actually the post-trade reform EPR, $(E^1 j)$, while $(V_j^0 - V_j^f) / V_j^f$ is the pre-trade reform EPR ,(E_j^0) (equations 1.5 and 1.6 respectively).

$$E^1 j = (V_j^1 - V_j^f) / V_j^f \tag{1.5}$$

$$E^0 j = (V_j^0 - V_j^f) / V_j^f \tag{1.6}$$

22. V_j^f before and after trade reform are the same because of the use of fixed coefficients which do not allow substitution among goods to occur even as price changes.

Since $E_j^0 = V_j^0 / V_j^f - 1$ (equation 1.6), $1 + E_j^0 = V_j^0 / V_j^f$, (equation 1.7), $1/1 + E_j^0 = V_j^f / V_j^0$, (equation 1.8), then equation 1.9 shows that the proportionate change in effective price, $\hat{v}_j$, is the difference between E_j^1 and E_j^0 over $1 + E_j^0$.

$$1 + E_j^0 = V_j^0 / V_j^f \tag{1.7}$$

$$\frac{1}{1 + E_j^0} = \frac{V_j^f}{V_j^0} \tag{1.8}$$

$$\hat{v} = \frac{E_j^1 - E_j^0}{1 + E_j^0} \tag{1.9}$$

Changes in output, therefore, can be estimated from changes in EPRs, as seen in equation 1.10. The effect of trade policy reform on output can then work its way indirectly via changes in EPR which capture the net protection received by an activity.

$$dQ_j = b_j Q_j (E_j^1 - E_j^0) / (1 + E_j^0) \tag{1.10}$$

Equation 2 states that the level of employment in sector j, *(L_j)*, is the product of an employment ratio, *(ej)*, and Q_j while equation 2.1 shows the change in employment of sector j, *(dL_j)*, to be the product of *(ej)* and the change in output *(dQ_j)*.

$$L_j = ej\, Q_j \tag{2}$$

$$d L_j = ej\, d Q_j \tag{2.1}$$

The third equation is income. Equation 3 shows that income, (Yj), is the product of Vj and Qj. Change in income, dYj, is equal to Vj times dQj (equation 3.1).

$$Y_j = V_j Q_j \tag{3}$$

$$d Y_j = V_j d Q_j \tag{3.1}$$

The fourth equation is intermediate demand. Intermediate demand of sector *j*, *Ij*, is the sum of the product of *aji*, the amount of input *j* used in producing a unit of output *i*, and *Qi*, (equation 4); the change in interme-

diate demand of sector *j*, *dIj*, comes from the changes in output only and is the product of *aji* and *dQi*, (equation 4.1).

$$Ij = \sum aji * Q, \tag{4}$$

$$dIj = \sum aji * dQi \tag{4.1}$$

Final demand *(Fj)* is a function of price and income (equation 5). Assuming that cross price elasticities are zero, the change in final demand of sector *j* due to changes in price is estimated as the product of the proportionate change in implicit tariffs, ($\hat{T}j$), own price elasticity of demand (Gjj), and final demand. Changes in final demand due to change in income is estimated as the product of the income elasticity of demand of sector *j* (Kj), the proportionate change in income ($\hat{Y}$) and final demand. Therefore, total change in final demand of sector *j*, (dFj), is the sum of the price and income effects (equation 5.1).

$$Fbj = g(T_j, Y) \tag{5}$$

$$dFj = [G_{jj} * (\hat{T}j) + Kj\hat{Y}]\, Fj \tag{5.1}$$

The sixth equation is total demand, (Tj), defined as the sum of intermediate and final demand; change in total demand of sector *j* (dTj) is the sum of the change in intermediate demand and change in final demand (equation 6.1).

$$Tj = Fj + Ij \tag{6}$$

$$dTj = dFj + dIj \tag{6.1}$$

The seventh equation is imports, *(Mj)*, which is the difference between the total demand for and output of importable sectors; change in imports of sector *j* *(dMj)* is the difference between the change in total demand and the change in output of importable sector *j* *(dQj)* (equation 7.1).

$$Mj = Tj - Qj \tag{7}$$

$$dMj = dTj - dQj \tag{7.1}$$

The eighth equation is exports *(Xj)*, the difference between output and total demand of exportable sector *j*; change in exports of sector *j* *(dXj)* is taken as the difference between the change in output and the change in total demand of exportable sector *j* (equation 8.1).

$$Xj = Qj - Tj \tag{8}$$

$$dXj = dQj - dTj \tag{8.1}$$

The ninth equation is trade deficit *(TD)*, which is defined as the difference between the sum of imports of importable sectors, $\sum M_j$, and the sum of exports of exportable sectors, $\sum X_j$; the change in the trade deficit *(dTD)*, is the difference between the sum of changes in imports, $\sum dMj$, and the sum of changes in exports, $\sum X_j$, (equation 9.1).

$$TD = \sum Mj - \sum Xj \tag{9}$$

$$dTD = \sum dMj - \sum dXj \tag{9.1}$$

The Simulation Model

The simulation model[23] is basically the Chunglee model with one major difference: the assumption of fixed exchange rate is relaxed. The objective of this section is to present the simulation model which quantifies the effects of trade reform given flexible real exchange rate.

The simulation model begins with equation 1.3 from the Chunglee model. Equations 1.31 and 1.32 state effective price before and after trade reform assuming a flexible real exchange rate, $(V_j^0)^*$ and $(V_j^1)^*$, respectively. V_j^{0*} is equal to the product of r_0, the real exchange rate before trade reform, and V_j^0, effective price before trade reform; V_j^{1*} is equal to the product of r_1, the real exchange rate after trade reform, and V_j^{1*}, effective price after trade reform.

$$\hat{V} = \frac{V_j^1 = V_j^0}{V_j^0} \tag{1.3}$$

$$V_{j*}^0 = r_0 V_j^0 \tag{1.31}$$

$$V_j^{1*} = r_1 V_j^1 \tag{1.32}$$

23. Medalla, Erlinda M. "Impact Effects of Tariff Reform Program" TC-PIDS Staff Paper Series No. 86-05, 1986b.

Equation 1.33 defines the proportionate change in effective price incorporating changes in the real exchange rate.

$$\hat{V}_j^* = \frac{V_{j^*}^1 - V_{j^*}^0}{V_{j^*}^0} \tag{1.33}$$

Substitute equations 1.31 and 1.32 into equation 1.33 to get equation 1.34.

$$\hat{V}_j^* = \frac{r_1 V_j^1 - r_0 V_j^0}{r_0 V_j^0} \tag{1.34}$$

Use equations 1.5 and 1.6 fiom the Chunglee model and substitute into equation 1.34 to get equations 1.35 and 1.36 which states that Vj^* is the product of the relative real exchange rate, (r_1/r_0), and the relative EPR, $[(1+Ej^1)/(1+Ej^0)]$, minus one.

$$V_j^1 = V_j^f(1+E_j^1) \tag{1.5}$$

$$V_j^0 = V_j^f(1+E_j^0) \tag{1.6}$$

$$\hat{V}_j^* = \frac{r_1 V_j^f(1+E_j^1) - r_0 V_j^f(1+E_j^0)}{r_0 V_j^f(1+E_j^0)} \tag{1.35}$$

Equation 1.37 is a restatement of equation 1.2 assuming flexible real exchange rate;

$$\hat{V}_j^* = \frac{r_1}{r_0}\left(\frac{1+E_j^1}{1+E_j^0}\right) - 1 \tag{1.36}$$

substitute equation 1.36 into equation 1.37 to get equation 1.38.

$$dQj^* = bjQj(\hat{V}j^*) \tag{1.37}$$

$$dQj^* = bjQj\left[\frac{r_1}{r_0}\left(\frac{(1+Ej^1)}{(1+Ej^0)}\right) - 1\right] \tag{1.38}$$

Equation (1.38), the heart of the simulation model, shows the change in output due to trade reform with real exchange rate adjustment to be a function of the relative real exchange rate, (r_1/r_0) and relative EPR, $[(1+Ej^1)/(1+Ej^0)]$. The arguments in the remaining equations of the simulation model are the same as in the Chunglee model, nevertheless, the changes reflect adjustment in the real exchange rate. Once the value of r_1/r_0 in equation 1.38 is known, the change in output can be estimated and the values of the succeeding equations can be estimated as well. The simulation results presented in Chapter 4 computed for a change in the relative real exchange given no change in the trade deficit.[24]

24. The value of r_1/r_0 can be solved by iterating, i.e., searching for the value of r_1/r_0 that would satisfy a specified change in the trade deficit. Since the simulation model is recursive rather than simultaneous, an analytical solution which can satisfy any specified change in the trade deficit can be derived by solving the equations. For the derivation, please see Tan (1994).

CHAPTER 4

Analysis of Results

This chapter presents and analyzes the macro effects of E.O. 470 with and without changes in the exchange rate using the Chunglee and simulation models, respectively.

Trade Reform and Exchange Rate Policy

When trade reform is undertaken given a fixed exchange rate, there are two effects. First, there is a negative output effect. When tariffs are lowered or QRs are lifted, imports become cheaper relative to their import substitutes;[25] this creates a downward pressure on prices, causing output in import-competing sectors to fall. Second, there is a negative trade balance effect: domestic prices of imports (P_m) decrease causing demand to increase while the domestic prices of exports (P_x) remain constant. The negative trade balance effect can also be due to an expenditure-switching policy without an accompanying expenditure-reducing policy. This means that demand for imports increase without a corresponding rise in the production of exports.[26] The increase in the demand for imports puts pressure on the exchange rate. The Central Bank will be able to defend the exchange rate

25 This assumes that import-substitutes and imports are homogeneous, hence, perfectly substitutable.

26. There is one way trade reform can benefit exports: the cost of import-intensive exports can be decreased through lower cost of imported inputs.

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by drawing down on international reserves and foreign borrowing.[27] Once both measures are not tenable, the country will be forced to devalue.

When trade reform is complemented by exchange rate adjustment, the negative output effect and trade deficit can be averted; however, the peso should depreciate not only in nominal but in real terms as well. Real depreciation implies that a nominal devaluation should be coupled with expenditure-reducing policy to prevent expansionary and/or inflationary effects of devaluation from eroding the price competitiveness brought by the nominal devaluation. The expansionary effect of devaluation is caused by an increase in the demand for nontraded goods as their prices decrease relative to prices of traded goods. The inflationary effect is through domestic prices: once the currency depreciates, the domestic currency price of traded goods increases and if it increases by as much as the rate of depreciation, nothing will have been gained. If domestic prices should increase, at least it should not increase by as much as the depreciation rate. The expenditure-reducing policy reduces the demand for nontraded goods; this in turn enables resources to shift to the production of traded goods.

Given trade reform accompanied by an increase in the real exchange rate, the drop in the domestic currency price of imports will be offset by an increase in the real exchange rate, hence, imports become more expensive relative to their domestic substitutes. Production for importables will increase while demand for imports drops. Meanwhile, the production for exportables become more attractive even if their world price remains unchanged; an increase in the real exchange rate increases the domestic currency price of exports given constant world prices. Hence, the negative output effect is averted and the trade balance can improve. The expenditure-reducing policy is implied once the real exchange rate is assumed to depreciate; this ensures that expenditures will not be greater than income, ex post devaluation.

The effect of a real depreciation may not be uniform if the trade regime is not relatively free, i.e, there are prohibitive tariffs and/or binding QRs for certain sectors. The favored sectors will be those where QRs are present for their output while their imported inputs have been liberalized. Prices and profitability for these types of goods increase and resources will tend to shift to their production.

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27 If the exchange rate has been liberalized, the CB can defend or induce a lower exchange rate by pursuing a high interest rate policy which encourages capital inflows.

Effects of E.O.470, Trade and Exchange Rate Liberalization

Table 4.1 shows the general effects of trade reform without any corresponding real exchange rate adjustment: output falls in both cases A and B,[28] by 1.1 percent and 0.9 percent respectively. The wage bill, income and intermediate demand also decrease but by less than the drop in output; the decrease in income is less than that of output because on the average, it is the low-value added sectors that contract.[29] Since there is an overall drop in output and income, a positive resource-allocation effect need not necessarily happen. Imports and exports both increase, but the trade deficit increases to US $2.98 billion in case A and US $2.87 billion in case B by 1995[30] because final demand grows by 1.1 percent and 1 percent but income shrinks by 0.2 percent, respectively. The overall increase in final demand is largely due to a positive price effect stronger than the negative income effect; without the real exchange rate adjustment, imports become cheaper relative to import substitutes because of lower tariffs. The increase in imports is needed because as output of importables drops and total demand increases, excess demand is provided for by an increase in imports. Exports increase because production for exports increase while total demand drops. The trade deficit in case A is greater than in case B because E.O. 470 had more substantial cuts, hence, a greater impact relative to the lifting of QRs.

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28 In cases A and B, the study argues for the use of low supply elasticities since producers are not able to respond immediately to changes in sectoral EPRs by switching to more profitable areas of economic activities since access to information is asymmetric for different agents. Another reason is that private sector doubts the credibility of trade reform and perceives the change in incentive structure as temporary. Hence, producers do not do the necessary adjustments.

29 For sector j, the rate of change in income is the same as in output. The proof can be shown from the following equations:

$$Y_{bj} = V_j Q_{bj} \quad (1)$$
$$dY_{bj} = V_j dQ_{bj} \quad (2)$$
$$dY_{bj} / Y_{bj} = (V_j dQ_{bj}) / V_j Q_{bj} \quad (3)$$
$$dY_{bj} / Y_{bj} = dQ_{bj} / Q_{bj} \quad (4)$$

Hence, if the growth rate in output is greater than or less than the growth rate of income for a sector group, it can be only due to the differences in value-added of the different sectors.

30 The trade deficit in base year 1983 is P27,487,160,000 in peso border prices. The increase in the trade deficit in case A is P5,516,758,000 and P4,578,408,000 in Case B. At the official exchange rate (OER) of P11.13 for every $US in 1983, the trade deficit in case A will be $2.97 billion and $12.578 billion in case B by 1995.

TABLE 4.1

EFFECTS OF TRADE REFORM ASSUMING FIXED REAL EXCHANGE RATE

(For all sectors, in percent)

		A	B	C	D
1	Output				
	Importables	-4.3	-3.5	-2.8	-2.3
	Exportables	0.6	0.6	5.6	4.6
	TOTAL	-1.1	-0.9	0.5	0.4
2	Wage Bill				
	Importables	-5.0	-5.1	-4.8	-5.9
	Exportables	0.7	0.7	5.1	4.3
	TOTAL	-0.6	-0.7	0.4	0.0
3	Income				
	Importables	-2.6	-2.5	0.1	-0.6
	Exportables	0.6	0.6	5.1	4.2
	TOTAL	-0.2	-0.2	1.3	1.0
4	Intermediate Demand				
	Importables	-1.9	-1.3	0.2	0.6
	Exportables	-2.1	-2.1	-0.9	-1.5
	TOTAL	-1.3	-1.0	-0.0	0.0
5	Final Demand				
	Importables	2.9	2.6	7.4	6.5
	Exportables	-0.2	-0.1	1.0	0.7
	TOTAL	1.1	1.0	3.0	2.7
6	Total Demand				
	Importables	0.4	0.6	3.7	3.5
	Exportables	-1.3	-1.2	-0.0	-0.5
	TOTAL	-0.0	0.1	1.6	1.4

TABLE 4.1 (CONTINUED)

		A	B	C	D
7	Imports				
	Importables	13.1	11.8	23.0	20.8
8	Exports				
	Exportables	5.2	5.1	19.5	17.2
9	Trade Deficit ($B)				
	TOTAL	2.98	2.92	3.03	3.00

[A]Supply elasticity for sectors 3-27 is 0.5 and 0.8 for sectors 28-96; EPR using tariffs and taxes.

[B]Supply elasticity is the same as in A but EPRs are from price comparisons.

[C]Supply elasticity for sectors 3-27 is 0.8 and 1 5 for sectors 28-96; relative EPRs using tariffs and taxes.

[D]Supply elasticity is the same as in C but relative EPRs are from price comparisons.

The overall drop in output in both cases, A and B, is due to a decrease in their respective weighted EPRs brought about by a reduction in the average level of tariffs, i.e., E.O. 470 and the lifting of QRs which lowers prices via lower implicit tariffs, respectively. The drop in case A is greater than in case B because changes in tariffs contained in E.O. 470 were more substantial; there was only minimal lifting of QRs such that the change over the same period of time was smaller.[31] The level of implicit tariffs from price comparisons relative to book rates remains higher but the change is smaller, hence, a smaller impact on output.

In manufacturing, the output of all but two major sectors declines in cases A and B. The greatest negative output effect occurs in these sectors: paper, rubber, leather and plastic products (sectors 59-66), chemicals and chemical products (sectors 67-75), basic metals and metal products (sectors 80 - 82), machinery including electrical and transport equipment (sectors 83 - 91). The two groups that manage to post positive growth rates are

31. The assumption here is that once QRs are lifted, it exerts a downward pressure on prices such that EPRs based on price comparison would also drop. Nevertheless, it is possible for prices to change in response to other factors other than changes in the trade regime. The argument that there was not much progress in the import liberalization program assumes that there would be no effect on prices too.

nonmetallic mining (sectors 76-79) by 11 percent in case A and 14.3 percent in case B; wood and wood products (sectors 56-58) by 3.6 percent in both cases (Table 4.2).

Table 4.3 shows the growth rates of income by major groups. The effect on income follows more or less the pattern that emerged in output: if outputs drop, incomes drop also. It is only possible for a major group to post positive growth rates in income if the income expansion of one sector is more than enough to compensate for the decreases in incomes of other sectors. The major group (59-66) posted an overall drop in output but registered an increase in its income; this is misleading since the positive growth rate is due to a decrease in output and a negative free trade value-added. If free trade value-added of sectors 60, 61 and 63 were set to zero, the growth rate of income in each sector would be negative and income of this sector would shrink by 5 percent.[32]

In cases C and D, there is an overall improvement: output posted positive growth rates of 0.5 percent and 0.4 percent, respectively. There is also a substantial recovery of the exportable sectors: output increases by 5.6 percent and 4.6 percent, respectively. The improved performance of the exportable sector is due to an increase in its protection relative to importable sectors; cases C and D use relative EPRs instead of sectoral EPRs. If this is perceived by producers, it can generate a positive resource allocation toward the exportable sectors and a positive output response. However, this has failed to improve the trade balance: the trade deficit by 1995 stands at $3.03 billion and $3.0 billion for cases C and D, respectively. This is due to the fact that final demand in both cases C and D grows by more than twice the respective rates in income: 3 percent and 2.7 percent relative to 1.3 percent and 1 percent.

The remaining sectors that remain to post the greatest percentage decrease in output in cases C and D are similar to those in cases A and B: sectors 59-66,

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32 If the value-added of all sectors with $V_j < 0$ are equated to zero, the overall growth rate of income for the entire economy would be -0.27 percent instead of -0.22 percent, an underestimate of about 0.5 percent. The underestimation comes from the fact that the sectors with negative free trade value-added are also the sectors that experienced decreases in output. This, in turn, understates the estimates in final demand and imports, while it overstates the estimates for exports. The final effect on the trade deficit depends on the actual amount of underestimation and overestimation of imports and exports, respectively.

If all the negative freetrade value-added were equated to zero, only the results of equations 3, 5 to 9 would be affected since the model is recursive rather than simultaneous. Income would be underestimated by as large as 0.5 percent in case A and by as little as 0.01 percent in case D.

The final effect on the level of trade deficit is an overestimation as small as $2.9 million in case D or as large as $5.8 million. The effect on the adjustment in the real exchange rate is negligible.

TABLE 4.2

EFFECTS OF TRADE REFORM ON OUTPUT ASSUMING FIXED REAL EXCHANGE RATE

(By sector groups, in percent)

		A	B	C	D
03-96	All Sectors				
	Importables	-4.3	-3.5	-2.8	-2.3
	Exportables	0.6	0.6	5.6	4.6
	TOTAL	-1.1	-0.9	0.5	0.4
03-22	Agriculture, Fishing and Forestry				
	Importables	-1.1	-2.5	1.2	-1.6
	Exportables	0.5	0.5	3.9	3.2
	TOTAL	0.1	-0.1	2.2	1.5
23-27	Mining				
	Importables	1.9	1.9	6.3	5.6
	Exportables	2.6	2.6	7.4	6.7
	TOTAL	2.4	2.4	7.2	6.5
28-96	Manufacturing				
	Importables	-4.7	-3.7	-3.2	-2.5
	Exportables	0.4	0.4	6.7	5.4
	TOTAL	-3.0	-2.3	-0.0[1]	0.0[1]
03-13	Agriculture				
	Importables	-0.1	-1.9	2.9	-0.8
	Exportables	0.1	0.1	3.3	2.6
	TOTAL	0.0	-0.2	1.5	0.7
19-20	Fishing				
	Importables	-3.8	-3.8	-3.3	-3.9
	Exportables	0.8	0.8	4.5	3.8
	TOTAL	0.2	0.2	3.5	2.8
21-22	Logging and Other Forestry Activities				
	Importables	-6.0	-6.0	-6.9	-7.5
	Exportables	0.6	0.6	4.1	3.4
	TOTAL	0.4	0.4	3.8	3.1

TABLE 4.2 (CONTINUED)

		A	B	C	D
28-45	Food Processing				
	Importables	-6.3	-6.1	-6.4	-7.1
	Exportables	-0.3	-0.3	5.3	4.1
	TOTAL	-4.2	-4.0	-2.3	-3.2
46-50	Beverages and Tobacco				
	Importables	-0.8	-0.8	4.2	3.0
	Exportables	-3.5	-3.5	-0.9	-2.1
	TOTAL	-1.5	-1.5	1.5	0.6
51-55	Textile and Footwear				
	Importables	-20.7	-20.7	-34.5	-35.5
	Exportables	0.0	0.0	5.8	4.6
	TOTAL	-6.6	-6.6	-7.0	-8.2
56-58	Wood and Wood Products				
	Importables	0.0	0.0	0.0	0.0
	Exportables	3.6	3.6	12.8	11.5
	TOTAL	3.6	3.6	12.8	11.5
59-66	Paper, Rubber, Leather and Plastic Products				
	Importables	-10.2	-10.2	-14.0	-15.1
	Exportables	-0.6	-0.6	4.7	3.4
	TOTAL	-9.4	-9.4	-12.4	-13.5
67-75	Chemicals and Chemical Products				
	Importables	-9.4	-4.4	-12.5	-4.0
	Exportables	0.0	0.0	0.0	0.0
	TOTAL	-9.4	-4.4	-12.5	-4.0
76-79	Nonmetallic Mineral Products				
	Importables	10.8	14.3	26.9	32.3
	Exportables	14.2	14.2	33.6	32.0
	TOTAL	10.9	14.3	27.0	32.3

TABLE 4.2 (CONTINUED)

		A	B	C	D
80-82	Basic Metals and Metal Products				
	Importables	-8.3	-8.3	-10.3	-11.5
	Exportables	6.2	6.2	17.8	16.4
	TOTAL	-8.1	-8.1	-9.9	-11.1
83-91	Machinery, Including Electrical Equipment and Transport Equipment				
	Importables	-8.6	-9.7	-10.9	-14.1
	Exportables	0.0	0.0	5.8	4.6
	TOTAL	-6.9	-7.8	-7.6	-10.5
92-96	Miscellaneous Manufactures				
	Importables	-10.3	-10.3	-14.3	-15.4
	Exportables	1.1	1.1	7.9	6.6
	TOTAL	-6.3	-6.3	-6.4	-7.6

Notes

Assumptions for cases A, B, C and D are the same as in Table 4.1

[1]In case C, the rate is -0.03 percent and in case D, the rate is 0.04 percent.

67-75, 80-82 and 83-91. Output in agriculture registers a positive growth rate in the latter two cases relative to the previous two cases primarily because of the substantial improvement in its exportable sector. Only the output in the sector (51-55) in manufacturing posted positive growth rates of about 1.5 percent and 0.6 percent in cases C and D, respectively.

Table 4.4 shows that trade liberalization with real exchange rate adjustment[33] brings about positive effects. In cases E and F, the exchange rate needs to depreciate by about 8.2 percent and 7.1 percent in real terms over a span of five years, respectively, to generate an increase in output by 1.9

33. The required real exchange rate adjustment is that which makes the change in the trade balance equal to zero or that which puts the economy in its 1983 trade balance. The paper is not in a position to say how the real exchange rate can depreciate: theoretically, this could be achieved by: one, a nominal depreciation given that domestic prices remain constant; and two, a nominal depreciation given that domestic prices increase but this is accompanied by either contractionary fiscal and or monetary policy.

TABLE 4.3

EFFECTS OF TRADE REFORM ON INCOME ASSUMING FIXED REAL EXCHANGE RATE

(By sector groups, in percent)

		A	B	C	D
03-96	All Sectors				
	Importables	-2.6	-2.5	0.1	-0.6
	Exportables	0.6	0.6	5.1	4.2
	TOTAL	-0.2	-0.2	1.3	1.0
03-22	Agriculture, Fishing and Forestry				
	Importables	-1.3	-2.7	1.0	-1.9
	Exportables	0.5	0.5	3.9	3.2
	TOTAL	0.1	-0.1	2.3	1.5
23-27	Mining				
	Importables	2.3	2.3	7.0	6.3
	Exportables	2.5	2.5	7.2	6.5
	TOTAL	2.4	2.4	7.2	6.5
28-96	Manufacturing				
	Importables	-3.3	-2.6	-0.6	-0.4
	Exportables	0.6	0.6	7.0	5.7
	TOTAL	-1.5	-1.1	2.8	2.4
03-13	Agriculture				
	Importables	-0.3	-2.0	2.6	-0.9
	Exportables	0.1	0.1	3.3	2.6
	TOTAL	-0.0	-0.3	1.7	0.8
19-20	Fishing				
	Importables	-4.8	-4.8	-4.6	-5.3
	Exportables	0.8	0.8	4.4	3.7
	TOTAL	0.2	0.2	3.4	2.7
21-22	Logging and Other Forestry Activities				
	Importables	-6.0	-6.0	-6.9	-7.5
	Exportables	0.6	0.6	4.1	3.4
	TOTAL	0.3	0.3	3.7	3.0

TABLE 4.3 (CONTINUED)

		A	B	C	D
28-45	Food Processing				
	Importables	-2.4	-2.6	1.2	-0.3
	Exportables	0.7	0.7	7.3	6.0
	TOTAL	-1.0	-1.1	3.9	2.4
46-50	Beverages and Tobacco				
	Importables	-1.0	-1.0	3.9	2.7
	Exportables	-2.8	-2.8	0.4	-0.9
	TOTAL	-1.5	-1.5	1.5	0.6
51-55	Textile and Footwear				
	Importables	-17.6	-17.6	-28.3	-29.4
	Exportables	0.0	0.0	5.9	4.6
	TOTAL	-2.0	-2.0	2.0	0.7
56-58	Wood and Wood Products				
	Importables	0.0	0.0	0.0	0.0
	Exportables	3.0	3.0	11.6	10.3
	TOTAL	3.0	3.0	11.6	10.3
59-66	Paper, Rubber, Leather and Plastic Products				
	Importables	-40.6	-40.6	-75.4	-75.5
	Exportables	-1.7	-1.7	2.7	1.4
	TOTAL	3.8	3.8	13.7	12.2
67-75	Chemicals and Chemical Products				
	Importables	-7.6	-6.3	-9.0	-7.6
	Exportables	0.0	0.0	0.0	0.0
	TOTAL	-7.6	-6.3	-9.0	-7.6
76-79	Nonmetallic Mineral Products				
	Importables	-0.1	3.7	5.7	11.8
	Exportables	11.0	11.0	27.3	25.8
	TOTAL	0.4	4.1	6.7	12.5
80-82	Basic Metals and Metal Products				
	Importables	-9.0	-9.0	-11.7	-12.8
	Exportables	6.5	6.5	18.9	17.4
	TOTAL	-8.5	-8.5	-10.7	-11.9

TABLE 4.3 (CONTINUED)

		A	B	C	D
83-91	Machinery. Including Electrical Equipment and Transport Equipment				
	Importables	-9.6	-10.8	-12.8	-16.4
	Exportables	0.0	0.0	5.8	4.6
	TOTAL	-6.5	-7.4	-6.9	-9.7
92-96	Miscellaneous Manufactures				
	Importables	7.5	7.5	20.5	19.2
	Exportables	1.1	1.1	7.9	6.6
	TOTAL	-2.3	-2.3	1.3	0.0[a]

Note: Assumptions for cases A, B, C and D are the same as in Table 4.1.

[a] The rate is 0 03%.

percent and 1.7 percent, respectively. The increase in output correspondingly brings about positive changes in the wage bill, income, intermediate demand, final demand, imports and exports with a zero trade deficit. The increase in final demand is mainly due to a positive income effect brought about by increases in output; the direct price effect on final demand may not be very strong, as it is neutralized or compensated for by a real depreciation. In cases E and F, while income and final demand increases there is no increase in the trade deficit. Actually, the growth in final demand is still greater than in income, 2.1 percent and 1.9 percent relative to 1.9 percent and 1.6 percent. But the growth rates are very much closer than in cases A,B, C and D. The required change in the exchange rate in case E is greater than in case F because the trade deficit it needs to balance is greater, $2.98 billion relative to $2.92 billion.

Production in agriculture, sectors 3-13, expands by 1.9 percent and 1.4 percent in cases E and F, respectively, while its income grows by even higher rates, 2.2 percent and 1.6 percent, respectively (Tables 4.5 and 4.6). Overall, manufacturing also posts positive growth rates: 3.3 percent and 3.1 percent in cases E and F while its income grows by 5 percent and 4.4 percent, respectively. Real exchange rate adjustment was instrumental in bringing positive output growth in the food processing sector (28-45) and beverages and tobacco sectors (46-50): output in these two major groups posted positive

TABLE 4.4

EFFECTS OF TRADE REFORM ASSUMING FLEXIBLE REAL EXCHANGE RATE

(For all sectors, in percent)

		E	F	G	H
	r_1 / r_0 [a]	8.2	7.1	4.8	4.5
1	Output				
	Importables	1.7	1.7	4.0	4.0
	Exportables	6.1	5.3	11.5	10.1
	TOTAL	1.9	1.7	3.8	3.5
2	Wage Bill				
	Importables	0.3	-0.5	1.0	-0.5
	Exportables	5.6	4.9	10.2	9.0
	TOTAL	1.3	1.0	2.5	2.0
3	Income				
	Importables	3.1	2.5	6.3	5.2
	Exportables	5.6	4.9	10.3	9.0
	TOTAL	1.9	1.6	3.5	3.0
4	Intermediate Demand				
	Importables	2.5	2.6	5.1	5.2
	Exportables	1.4	1.0	3.1	2.2
	TOTAL	1.4	1.4	3.0	2.8
5	Final Demand				
	Importables	4.8	4.3	9.5	8.4
	Exportables	1.4	1.2	2.7	2.3
	TOTAL	2.1	1.9	4.1	3.6
6	Total Demand				
	Importables	3.6	3.4	7.3	6 8
	Exportables	1.4	1.1	2.9	2.2
	TOTAL	1.8	1.6	3.6	3.2

TABLE 4.4 (CONTINUED)

		E	F	G	H
7	Imports				
	Importables	10.8	9.7	20.0	18.0
8	Exports				
	Exportables	17.4	15.7	32.4	29.2
9	Trade Deficit ($B)				
	TOTAL.	0.0	0.0	0.0	0.0

[a]Percent change in the real exchange rate

The assumptions used in cases E, F, G and H are the same as in A, B, C and D, respectively, except that the real exchange rate is flexible.

growth rate in all cases, i.e, E, F, G, H. The same sectors in manufacturing failed to post positive growth rates despite an accompanying adjustment in the real exchange rate: sectors 51-55, 59-66, 67-75, 80-82 and 83-91.

In cases G and H, the required adjustment in the real exchange rate to have a zero change in the trade deficit is less relative to cases E and F because supply is more elastic. In cases G and H, the required change is 4.8 percent and 4.5 percent, respectively. Nevertheless, these changes together with the lowering of tariffs and lifting of QRs produce greater positive output increases: in case G, output increases by 3.8 percent, twice that in case E; in case H, output increases by 3.5 percent, about 73 percent greater than in case F. This is due to higher supply elasticities built into the model. The performance of the entire manufacturing sector also improved: output grew by 7 percent in case G and by 6.5 percent in case H. This improvement was brought about by the following sectors: food processing (28-45), beverages and tobacco (46-50), wood and wood products (56-58), and nonmetallic mining (76-79). The same sectors, i.e., 51-55, 59-66, 67-75, 80-82 and 83-91, failed to show any improvement in output.

In cases G and H, the income of the entire economy grew by 3.5 percent and 3.0 percent, respectively. The expansion of income in the following sectors were greater than their respective growth rates in output: agriculture (3-13), food processing (28-45), textile and footwear (51-55). This suggests

that on the average, it was the high value-added sectors in these major groups that expanded.[34]

The general results from all these scenarios point to one thing: effects from trade reform are small since the models used cannot capture dynamic effects. The dynamic effects could be larger.

TABLE 4.5

EFFECTS OF TRADE REFORM ON OUTPUT ASSUMING FLEXIBLE REAL EXCHANGE RATE

(By sector groups, in percent)

		E	F	G	H
03-96	All Sectors				
	Importables	1.7	1.7	4.0	4.0
	Exportables	6.1	5.3	11.5	10.1
	TOTAL	1.9	1.7	3.8	3.5
03-22	Agriculture, Fishing and Forestry				
	Importables	2.9	0.9	5.1	1.9
	Exportables	4.6	4.1	7.9	6.9
	TOTAL	2.7	2.2	4.7	3.8
23-27	Mining				
	Importables	6.2	5.6	10.4	9.4
	Exportables	6.9	6.3	11.6	10.6
	TOTAL	6.8	6.2	11 4	10.3
28-96	Manufacturing				
	Importables	1.5	1.8	3.8	4.1
	Exportables	7.1	6.2	14.2	12.4
	TOTAL	3.3	3.1	7.0	6.7

34. Income did not really grow by 11 percent and 10 percent in case E and F for sector 59-66. This is the same problem as discussed earlier, i.e. negative value-added combined with decreases in output. If the same adjustments are made, i.e., equate all $V_{ji} < 0$ to zero, income would grow by only 1.5 percent in case E and by 0.62 percent in case F.

TABLE 4 5 (CONTINUED)

		E	F	G	H
03-13	Agriculture				
	Importables	4.0	1.5	6.9	2.8
	Exportables	4.2	3 7	7.3	6.3
	TOTAL	1.9	1.4	3.3	2.4
19-20	Fishing				
	Importables	-0.0	-0.6	0.4	-0.5
	Exportables	5.0	4.4	8.5	7.5
	TOTAL	4.4	3.8	7.5	6.5
21-22	Logging and Other Forestry Activities				
	Importables	-2.4	-2.9	-3.4	-4.2
	Exportables	4.8	4.2	8.1	7.2
	TOTAL	4.5	4.0	7.8	6.8
28-45	Food Processing				
	Importables	-0.2	-0.8	0.4	-0.7
	Exportables	6.3	5.4	12.8	11.0
	TOTAL	2.0	1.3	4.7	3.3
46-50	Beverages and Tobacco				
	Importables	5.7	4.8	11.6	9.8
	Exportables	2.8	2.0	6.2	4.5
	TOTAL	3.4	2.7	7.1	5.8
51-55	Textile and Footwear				
	Importables	-15.8	-16.5	-29.0	-30.3
	Exportables	6.6	5.7	13.3	11.5
	TOTAL	-0.5	-1.4	-0.1	-1.8
56-58	Wood and Wood Products				
	Importables	0.0	0.0	0.0	0.0
	Exportables	10.4	9.5	20.6	18.7
	TOTAL	10.4	9.5	20.6	18.7

TABLE 4 5 (CONTINUED)

		E	F	G	H
59-66	Paper, Rubber, Leather and Plastic Products				
	Importables	-4.4	-5 2	-7.5	-9.1
	Exportables	5 9	5.1	12.1	10.3
	TOTAL	-3.5	-4 3	-5 8	-7.4
67-75	Chemicals and Chemical Products				
	Importables	-3.6	1 0	-5 9	2.6
	Exportables	0.0	0 0	0 0	0.0
	TOTAL	-3.6	1.0	-5.9	2.6
76-79	Nonmetallic Mineral Products				
	Importables	18 3	21 1	35 4	40 4
	Exportables	22.0	20 9	42 3	40.2
	TOTAL	18.4	21 0	35 5	40 4
80-82	Basic Metals and Metal Products				
	Importables	-2 4	-3 2	-3 6	-5.3
	Exportables	13.2	12.3	25.9	23.9
	TOTAL	-2.2	-3 0	-3 2	-4.9
83-91	Machinery, including Electrical Equipment and Transport Equipment				
	Importables	-2.7	-4.7	-4 2	-8.0
	Exportables	6.6	5.7	13.3	11.5
	TOTAL	-0.9	-2 7	-0.8	-4.3
92-96	Miscellaneous Manufactures				
	Importables	-4.6	-5.4	-7.8	-9.4
	Exportables	7.7	6.8	15.5	13.6
	TOTAL	-0.2	-1.1	0 4	-1.2

TABLE 4.6

EFFECTS OF TRADE REFORM ON INCOME ASSUMING FLEXIBLE REAL EXCHANGE RATE

(By sector groups, in percent)

		E	F	G	H
03-96	All Sectors				
	Importables	3.1	2.5	6.3	5.2
	Exportables	5.6	4.9	10.3	9.0
	TOTAL	1 9	1.6	3 5	3.0
03-22	Agriculture, Fishing and Forestry				
	Importables	2.7	0.7	4.9	1.6
	Exportables	4.6	4.0	7.9	6.9
	TOTAL	3.0	2.4	5.2	4.1
23-27	Mining				
	Importables	6.6	6.0	11.1	10.1
	Exportables	6.8	6.2	11.4	10.4
	TOTAL	6.8	6.2	11.3	10.3
28-96	Manufacturing				
	Importables	3.0	2.9	6.6	6.3
	Exportables	7.2	6.3	14.6	12.7
	TOTAL	4.9	4.4	10.0	9.1
03-13	Agriculture				
	Importables	3.8	1.4	6.6	2.6
	Exportables	4.2	3.7	7.3	6.3
	TOTAL	2.2	1.6	3.8	2.8
19-20	Fishing				
	Importables	-0.8	-1.3	-0.8	-1.7
	Exportables	4.9	4.4	8.4	7.4
	TOTAL	4.3	3.7	7.4	6.4
21-22	Logging and Other Forestry Activities				
	Importables	-2.4	-2.9	-3.4	-4.2
	Exportables	4.8	4.2	8.1	7.2
	TOTAL	4.5	3.9	7.7	6.7

TABLE 4.6 (CONTINUED)

		E	F	G	H
28-45	Food Processing				
	Importables	4.0	3.0	8.5	6.4
	Exportables	7.4	6.5	14.8	13.0
	TOTAL	5.5	4.5	11.2	9.3
46-50	Beverages and Tobacco				
	Importables	5.5	4.6	11.3	9.5
	Exportables	3.6	2.7	7.6	5.9
	TOTAL	3.4	2.7	7.1	5.7
51-55	Textile and Footwear				
	Importables	-12.3	-13.0	-22.3	-23.8
	Exportables	6.6	5.7	13.4	11.5
	TOTAL	4.5	3.6	9.3	7.5
56-58	Wood and Wood Products				
	Importables	0.0	0.0	0.0	0.0
	Exportables	9.8	8.9	19.4	17.5
	TOTAL	9.8	8.9	19.4	17.5
59-66	Paper, Rubber, Leather and Plastic Products				
	Importables	-39.8	-39.9	-74.4	-74.7
	Exportables	4.9	4.0	10.1	8.3
	TOTAL	11.1	10.1	22.0	19.9
67-75	Chemicals and Chemical Products				
	Importables	-1.7	-1.1	-2.2	-1.3
	Exportables	0.0	0.0	0.0	0.0
	TOTAL	-1.7	-1.1	-2.2	-1.3
76-79	Nonmetallic Mineral Products				
	Importables	6.5	9.7	13.2	19.0
	Exportables	18.6	17.5	35.9	33.8
	TOTAL	7.1	10.1	14.3	19.8
80-82	Basic Metals and Metal Products				
	Importables	-3.2	-4.0	-5.1	-6.7
	Exportables	14.1	13.0	27.4	25.3
	TOTAL	-2.6	-3.4	-4.1	-5.7

TABLE 4.6 (CONTINUED)

		E	F	G	H
83-91	Machinery including Electrical Equipment and Transport Equipment				
	Importables	-3.8	-5.9	-6.2	-10.4
	Exportables	6.6	5.7	13.3	11.5
	TOTAL	-0.5	-2.2	-0.0[a]	-3.5
92-96	Miscellaneous Manufactures				
	importables	14.7	13 8	28.7	26.7
	Exportables	7.7	6.8	15.5	13.6
	TOTAL	4.1	3.2	8.5	6.7

[a]The rate is -0.05 percent.

CHAPTER 5

Conclusion

In the end, one goes back to the main theme. The main theme of this paper is trade reform, the instruments used and its desired effects. The main objectives of reform are, in essence, to change the incentive structure between traded goods and to bring about an improvement in the trade balance.

Chapter 2 points out the experience of trade reform in the 1990s: E.O. 470 made some gains and has contributed to a sense of trade policy continuity and commitment of the government to the process of trade reform. Nevertheless, these gains were easily eroded by subsequent policy moves such as E.O. 8 and M.O. 95. The government's commitment to reform failed the test of time. The commitment and credibility of trade reform is important in inducing the necessary changes in producer behavior. Weak commitment and/or lost of credibility is damaging because producers will not do the necessary adjustment in production since they perceive policy changes as temporary. Hence, any changes in tariffs and/or lifting of QRs may not produce the desired resource-allocation effects.

The policy reform that came after E.O. 470 such as E.O. 8 and M.O. 95 actually reversed gains achieved by E.O. 470. E.O. 470 and the ongoing import liberalization have not been successful on these counts:

- they have lowered the level of protection and its dispersal among sectors but have not changed the structure of protection since bias against exports continue as shown by their EPRs; and
- they have not significantly achieved a more neutral or more even form of protection as shown by an inverted normal distribution of EPRs in the economy.

Trade policy reform within this context is limited in changing the existing biases of the trade regime. Nevertheless, trade reform is necessary but its contribution should be perceived as limited.

Chapter 4 points to one important tool in trade reform, adjustment in the real exchange rate. The liberalization of the foreign exchange market, as discussed in Chapter 2, is not sufficient since monetary authorities can defend a lower exchange rate by inducing capital inflows via a high interest rate policy.

The role of the real exchange rate is argued to be the more significant price variable in changing relative incentives among sectors: the negative output effect can be prevented as shown by the results in cases E,F,G and H. Hence, trade policy reform without reform in the exchange rate and inflation policy may not be able to reap the gains at the least, and at the worst may erode the gains from implementing trade reform.

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-- 239

Special Paper No. 2

Foreign Direct Investment in the Philippines: A Reassessment

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Previous Page Blank

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CHAPTER 1

Introduction

The attitudes of most developing countries toward foreign direct investment (FDI) have changed significantly in recent years. Beginning in the late 1970s, a considerable number of developing countries that were earlier skeptical about foreign direct investment have adopted more open and flexible policies toward FDI. A central reason behind this is their need to expand exports (Blomström 1990). Most developing countries recognize that FDI has the potential of making significant contributions to facilitating the marketing of exports. The knowledge and experience of transnational corporations (TNCs) in international marketing and their lobbying power in their home countries can help developing countries expand their exports. FDI can also contribute to their economic development through the transfer of financial resources as well as through technology transfer and improved management knowhow.

These contributions depend largely on the policies of developing countries and the behavior of TNCs. It is often suggested that a more outward-oriented policy is a necessary condition for the realization of TNCs' export potential and that host country trade policies are more important than policies toward TNCs. The four Asian newly industrializing countries (NICs) are the most successful in transforming their economies and creating a policy environment that encourages export competitiveness. More important, their trade policy regimes are less biased against exports. Their trade orientation attracted a substantial amount of foreign investment which in turn contributed to their export expansion.[1] In the 1980s, they emerged as Asia's new capital-exporting countries.

1. This is particularly true for Singapore and Hong Kong. In the case of South Korea, exporting is done mostly by local firms. Until 1984, South Korea had restrictive foreign investment policies (UNCTC 1988 and Helleiner 1991).

Recognizing the importance of an outward-oriented policy[2] approach, many countries today are abandoning the Prebisch-type of inward-looking strategy. They have liberalized their FDI regulations and introduced various guarantees and incentives. Emulating the successful model of their Asian neighbors, the four ASEAN countries (i.e., Malaysia, Indonesia, Thailand, and the Philippines) have embarked on policies of deregulation, liberalization and reforms. In the case of the Philippines, however, the volume of FDI has failed to meet expectations as the country compares itself unfavorably with its ASEAN neighbors. In the 1980s, the early wave of foreign investment flows from the Asian NICs as well as those from Japan, mostly benefitted Indonesia, Malaysia, and Thailand, within ASEAN.[3]

This study aims to identify the factors that may explain and help in understanding why the Philippines has lagged significantly behind other countries in attracting export-oriented FDI. The paper is organized as follows: Chapter 2 provides a background on trade and investment policies of the government as well as on the overall economic and political environment in the Philippines from the 1940s up to the early 1990s; Chapter 3 gives the trends, patterns, sources, and sectoral concentration of FDI in the Philippines; while Chapter 4 analyzes the impact of domestic policy changes in the 1980s on the volume and type of FDI flows. It also examines the impact of FDI on exports and along this vein, the following questions are addressed: Has the increased policy attention to export promotion led to an increased export orientation of existing firms? If not, what prevented them from engaging in greater export activity? Chapter 5 compares the Philippines with

2 An inward-oriented trade strategy is one in which trade and industrial incentives are biased toward production for the domestic market. This strategy tends to rely on discretionary interventions, so that over time, an inward-oriented trade regime is often characterized by controls, high and variable tariff protection and quantitative restrictions and administrative allocations. Outward orientation, on the other hand, emphasizes linkages to the world economy through exports and enhanced import capacity. This strategy does not bias incentives in favor of the domestic market. Export activities are, therefore, treated at least as profitably as import-competing activities. While an important principle of outward-orientation is a neutrality of incentives between production for home and export markets, it does not imply an absence of government intervention. (Bhattacharya and Linn, 1988)

3 This wave of FDI flows from the Asian NICs was driven by their search for new markets, the need to circumvent increasing protection in the developed countries, and the appreciation of their currencies. FDI flows from Japan surged due to the yen appreciation in 1985 as well as the wage increases, scarcity of land, and the graduation of the NICs from the Generalized System Preferences (GSP) in 1989 (Pangestu et al. 1992).

its ASEAN neighbors in terms of trade and investment policies as well as the characteristics of foreign firms operating in each country while Chapter 6 looks at the determinants of FDI and assesses the impact of FDI flows on exports. Finally, Chapter 7 presents the conclusions and policy recommendations of the study.

CHAPTER 2

Overall Investment Climate in the Philippines: 1940s - 1990s

This section provides an overview of the economic and political environment in the Philippines and discusses the trade and FDI policies in the country from the 1940s up to the early 1990s. This serves as a background for the succeeding analysis on FDI flows. Box 1 summarizes the major economic and political events affecting FDI flows in the country.

Parity Amendment and Import Substitution: 1940s to mid-1960s

The Philippines was a colony of the US for the period 1898 to 1946. Because of these traditional ties, the country's international economic relations were very much oriented toward the US. After independence in 1946, the enactment of the Bell Trade Act reinforced the relationship between the two countries. The Act had a parity provision which afforded the same rights and privileges to American firms in the exploitation of natural resources and operation of public utilities. In 1955, the Bell Act was revised by the Laurel-Langley Agreement which extended the parity privileges of the Americans to all forms of economic activities in the country.

The Philippines started to adopt an industrialization policy of import substitution when import and foreign exchange controls were imposed in response to a balance-of-payments (BOP) crisis in 1949. These controls were retained throughout the 1950s and soon, a protective system was built up through the maintenance of an overvalued currency, defended by protective tariffs and quantitative import restrictions.

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BOX 1

CHRONOLOGY OF SIGNIFICANT ECONOMIC AND POLITICAL EVENTS IN THE PHILIPPINES

Year	Event
1945	**Bell Trade Act.** This provided for the continuance of free trade between the US and the Philippines for a period of eight years with gradually rising tariffs thereafter.
1949	Balance-of-payments (BOP) crisis Imposition of import and foreign exchange controls.
1955	**Laurel-Langley Agreement.** This accelerated the application of Philippine duties on imports from the US so that 90 percent of the Philippine duty was applied by 1965, earlier than previously scheduled. Duties would then rise to 100 percent in 1974.
1957	**Adoption of a protective tariff structure.** The 1957 tariff changes lowered the duties on raw materials, intermediate foods and essential items which were not domestically available and raised the duties on nonessential, finished goods and items which could be domestically manufactured This produced the familiar escalation of the tariff structure which has remained until today The decontrol on imports in 1960-1962 allowed this tariff structure to emerge as the dominant protection instrument
1965	Election of Ferdinand Marcos
1967	**RA 5186: Investment Incentives Act.** This Act prescribed incentives and guarantees to investments in the Philippines and created a Board of Investments (BOI) to carry out its provisions. Investments in pioneer industries could be totally foreign-owned while investments in nonpioneer industries were restricted up to 40 percent equity The ownership requirement was relaxed if the enterprise proposed to engage in a pioneer activity or if it exported at least 70 percent of its production It also offered various fiscal incentives to foreign investors in pioneer areas such as accelerated depreciation, net operating loss carry-over, tax exemption on imported capital equipment, tax credit on domestic capital equipment, tax credit for withholding tax on interest, and exemption from all revenue taxes except income tax.
1968	**RA 5455: Foreign Business Regulations Act.** This Act regulated foreign investments whose equity participation exceeded 30 percent in enterprises that were not registered under the Investment Incentives Act of 1967. Whenever foreign equity participation in these interprises exceeded 30 percent, prior authority from the BOI must be obtained For investments that did not exceed 30 percent, the enterprise must only be registered with the BOI.

BOX 1 (CONTINUED)

Year	Event
1969	Reelection of Ferdinand Marcos Escalation of radical protests
1970	Balance-of-payments crisis **RA 6135: Export Incentives Act.** This Act was the first step toward redirecting investments away from import-substituting industries that had dominated the Philippine economy It followed the same rules on foreign ownership as RA 5186 and provided almost the same incentives granted to firms registered under RA 5186 in addition to tax credit on duties and taxes paid on raw materials and additional deduction of the sum of direct labor cost and raw materials used.
1972	Declaration of Martial Law **PD 66: Export Processing Zones.** RA 5490 of 1969 was legislated to pave the way for the country's first Export Processing Zone (EPZ) in Bataan, but no real progress was made until PD 66 was issued Total production of firms must be entirely geared for exports, in certain instances, however, and subject to the approval of the EPZ Authority, 30 percent of production may be sold in the domestic market Foreign ownership was permitted up to 100 percent, however, only the industries being promoted were allowed to be set up
1974	Expiration of Laurel-Langley Agreement
1980	**Trade Liberalization Program.** Under a World Bank structural adjustment loan (SAL), the government embarked on a program to reduce the level and dispersion of tariff rates and remove quantitative restrictions over a period of five years ending in 1985. The program proceeded broadly on schedule until the 1983 BOP crisis.
1981	Lifting of Martial Law **PD 1789: Omnibus Investments Code of 1981.** This consolidated into a single code all incentive measures to investments, agriculture and exports contained in separate pieces of legislation, but did not alter their overall thrust
1983	**BP 391: Amendment of PD 1789.** This reduced the number of incentives under PD 1789. It did away with some of the capital-cheapening measures such as accelerated depreciation and expansion reinvestment allowances. It also gave strong preference to exports and substituted performance-based benefits for capital-based ones Assassination of Benigno Aquino Balance-of-payments crisis
1984-1985	Holding of massive demonstrations participated in for the first time by the urban middle class and the business community

BOX 1 (CONTINUED)

Year	Event
1986	February People Power Revolution July coup attempt November coup attempt
1987	**EO 226: Omnibus Investments Code of 1987.** Regulated the entry of foreign investments in enterprises not registered under Book 1 of the Code whenever their equity participation exceeded 40 percent (instead of 30 percent in the old Code). The new Code simplified and consolidated previous laws and provided two important additions income tax holiday for enterprises engaged in preferred areas of investments, and labor expenses allowance for tax deduction purposes. August coup attempt
1989	Nearly successful December coup and persistence of rumors of further conspiracies
1991	**RA 7042: Foreign Investment Act.** Liberalized the existing regulations by allowing foreign equity participation up to 100 percent in all areas not specified in the Foreign Investment Negative List (FINL). The FINL has three component lists: A, B and C List A covers areas where foreign participation is excluded or restricted by the Constitution or specific legislations. List B contains activities where foreign investment is limited for reasons of defense, risk to health and moral and protection of local small and medium-scale enterprises. List C contains areas of investment in which there already exists an adequate number of enterprises to serve the needs of the economy and further foreign investments are no longer necessary. Foreigners who do not seek incentives and/or whose activities are not included in the negative list can invest up to 100 percent equity simply by registering with the Securities and Exchange Commission (SEC). They can also invest up to 100 percent in enterprises that export at least 60 percent (instead of 70 percent under EO 226) on their output, provided these do not fall within Lists A and B. **EO 470.** Designed within a four-year phasedown period from July 1991 to July 1995, EO 470 aimed to lower the maximum tariff rate to 50 percent and reduce the number of tariff tiers within the range of zero minimum for raw materials to 50 percent (with some exceptions) for finished products.
1992	Election of Fidel Ramos

Martial Law, Export Promotion, and Debt-driven Growth: Late 1960s - 1970s

The late 1960s was marked by economic and political turmoil. The economy again witnessed a renewal of BOP difficulties which led to a crisis in late 1969. To encourage foreign investments, Republic Act (RA) 5186 or the Investment Incentives Act of 1967 and RA 6135 or the Export Incentives Act of 1970 were promulgated. These two Acts were the first laws aimed at streamlining and rationalizing foreign investment policy in the Philippines. In 1968, RA 5455 or the Foreign Business Regulations Act was legislated to regulate foreign investments in enterprises that were not registered under RA 5186.

After the 1969 election in which Ferdinand Marcos was reelected President of the Republic, radical protests escalated in both rural and urban areas. Purportedly to curb the expansion of these unrests, Marcos declared Martial Law in September 1972. Various measures were passed reducing restrictions on foreign investments. Earlier laws such as RA 5186, 5455, and 6135 were amended to enhance their attractiveness. To pave the way for the country's export processing zones, Presidential Decree (PD) 66 was issued in 1972.

During the 1970s, the government attempted to encourage nontraditional exports to spearhead its economic development. This, however, fell short of expectations. The growth of nontraditional exports became highly concentrated on a few commodities dominated by garments and semiconductor devices which were heavily dependent on imported raw material inputs as well as on export processing zones and bonded warehouses. During this period, the country's external indebtedness increased greatly as a result of the two oil price shocks and the heavy borrowing from the easily available recycled petro dollars.

Economic Crisis, Trade Liberalization, and People Power Revolution : 1980s - Early 1990s

The economic and political atmosphere in the early 1980s was turbulent, reminiscent of the situation during the late 1960s. Insurgency heightened as the Marcos government was beginning to lose its credibility and support. After the second oil price increase, the country began to encounter serious economic problems arising from its increasing debt service burden, declining export receipts, and low rates of economic growth. In January 1981, Martial Law was lifted although it made no difference in the powers of the

Marcos regime. The assassination of Benigno Aquino (the opposition leader regarded as the most credible alternative to Marcos) in August 1983 and the resulting political disturbances triggered capital flight and the most severe BOP crisis that the country had ever faced.

Amidst this economic and political chaos, several economic reforms were initiated by the Marcos government. In 1980, the country embarked on a trade liberalization program under a World Bank structural adjustment loan (SAL). To consolidate the incentive measures to investments and exports, PD 1789 or the Omnibus Investments Code of 1981 was promulgated. In April 1983, major changes were introduced in the investment incentive system through the amendment of PD 1789 by Batas Pambansa (BP) Blg. 391. The latter reduced the number of incentives under PD 1789 and did away with some of the capital-cheapening measures such as accelerated depreciation and expansion reinvestment allowances. It also gave strong preference to exports and substituted performance-based benefits for capital-based ones (Manasan 1986 and Power 1989).

In February 1986, an aborted military coup which was turned into a massive uprising by the people overthrew Ferdinand Marcos. The new regime of Corazon Aquino succeeded in restoring democratic institutions in the political arena and recorded improvements in the country's economic growth particularly from 1987 to 1989. However, the political stability of the country remained fragile with threats from right-wing military renegades and communist revolutionaries. Aquino's term saw a series of attempted coups and rumored coups involving elements of the military. The almost successful coup of December 1989 severely damaged the government's standing.

After 1986, President Aquino strove to complete the import liberalization program which was suspended in 1983. Further tariff reform was legislated through Executive Order (EO) 470. To encourage investments, EO 226 was promulgated in February 1987. The new code simplified and consolidated previous investment laws. Compared with BP 391, EO 226 diminished the preference for exports and reinstated some of the capital-cheapening measures that had characterized investment incentives prior to 1983. Thus, the Investment Code no longer served as a counterbalance to the import-substitution bias of the protection system and was itself biased in favor of capital-intensive investments (Manasan 1986 and Power 1989). This tended to give the wrong signals to foreign investors.

In June 1991, RA 7042 or the Foreign Investment Act (FIA) was legislated. This considerably liberalized the existing regulations by allowing foreign equity participation up to 100 percent in all areas not specified in

the Foreign Investment Negative List (FINL). The FIA provides transparency by disclosing in advance (through the FINL) the areas where foreign investment is allowed or restricted. It also reduces the bureaucratic discretion arising from the need to obtain prior government approval whenever foreign equity participation exceeds 40 percent (World Bank 1993). Together with the incentives under EO 226, the Philippines is expected to be on an equal footing with its ASEAN neighbors with respect to policies toward TNCs.

In May 1992, the democratic transition process was completed with the election of Aquino's former defense secretary Fidel Ramos as President of the Republic. His administration initiated peace negotiations with both right-wing military rebels and communist insurgents. This move was a major factor in the establishment of political stability during his first year in office. However, the rise in criminality which severely affected the peace-and-order situation in the country, and the power crisis which resulted in hours-long blackout contributed to the negative perceptions that foreign investors have on the Philippines.

CHAPTER 3

FDI in the Philippines

As in most developing countries, the Philippines lack comprehensive data on foreign direct investment. Although there are currently three government agencies[4] monitoring FDI flows, their data suffer from lack of comparability and discrepancies due to differences in definition, coverage, and time period. The data used in this section are based on Central Bank statistics which, notwithstanding their weaknesses, are the most comprehensive in terms of coverage and the most complete in terms of number of years covered.

Trends and Patterns

This analysis is based on the FDI item in the balance of payments computed by the Central Bank's Department of Economic Research International (DER-I). The DER-I's definition of foreign direct investment includes not only foreign direct equity investments but portfolio investments as well and foreign exchange holdings of corporations, partnerships, and banks due to other financial transactions.

Tables 1 and 2 show that the net inflow of FDI in the Philippines fluctuated widely. The history of economic and political instability in the country contributed greatly to this erratic trend. Table 1 presents the FDI flows for the period between 1950 and 1969. The table shows that the year 1950, which marked the beginning of import substitution in the Philippines,

4. These are the Central Bank, Securities and Exchange Commission, and Board of Investments.

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TABLE 1

NET FOREIGN INVESTMENT FLOWS IN THE PHILIPPINES: 1950-1969
(in US$ million)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Net Foreign Investment	2	5	22	43	44	59	31	40	18	46
Inflow	2*	5*	22*	43*	44*	59*	46*	56*	55*	83*
Outflow	—	—	—	—	—	—	15	16	37	37

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Net Foreign Investment	18	-2	-27	-34	11	-10	2	49	184	130
Inflow	107	73	26	23	74	18	74	103	266	225
Outflow	59	75	53	57	63	28	72	54	82	95

*Net Flow

Source: Department of Economic Research, Central Bank.

TABLE 2

NET FOREIGN DIRECT INVESTMENT FLOW IN THE PHILIPPINES: 1970-1993
(in US$ million)

	Foreign Direct Equity Investment in the Philippines								
	New Foreign Investments	Reinvested Earnings	Debt Conversion	Technical Fees and Imports Converted into Investments	Total	Foreign Direct Investment Abroad	Portfolio Investment	Capital Withdrawn from the Philippines	Net Inflow
1970	4	—	—	—	4	-3	-26	-3	-28
1971	3	—	—	—	3	-5	2	-4	-4
1972	2	—	—	—	2	-9	-2	-13	-22
1973	83	—	—	—	83	-1	11	-29	64
1974	64	—	—	—	64	0	24	-60	28
1975	116	—	—	—	116	-1	28	-18	125
1976	91	67	—	—	158	-5	16	-25	144
1977	130	78	—	—	208	14	6	-12	216
1978	60	62	—	8	130	-9	-1	-20	100
1979	62	58	—	10	130	-38	13	-85	20
1980	75	39	—	—	114	-86	4	-134	-102
1981	91	62	—	90	243	-47	3	-24	175
1982	25	44	—	124	193	-61	1	-116	17
1983	119	26	—	102	247	-26	7	-116	112
1984	32	15	—	90	137	-15	-3	-102	17

TABLE 2 (CONTINUED)

	Foreign Direct Equity Investment in the Philippines								
	New Foreign Investments	Reinvested Earnings	Debt Conversion	Technical Fees and Imports Converted into Investments	Total	Foreign Direct Investment Abroad	Portfolio Investment	Capital Withdrawn from the Philippines	Net Inflow
1985	9	10	—	45	64	-22	5	-30	17
1986	17	20	14	38	89	14	13	24	140
1987	34	22	287	31	374	2	19	-69	326
1988	81	17	806	13	917	25	50	-6	986
1989	93	56	306	39	494	7	372	-30	843
1990	171	28	226	24	449	0	152	-121	480
1991	130	34	273	56	493	13	212	-64	654
1992	234	42	269	46	591	6	451	-311	737
1993	334	43	193	5	575	6	955	-924	612

Net Foreign Direct Investment Inflow = Inflows - Outflows This represents the net increase in foreign equity and non-equity investments plus net increase in foreign exchange holdings of domestic corporations and partnerships due to other financial transactions

Source. Department of Economic Research - International, Central Bank

was characterized by overall increases in the inflow of import-substituting FDI. This can be illustrated by looking at the foreign direct investment of the US which accounts for the bulk of FDI in the country. Table 3 reveals that US investment in manufacturing grew rapidly between 1957 and 1966. This period coincided with the adoption of import substitution by the government along with the granting of parity rights to the US. Table 3 shows that during this period, the US shifted its investment from trade and public utilities toward manufacturing. The share of manufacturing increased from 13.4 percent in 1957 to 34.2 percent in 1966. These investments in manufacturing were made largely in firms producing import-substitutes like toiletries and detergents (Colgate-Palmolive 1949), pharmaceuticals (Muller and Phelps, 1950 and Mead Johnson, 1962), batteries (Union Carbide, 1951), aluminum products (Reynolds, 1956), wires and cables (Phelps-Dodge, 1955), paper (Kimberly Clark, 1956), dairy products (General Milk, 1957 and Consolidated, 1956), tires (BF Goodrich), and electrical appliances (General Electric [GE]).[5]

TABLE 3

US DIRECT INVESTMENT IN THE PHILIPPINES, BY INDUSTRY

Percentage Distribution

	1940	1950	1957	1966
Manufacturing	7.6	15.4	13.4	34.2
Transportation, communication and public utilities	39.6	31.5	23 8	6 0
Trade	14.5	20 1	19.9	14 2
Other industries	38.3	32.9	(D)	(D)
TOTAL	100.0	100.0	100.0	100 0
(in million US$)	90.2	149.2	306.0	486.0

Note. (D) indicates that the data in the cell has been suppressed to avoid disclosure of data in that cell, or another cell for a specific person or firm

Sources: US Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* (Washington D C Government Printing Office), various issues in Meiners, 1988

5 *American Philippine Yearbook* 1967 published by the American Chamber of Commerce in Constantino, R and Constantino L , *The Continuing Past*, 1978, Manila.

The early 1960s was beset by economic problems arising from the exchange controls instituted in the last decade. Until the middle of the 1960s, net FDI outflows were registered (Table 1). Net FDI inflows began to rise in 1966 and reached a peak of US$184 million in 1968. However, this started to decline in 1969 as uncertainty loomed among foreign investors due to the country's growing economic and political difficulties as well as the anticipated termination of the Laurel-Langley Agreement in 1974.

Table 2 shows the FDI flows from 1979 up to 1993. Negative net inflows were registered from 1970 up to 1972. With the declaration of martial law in 1972, net FDI inflows increased steadily from 1973 to 1977, except in 1974 when net FDI inflow plunged due to the first oil price shock. During this period, the government enacted various measures to deregulate foreign investment. The anxieties of American investors were relieved by the passage of a series of PDs which facilitated their divestments. Furthermore, the Central Bank (CB) liberalized regulations on the repatriations of capital and profits and the remittances of royalties. But as the second oil price shock hit the world in 1978-1979 net inflows again dropped substantially from 1978 until 1980. Abroad, the 1980s witnessed a downturn in world economic activity and sharp reductions both in international bank lending and foreign direct investment flows.

In the early 1980s, the country was again beleaguered by economic and political instability. Net FDI flows suffered a massive drop with large FDI outflows registered in the mid-1980. The year 1986 marked the end of the Marcos era and the beginning of the Aquino administration. From 1986 to 1988, steady increases in net FDI flows were registered with a peak of US$986 in 1988. These flows were boosted by the government's debt for equity program. Under the program, foreign liabilities at commercial banks could be bought at a discount at the secondary market and the same could be redeemed at full peso equivalent at the CB for investment in Philippine equity. In 1988, debt conversions stood at US$806 million and accounted for 88 percent of total foreign direct equity investment. Investor confidence was, however, dented by the nearly successful December 1989 coup. Amidst widespread investor uncertainty, a renewed fall occurred in net foreign investment in 1990. Although some recovery was observed in 1991 and 1992, net FDI flows again fell in 1993. Net portfolio investments in the Philippines were relatively small until the mid-1980s. Starting in 1986 net portfolio investments increased significantly with a surge in 1992 and 1993.

Sectoral Concentration

This analysis looks at the changes in the sectoral distribution of CB-registered foreign direct equity investments from 1973 to 1993. The CB Foreign Exchange Department is the main source of the data used in the analysis. Table 4 shows the percentage distribution of FDI stock based on cumulative flows. It is evident that foreign investment in the Philippines tended to concentrate in the manufacturing sector with its share steadily rising from 39 percent in 1973 to 48 percent in 1983 and to 53 percent in 1993. Within manufacturing, foreign investment is concentrated in industries like chemicals and chemical products, food processing, petroleum and coal, transport equipment, and machinery and appliances. Although chemicals and chemical products dominated the other manufacturing sectors, its share continuously fell during the past six years from 29 percent in 1988 to 23 percent in 1993. The same holds for food whose share gradually dropped from 22 percent in 1985 to 15 percent in 1993, as well as metal and metal products whose share declined from 13 percent in 1985 to 8 percent in 1993. Gaining in importance is the machinery, apparatus, appliances, and supplies sector whose share in total manufacturing went up sharply from 6 percent in 1987 to 17 percent in 1993. For the period 1982-1993, the share of textiles and garments remained constant at around 5 percent. In 1973, it had a share of 13 percent which gradually declined thereafter. The share of transport equipment increased from 7 percent in 1982 to 9 percent in 1992, but this declined to 8 percent in 1993. The share of petroleum and coal was almost constant at 6 percent between 1980 and 1989, dropped to 5 percent from 1990 to 1992 but rose to 10 percent in 1993.

For the period 1973-1993, there have been substantial shifts in the overall concentration of FDI. In the beginning of the period under study, banking and finance was the leading sector with its share amounting to around 45 percent in 1973 and 1974. This could be explained by the enactment of PD 71 which allowed minority foreign participation in banking and finance, and PD 1034 which created an offshore banking system in the Philippines. PD 1034 was legislated with the objective of competing with Singapore as a financial center in the region. However, further movements into this sector were not sustained. Its share continued to drop from 45 percent in 1973 to 12 percent in 1993.

In 1973, public utility was the third largest sector with a share of 7 percent. But with the expiration of the Laurel-Langley Agreement in 1974, Americans began to withdraw their investments from this sector. Between

TABLE 4

DISTRIBUTION OF CB-REGISTERED FOREIGN DIRECT EQUITY INVESTMENTS BY SECTOR
CUMULATIVE FLOWS (in percent)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Banks and Other Financial Institutions	45.44	45.03	35.12	27.06	24.54	22.51	21.01	18.81	17.00	14.95	13.66	12.94	12.25	12.90	12.66	12.41	12.13	12.15	11.61	11.57	11.69
Banks	88.84	76.27	76.47	74.43	70.56	66.30	66.88	60.98	57.17	56.92	59.93	59.71	59.11	62.36	62.73	62.78	61.48	59.69	58.21	56.00	50.78
Other financial institutions	11.16	23.73	23.53	25.57	29.44	33.70	33.12	39.02	42.83	43.08	40.07	40.29	40.89	37.64	37.22	37.22	38.52	40.31	41.79	44.00	49.22
Manufacturing	39.18	34.31	44.80	48.66	55.10	55.63	53.39	50.42	49.20	47.23	47.92	48.35	49.10	48.05	48.10	47.86	48.21	48.66	51.28	51.62	53.02
Chemicals and Chemical Products	9.31	15.77	11.56	15.29	22.54	29.30	29.92	29.17	29.53	29.39	27.85	27.35	26.51	28.19	28.59	28.66	27.92	27.04	25.13	24.31	23.12
Food	6.15	14.35	11.99	9.22	12.79	12.19	14.66	13.68	17.10	15.52	18.55	19.44	22.10	21.70	21.32	21.01	19.99	19.60	16.98	16.55	15.49
Metal and Metal Products	3.55	2.19	27.67	30.37	22.11	18.12	16.46	15.80	13.82	16.45	15.29	14.71	13.13	13.00	12.55	12.30	11.46	10.77	9.82	9.31	8.46
Textiles and Garments	12.70	11.03	8.16	6.76	5.45	5.93	5.71	5.61	5.19	5.47	4.84	4.64	4.37	4.42	4.41	4.59	4.81	5.07	5.05	5.41	5.09
Transport Equipment	5.94	3.93	3.03	3.23	4.58	5.63	5.95	8.48	8.07	7.39	6.45	6.76	7.87	7.69	7.68	7.53	7.34	7.30	7.31	8.60	8.23
Petroleum and Coal	41.78	25.87	13.83	11.31	7.37	6.05	5.11	4.60	4.61	3.95	7.26	6.74	6.16	6.24	6.10	5.98	5.55	5.17	5.01	4.57	9.61
Machinery, apparatus, appliances and supplies	2.66	4.36	3.09	3.84	5.20	4.88	5.00	6.02	5.81	6.72	6.08	5.97	5.68	5.67	5.85	5.91	8.75	9.76	17.14	18.27	17.37
Nonmetallic mineral products	3.16	1.95	1.43	1.77	1.69	1.92	1.88	2.09	2.11	2.77	2.41	2.90	2.62	2.65	2.56	2.51	2.41	3.08	2.66	2.50	2.85
Others	14.75	20.55	19.24	18.20	18.27	15.98	15.30	14.54	13.75	12.34	11.27	11.48	11.53	10.43	10.95	11.51	11.76	12.21	10.90	10.48	9.75
Mining	3.25	8.26	7.81	11.22	8.43	9.34	13.51	17.57	19.60	24.54	26.02	26.64	26.44	27.16	27.46	27.14	26.73	26.06	23.95	22.30	20.43
Petroleum and Gas	2.95	1.75	2.65	35.98	37.36	51.88	72.74	81.46	86.51	88.39	90.42	91.22	91.85	92.39	90.34	89.33	88.50	86.88	84.04	82.90	82.71
Copper	72.36	57.85	62.98	45.26	44.24	34.33	19.23	13.47	9.74	9.14	7.54	6.91	6.30	5.89	5.62	5.55	5.26	5.08	4.90	4.83	4.82
Iron Ore	6.75	34.46	28.37	15.27	14.99	11.16	6.55	4.13	2.99	1.97	1.62	1.49	1.36	1.27	1.21	1.19	1.13	1.09	1.05	1.04	1.04
Nickel	17.93	5.94	4.46	2.36	2.31	1.71	0.96	0.60	0.44	0.29	0.24	0.22	0.20	0.18	0.18	0.17	0.17	0.26	0.25	0.32	0.31
Others	0.00	0.00	1.54	1.13	1.10	0.92	0.52	0.33	0.31	0.22	0.18	0.17	0.29	0.27	2.65	3.75	4.94	6.69	9.75	10.91	11.11

TABLE 4 (CONTINUED)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Commerce	2.55	6.31	5.76	6.04	5.62	5.95	5.93	6.49	5.89	5.34	4.77	4.67	4.36	4.19	4.12	4.36	4.99	5.29	5.30	5.31	5.10
Wholesale	61.83	39.65	48.47	61.68	67.42	69.49	71.75	78.10	75.98	72.51	72.52	72.17	74.20	73.94	73.54	72.93	62.40	62.30	58.00	56.01	56.05
Real Estate	35.48	52.82	40.74	30.45	26.18	20.96	18.16	14.26	17.24	21.34	21.72	22.32	22.11	22.38	22.35	21.20	24.53	26.11	31.73	34.59	35.00
Others	2.59	7.53	10.80	7.87	6.40	9.54	10.08	7.64	6.79	6.16	5.76	5.51	3.69	3.69	4.11	5.87	13.07	11.59	10.27	9.40	8.95
Services	0.18	0.31	1.70	2.96	2.94	2.77	2.66	2.55	4.13	3.94	4.05	3.85	3.96	3.93	3.89	4.50	4.39	4.28	4.60	5.96	5.68
Business	92.31	85.71	49.17	70.66	64.50	66.85	71.94	75.35	84.69	77.76	71.81	71.74	66.23	66.00	66.27	56.57	56.55	57.55	48.89	38.26	38.13
Others	7.69	14.29	50.83	29.34	35.50	33.15	28.06	24.65	15.31	22.24	28.19	28.26	33.77	34.00	33.73	43.43	43.45	42.45	51.11	61.74	61.87
Public Utility	6.76	3.73	3.20	2.62	2.00	1.71	1.63	1.51	1.69	1.59	1.44	1.38	1.31	1.30	1.36	1.34	1.30	1.26	1.16	1.18	2.18
Communication	9.21	9.07	21.09	19.67	20.66	19.73	22.11	19.57	31.36	33.99	33.00	33.38	36.60	38.28	42.89	42.54	43.96	44.78	44.68	46.98	58.97
Land transport	90.49	90.63	72.60	67.73	65.44	62.47	53.16	47.05	33.90	33.90	32.81	32.18	30.54	29.64	27.33	27.10	26.17	25.43	24.60	22.23	10.97
Others	0.30	0.30	6.31	12.59	13.89	17.80	24.74	33.39	34.71	32.11	34.19	34.43	32.66	32.08	29.79	30.35	29.87	29.79	30.72	30.79	30.06
Agriculture, Fishery and Forestry	2.49	1.81	1.44	1.26	1.14	1.06	0.99	1.27	1.29	1.28	1.17	1.24	1.74	1.67	1.63	1.63	1.53	01.63	1.46	1.34	1.23
Agriculture	5.49	13.58	15.66	18.14	29.76	26.14	36.14	27.13	34.00	42.63	44.44	48.64	65.63	84.63	84.81	84.28	83.69	81.09	81.27	81.14	81.08
Others	94.51	86.42	84.34	81.86	70.24	73.86	63.86	72.87	66.00	57.37	55.56	51.36	34.37	15.37	15.19	15.72	16.31	18.91	18.73	18.86	18.92
Construction	0.08	0.06	0.05	0.08	0.12	0.98	0.83	1.34	1.16	1.09	0.95	0.90	0.83	0.79	0.77	0.75	0.70	0.66	0.63	0.70	0.66
Transport Facilities	0.00	0.00	0.00	41.03	27.38	82.51	79.01	43.51	40.61	35.53	35.84	35.25	48.53	48.49	48.35	48.35	48.56	48.39	45.26	37.15	36.24
Infrastructure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.77	38.98	34.11	34.40	34.26	72.27	72.29	72.28	72.28	72.24	71.84	72.67	61.72	60.23
Others	100.00	100.00	100.00	58.97	72.62	17.49	20.99	14.72	20.41	30.36	29.76	30.49	-20.80	-20.78	-20.63	-20.63	-20.81	-20.83	-17.93	1.13	3.47
Others	0.08	0.19	0.13	0.10	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Total Foreign Equity Investments	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Central Bank of the Philippines.

1980 and 1992, public utilities had a constant share of only 1 percent which increased to 2 percent in 1993. The share of mining expanded tremendously from 3 percent in 1973 to 27.5 percent in 1987. This was due to large foreign investments in petroleum and gas. Its share, however, began to drop in 1988 and in 1993 it accounted for 20 percent of total FDI. The share of commerce increased from 3 percent in 1973 to 5 percent in 1993. This could be explained by the passage of PD 714 which exempted foreign investors who are engaged in intermediate trade and bulk sales from the equity restrictions imposed by RA 1180.

The share of services also rose from less than 1 percent in 1973 to roughly 6 percent in 1993. Due to the equity restrictions imposed by the Constitution in the areas of agriculture, fishery, and forestry as well as in construction, foreign investments in these sectors remained relatively low with the share of agriculture, fishery, and forestry shrinking from 3 percent in 1973 to 1 percent in 1993.

Sources of FDI

The last two decades witnessed changes not only in the sectoral distribution but also in the sources of FDI. Although still the most important, the dominance of the US has been substantially diluted by the increasing presence of Japan and Hong Kong, and to a lesser extent, of South Korea and Taiwan.[6]

Between 1973 and 1993 (Table 5), the share of the US declined from 64.3 percent to 44 percent in 1993. Annual FDI flows from the US started to decline in 1987. The shares of Japan and Hong Kong both increased considerably from 9.7 percent in 1973 to 20 percent in 1993, and from 1.3 percent in 1973 to 7 percent in 1993, respectively. Substantial annual flows from Japan were registered between 1988 and 1992. Among the other Asian countries, South Korea and Taiwan have become significant sources of FDI. Starting to invest in 1976, South Korea's share increased from .01 percent to 1.6 percent in 1993. Taiwan's share rose from 0.2 percent in 1977 to 0.9 percent in 1993. The bulk of the flows from Taiwan and South Korea started to be felt in 1989 and 1990, respectively. In 1989, Taiwan had a share of 7 percent of the total non-cumulative flow while South Korea had a share of 9

6 FDI from Taiwan may be understated. Their investments may not all be reported to the Central Bank because some Taiwanese investors channel their investments through their Filipino-Chinese connections.

percent of the total non-cumulative flow in 1991. In 1993, Singapore's cumulative share stood at 1 percent while Malaysia registered a share of 0.3 percent (Table 5).

The cumulative share of the UK decreased from 16.5 percent in 1973 to merely 6.5 percent in 1993. FDI flows from the UK were the largest in 1993 accounting for 41 percent of the total non-cumulative flow. During the last decade, i.e., from 1982 to 1992, the shares of the other major European countries together with Australia and Canada have either declined or remained unchanged. In 1993, Table 5 indicates increases in the shares of Switzerland, Germany, and Luxembourg.

TABLE 5

DISTRIBUTION OF CB-REGISTERED FOREIGN DIRECT EQUITY INVESTMENTS BY COUNTRY

CUMULATIVE FLOWS (in percent)

Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
U.S.A.	64.25	55.11	48 37	47 93	49.39	52.90	55.06	54.60	53.89	52 82
Japan	9.66	14 79	23 54	24 22	21.72	19 27	17.69	16.79	14.74	15.27
Hongkong	1 33	1.44	2 14	2 78	3 86	4 06	3 79	4.32	5.95	5 51
Netherlands	0.16	0.64	0.44	1 85	1 78	1.66	1 53	1 66	2 13	4.77
U.K.	16 45	9.15	7 33	5 79	4 72	4 09	3.61	3 36	4 25	4 16
Switzerland	0.77	1 22	1.64	1 77	2 15	2 37	2 43	2 56	2.51	2.40
Australia	0.31	2.14	2 43	2 51	2.48	2 32	2 31	2 45	2 25	2 03
Canada	0.34	8.60	8 66	7 82	6 97	5.72	4 79	3.94	2.82	2.37
France	0.77	0 42	0 30	0 24	0 22	0 19	0 74	1 39	2.27	1.97
Republic of Nauru	0 00	0.00	0 00	0 00	0.00	0.00	0 00	0 00	0 63	0.52
West Germany	0.18	0.32	0 23	0.33	0.65	0.92	0 91	1 05	1.14	1 09
Sweden	0.00	0 00	0.13	0 45	0 53	0.51	1 06	0 91	0 80	0 71
Panama	0.18	0.10	0.32	0 40	1 31	1 22	1 11	0 97	0 89	0 95
Austria	0.00	0.00	0.00	0 00	0 00	0 00	0 00	0 23	0 24	0.44
Singapore	0.00	0.04	0 13	0.28	0 28	0 31	0 47	0 41	0 72	0 64
Denmark	0.22	0.16	0.19	0.16	0 35	0 38	0 53	0 58	0 49	0.71
Luxembourg	0.00	3 36	2.38	1 82	1 55	1 26	1.04	0.87	0.71	0.65
Malaysia	0.00	0 00	0.00	0.00	0 04	0.04	0.03	0.03	0.02	0.03
Bahamas	0.58	0.32	0 03	0.02	0.01	0.02	0.02	0.01	0 01	0.01

TABLE 5 (CONTINUED)

Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
New Hebrides	0.00	0.00	0 00	0.00	0.38	0.39	0.31	1.28	1.03	0 85
Bermuda	0.15	0.15	0 15	0.15	0 35	0.31	0 36	0.46	0.41	0 34
South Korea	0.00	0.00	0 00	0 01	0.02	0.57	0.56	0.46	0.39	0.33
Taiwan	0.00	0.00	0.00	0.00	0.17	0.24	0.22	0.21	0.17	0.14
Other Countries	4 63	2.04	1.60	1.47	1.09	1.25	1.42	1.46	1.53	1 30
Total Foreign Equity Investments	100.00	100.00	100.00	100 00	100.00	100 00	100.00	100 00	100 00	100.00

Country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
U.S.A.	55.11	55.48	56.17	57.28	57.75	57.34	55.80	54.07	50 02	47.33	44.08
Japan	14.10	14.05	13 91	13.72	13.45	13 72	14 50	15.29	18.69	21.00	20.25
Hongkong	5.47	5.58	6.13	5.33	5.54	5.89	6.01	6.12	6.92	6.74	6.65
Netherlands	4.75	4 62	4.58	4.64	4.64	4.56	4 81	4.63	4 21	3.99	3 96
U.K.	3 55	3.52	3.40	3.72	3.62	3 57	3.44	3 50	3.52	3 28	6 49
Switzerland	2.16	2 35	2.31	2.32	2.24	2 20	2 22	2.31	2.28	2.29	2.44
Australia	1.96	1.86	1.69	1.65	1.64	1.61	1.92	2.04	1.80	1.78	1.64
Canada	2.08	1.95	1.79	1.73	1.70	1.65	1.58	1.58	1.43	1.34	1.22
France	1.88	1.77	1.61	1.55	1.50	1 46	1.37	1.32	1.20	1.24	1.14

TABLE 5 (CONTINUED)

Country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Republic of Nauru	0.46	0 43	0.39	0.37	0.36	0 35	0.33	0 31	0.27	0.29	0.27
West Germany	1.12	1.14	1 07	1 07	1.05	1.06	1.00	1 01	1.04	1.14	1.23
Sweden	1.07	1.08	1.02	0.99	0.96	0.94	0 88	1.02	1.05	0.99	0 92
Panama	0.86	0 81	0.77	0 74	0 72	0 70	0.69	0 72	0.64	0.58	0.56
Austria	0.69	0.73	0 69	0.67	0.64	0.63	0 59	0.55	0.75	0.69	0.63
Singapore	0 56	0.56	0 58	0.39	0.38	0.40	0.49	0 65	0 83	0.95	1.09
Denmark	0.64	0.60	0 55	0 56	0 54	0 58	0.58	0 58	0.53	0.48	0 49
Luxembourg	0.57	0 54	0 50	0.51	0.49	0.48	0.45	0.43	0.40	0 38	0 53
Malaysia	0.25	0.33	0.36	0.35	0.34	0.37	0 35	0.34	0.31	0.29	0.32
Bahamas	0.01	0.36	0.32	0.31	0 30	0 29	0 27	0 26	0.23	0.21	0 20
New Hebrides	0.74	0.35	0 32	0.30	0.29	0 29	0.27	0.25	0.22	0.20	0.19
Bermuda	0.30	0.28	0.26	0 25	0.24	0 29	0.28	0 27	0.27	0.25	0.31
South Korea	0.29	0.27	0 26	0.25	0.24	0.24	0 27	0.49	1.40	1.61	1.56
Taiwan	0.14	0.15	0.15	0.15	0.15	0 17	0.64	0.83	0.90	0.90	0.92
Other Countries	1.24	1.19	1.19	1.16	1.21	1.20	1.26	1.44	1 11	2 02	2.94
Total Foreign Equity Investments	100.00	100 00	100.00	100 00	100.00	100.00	100.00	100.00	100.00	100.00	100 00

Source: Central Bank

CHAPTER 4

Trade and Investment Policy Changes in the 1980s: Impact on FDI Flows and Exports

FDI and the Overall Trade and Investment Policy Regime

FDI can be broadly divided into three groups: local raw material processing, import-substituting or protection-hopping, and outward-looking FDI. Since the 1950s, the country's trade policy has continued to provide a very strong incentive for import-substituting as opposed to export-oriented production. Because of these incentives to import substitution, FDI in the country has become heavily oriented toward the domestic market and has failed to attract substantial amounts of FDI geared to export markets.

Table 6 reveals that FDI is concentrated in the highly protected manufacturing sector. The table shows that the manufacturing sector has received the highest effective protection rate (EPR) since 1965. Although this has been reduced over the years, the effective protection that it still receives remains relatively high compared with other sectors like mining and agriculture, fishery, and forestry which for some years received either negative or very low effective protection. Within the manufacturing sector, the same pattern is revealed. It is evident from Table 7 that FDI is concentrated in manufacturing subsectors receiving high effective protection. Prior to the 1980 tariff reform, chemicals had EPRs ranging from 15 to 227 percent; food, 495 percent; metal products, 84 percent; textiles and garments, 106 percent; transport equipment, machinery and appliances, 118 percent; and petroleum and coal, 38 percent. Although the EPRs were reduced in the late

TABLE 6

EPR AND FDI CONCENTRATION, ALL INDUSTRIES

	% Share in Total CB-Registered FDI	% Share in Total BOI -Approved Projects	EPR (tariffs)	EPR (price comparison)
Manufacturing				
1965	ND	ND	51.00	ND
1974	34.31	ND	44.00	ND
1979	53.39	ND	58.00	ND
1985	49.10	75.71	77.00	102.10
1986	48.05	59.56	61.70	82.90
1988	47.86	76.41	62.40	75.00
1989	48.21	69.76	61.20	73.70
1991	51.28	60.86	59.50	74.10
1992	51.60	54.81	57.20	71.90
Mining				
1965	ND	ND	-17.00	ND
1974	8.26	ND	-13 to 16	ND
1979	13.51	ND	0.00	ND
1985	26.44	0.93	23.60	23.60
1986	27.16	0.00	22.00	18.20
1988	27.14	0.38	17.30	17.30
1989	26.73	4.54	17.30	17.30
1991	23.95	1.45	23.00	23.00
1992	22.42	2.33	23.00	23.00
Agriculture, Fishery and Forestry				
1965	ND	ND	17 & -26*	ND
1974	1.81	ND	9.00	ND
1979	0.99	ND	1.00	ND
1985	1.74	1.55	76.50	76.50
1986	1.67	5.21	33.70	44.30
1988	1.63	7.22	35.30	45.10
1989	1.53	3.69	35.30	45.10
1991	1.46	2.95	51.10	51.10
1992	1.35	1.91	46.10	47.70

ND - no data.

*- 26 for Forestry and 17 for Agriculture.

TABLE 7

EPR AND FDI CONCENTRATION IN THE MANUFACTURING SECTOR

	% Share in Total CB-Registered FDI	% Share in Total BOI Approved Projects	EPR (tariffs)	EPR (price comparison)
Chemicals				
1965	ND	ND	13 to 94	ND
1974	5.40	ND	-7 to 221	ND
1979	16.00	ND	15 to 227	ND
1985	13.00	6.50	102.10	142.40
1986	13.50	50.70	72.40	110.30
1988	13.70	29.60	71.10	108.90
1989	13.50	4.70	71.10	108.90
1991	12.90	9.60	57.40	103.60
1992	12.60	2.50	53.00	99.20
Food				
1965	ND	ND	15 to 400	ND
1974	4.90	ND	-49 to 3371	ND
1979	7.80	ND	-6 to 495	ND
1985	10.90	12.30	76.90	53.20
1986	10.40	1.20	61.00	46.30
1988	10.10	2.70	60.30	43.70
1989	9.60	1.70	60.30	43.70
1991	8.70	4.10	59.20	42.60
1992	8.60	0.50	56.80	40.30
Basic Metal Products				
1965	ND	ND	ND	ND
1974	0.70	ND	47.00	0 to 27
1979	6.10	ND	84.10	47 to 176
1985	5.20	1.60	101.60	179.60
1986	6.30	2.90	71.90	71.90
1988	5.90	3.20	73.70	73.70
1989	5.50	3.50	73.70	73.70
1991	5.00	1.50	79.80	79.80
1992	4.80	2.90	78.90	78.90

TABLE 7 (CONTINUED)

	% Share in Total CB-Registered FDI	% Share in Total BOI Approved Projects	EPR (tariffs)	EPR (price comparison)
Textiles and Garments				
1965	ND	ND	43 to 330	ND
1974	3.80	ND	-4 to 78	ND
1979	3.10	ND	106.00	ND
1985	2.10	1.20	136.40	337.80
1986	2.10	8.80	101.40	322.50
1988	2.20	6.40	120 90	120.90
1989	2.30	21.30	116.40	116.40
1991	2.60	4.00	87.50	87.50
1992	2.80	4.50	87.50	87.50
Transport Equipment, Machinery and Appliances				
1965	ND	ND	77 to 533	ND
1974	1.40	ND	9 to 127	ND
1979	3.20	ND	118.00	ND
1985	3.90	67.00	72.00	96.60
1986	3.70	28.60	50.70	68.70
1988	3.70	38.30	47.80	64.40
1989	5.10	37.60	46.80	63.40
1991	8.30	18.00	42.30	58.80
1992	9.90	48.90	32.80	49.80
Petroleum and Coal				
1965	ND	ND	45.00	ND
1974	8.90	ND	16 to 21	ND
1979	2.70	ND	1 to 38	ND
1985	3.00	1.40	38.80	182.10
1986	3.00	0.00	37.90	172.30
1988	2.90	0.01	46.60	171.60
1989	2.70	8.80	40.00	165.00
1991	2.60	44.60	40.00	175.90
1992	2.40	0.00	42.00	177.90

Sources (EPR estimates): Power and Sicat, 1970; Bautista, Power and Associates, 1979; Quinto, 1986; Power and Medalla, 1986; and Tan, 1994.

1980s, effective protection still remains high particularly in textiles, chemicals, basic metal products, and processed food. This becomes even more glaring when one looks at the EPRs computed based on price comparisons. The latter is more meaningful since it captures the effects of non-tariff barriers which are mainly in the form of import restrictions. In line with BOI's local content programs, import restrictions were imposed on the appliance (consumer electronics in 1975) and transport (cars, jeeps, motorcycles, trucks, and buses in 1971) sectors. For reasons ranging from national security, public health and safety, to protection of local industry, chemicals, coal and machinery were regulated by the CB. EPR estimates on the basis of price comparisons show that in the early 1990s, chemicals petroleum and coal had EPRs that exceeded 100 percent. Textiles and basic metal products had EPRs of around 88 and 80 percent, respectively.

In principle, the investment incentives promulgated by the government favor export production. However, data on BOI-approved FDI projects show that these approvals are biased toward sectors with high EPRs such as machinery and equipment, chemicals, and transport (Tables 6). Between 1981 and 1992, the average share of these sectors to total manufacturing amounted to 52 percent. This leads us to conclude that the investment incentive system tends to reinforce the heavy domestic-market orientation promoted by the trade regime. Moreover, the incentive system favors capital-intensive over labor-intensive producers of import substitutes (Manasan 1986 and 1993). This is indicated by the increase in the capital-labor ratio for total manufacturing from 65.6 to 110.61 between 1983 and 1988 (Table G.9, World Bank 1993).

Because of the high level of protection promoted by the trade and investment incentive system, foreign competition which could have been provided by imports was virtually eliminated. The result was an inefficient manufacturing industry which was littered with infants that never grew up and required permanent protection for survival. Furthermore, the protection of domestic manufacturers penalized exporters and since the import substitution policy failed to develop backward-linked industrialization, the export activities that thrived had weak backward linkages. The high cost of domestically produced inputs discouraged exporters from sourcing their inputs locally. To retain their competitiveness, exporters had to rely on imported inputs. In addition to these problems, import substitution incentives led to a misallocation of resources. The overvalued currency encouraged the use of imported inputs especially on those on which tariffs were low. Since tariffs on capital equipment were also typically low, capital-inten-

sive investment was encouraged. With the excessive use of imports and capital, labor was not utilized intensively in the import-substituting manufacturing sector. The protected manufacturing sector remained a net burden in the balance of payments since the import substitution policy only shifted dependence on imports of consumer goods to capital and intermediate goods (WB 1985).

FDI in the Philippines was very much influenced by the import-substitution policy. Although the trade and investment policies were inappropriate, foreign investors nevertheless responded to the profit opportunities they offered by locating in the highly protected sectors of the economy. By taking advantage of the effective protection afforded by the tariff structure, the domestic investor (Filipino or foreigner) can earn extremely high profits, pay high wages, and/or simply accommodate inefficiencies and high costs substantially above those of foreign competitors. The higher the effective protection, the greater the potential for inefficiencies, high input costs or profits.

The distortionary policies accompanying import substitution resulted in investment in inefficient activities as well as in investment decisions by both foreign and domestic investors which caused a misallocation of resources and a suboptimal level of welfare. Investments made by multinationals in the transport industry are the prime example. This industry has been regulated and protected through BOI's progressive manufacturing program established in the early 1970s. The program resulted in high-cost domestic production and has not been successful in inducing the industry and its subsectors to compete in the export market. The World Bank (1993) estimated the cost of maintaining this type of protective regime for automobiles and commercial vehicles to be around P5.2 billion a year.

The immiserization literature is often used to link trade and foreign investment. This shows that capital flows in protected industries can lead to decreases in host economy welfare. For a small tariff-imposing country, within the standard two-commodity two-factor model of international trade and assuming that foreign capital receives the full (untaxed) value of its marginal product, Brecher and Diaz-Alejandro (1977) demonstrated the possibility of Bhagwati's immiserizing growth when the host country continues to import the capital-intensive good while remaining incompletely specialized. Once protection has been granted, further reduction in welfare would result from any exogenous as well as tariff-induced capital inflows from abroad.

FDI and Exports

The lack of comprehensive data[7] on the exports of TNCs greatly impairs the analysis in this section. Data on FDI exports are necessary in assessing the export orientation of TNCs operating in the country and how they reacted to the trade policy changes implemented by the government. Notwithstanding the data limitation, the picture that emerges is that although the export propensity (measured by the ratio of exports to total sales) of US TNCs had increased, a large proportion of their total sales was still mainly for the domestic market. Table 8 shows that with the gradual dismantling of protection, the export propensity of US firms increased from 16 percent in 1982 to 25 percent in 1987. However, compared with US TNCs operating in other Asian countries, these figures were much lower than say, Malaysia, whose ratio increased from 47 to 60 percent between 1982 and 1987. In Singapore, the ratio remained largely unchanged at 82 percent during the same period. Although Taiwan and Hong Kong experienced some reductions, their ratios were still relatively high. Taiwan's ratio declined from 50 percent in 1982 to 48 percent in 1987, while the same ratio for Hong Kong dropped from 60 percent in 1982 to 58 percent in 1987. TNCs in these countries have played a major role in their trade sector particularly in manufactured exports. In 1987, US TNCs alone accounted for as much as 33 percent of Singapore's total exports, 16 percent of Malaysia's exports, and 26.4 percent (mostly petroleum) of Indonesia's exports. In the case of the Philippines, US firms, which have been the country's largest foreign investors, accounted for 12 percent of the country's exports.

Investments by US TNCs were highly concentrated in electric and electronic equipment and chemicals. The share of electric and electronic equipment to total manufacturing investment of US TNCs operating in the Philippines increased from 20 percent in 1982 to 28 percent in 1987. Chemicals had a share of 29 percent in 1982 which increased to 35 percent in 1987. A large proportion of their manufactured exports consisted of electric and electronic equipment (mainly in the labor-intensive stage of semiconductor production) whose share continued to increase from 54 percent in 1982 to 65 percent in 1987. Texas Instruments, a US semiconductor giant, is one of the largest TNCs (in terms of sales) operating

7. The data available are limited to exports of US TNCs from the benchmark survey of the US Department of Commerce and the export performance of TNCs belonging to the top 2000 corporations in the country published by the Mahal Kong Pilipinas Foundation.

TABLE 8

EXPORT PERFORMANCE OF MAJORITY-OWNED NONBANK AFFILIATES OF NONBANK US PARENTS (MONANUS)

	Total Sales of MONANUS US$ million (1)	Total Export of MONANUS US$ million (2)	Total Country Exports US$ million (3)	Exports Propensity in percent (4)=(2)/(1)	US Firms' Share of Total Exports in percent (5)=(2)/(3)
1982					
Philippines	3,596	564	5,020.6	15.7	11.2
Malaysia	4,319	2,046	12,031.4	47.4	17.0
Indonesia	12,543	8,289	22,293.3	66.1	37.2
Thailand	2,591	453	6,956.9	17.5	6.5
Hong Kong	7,516	4,474	20,967.8	59.5	21.3
Singapore	14,114	11,579	20,788.0	82.0	55.7
South Korea	604	266	21,653.4	44.0	1.2
Taiwan	1,867	931		49.9	
1986					
Philippines	2,509	626	4,841.8	25.0	12.9
Malaysia	3,983	2,371	13,837.8	59.5	17.1
Indonesia	5,221	4,295	14,805.0	82.3	29.0
Thailand	2,760	525	8,835.6	19.0	5.9

TABLE 8 (CONTINUED)

	Total Sales of MONANUS US$ million (1)	Total Export of MONANUS US$ million (2)	Total Country Exports US$ million (3)	Exports Propensity in percent (4)=(2)/(1)	US Firms' Share of Total Exports in percent (5)=(2)/(3)
Hong Kong	8,059	4,916	35.465.7	61.0	13.9
Singapore	8,904	7,286	22,494 5	81.8	32.4
South Korea	935	407	34,714.5	43.5	1.2
Taiwan	2,908	1,568		53.9	
1987					
Philippines	2,798	698	5,720.2	24.9	12.2
Malaysia	4,736	2,831	17,920.9	59.8	15.8
Indonesia	5,453	4,532	17,135.6	83.1	26.4
Thailand	3,391	718	11,659.2	21.2	6.2
Hong Kong	9,807	5,653	48,501.8	57.6	11.7
Singapore	11,594	9,476	28,685.8	81.7	33.0
South Korea	1,292	606	47,206.6	46.9	1.3
Taiwan	3,758	1,815		48.3	

TABLE 8 (CONTINUED)

	Total Sales of MONANUS US$ million (1)	Total Export of MONANUS US$ million (2)	Total Country Exports US$ million (3)	Exports Propensity in percent (4)=(2)/(1)	US Firms' Share of Total Exports in percent (5)=(2)/(3)
1989					
Philippines	2,905	649	7,746 7	22 3	8.4
Malaysia	5,419	2,086	25,106 5	38.5	8 3
Indonesia	6,120	2,680	22,028.9	43 8	12 2
Thailand	5,456	1,735	20,058 3	31 8	8 6
Hong Kong	16,408	8,779	73,156 0	53 5	12.0
Singapore	15,102	10,531	44,687 1	69 7	23 6
South Korea	2,463	594	62,377 2	24 1	1.0
Taiwan	6,773	2,621		38 7	

Sources US Direct Investment Abroad: 1982 Benchmark Survey Data

US Department of Commerce, Bureau of Economic Analysis, December 1985.

US Direct Investment Abroad, Operations of US Parent Companies and their Foreign Affiliates, Revised 1987 Estimates.

US Department of Commerce, Bureau of Economic Analysis, July 1990

US Direct Investment Abroad, Operations of US Parent Companies and their Foreign Affiliates, Revised 1986 Estimates.

US Department of Commerce, Bureau of Economic Analysis, July 1989

Survey of Current Business (July 1993)

1989 Export Sales by MONANUS were taken from Ramstetter, E.D "Prospects for Foreign Firms in Developing Economies of the Asian

in the country. In the early 1980s, Malaysia and the Philippines became major sites for chip assembly. Malaysia's semiconductor exports were much larger than those of the Philippines. Table 9 reveals that from 1982 to 1987, the country's semiconductor exports remained roughly one-fifth of Malaysia's exports of the same.

Data (see Table 8 and 9) also show that the share of chemicals in the total manufactured exports of US affiliates in the Philippines declined by half, from 6 percent in 1982 to 3 percent in 1987. Likewise, the export propensity of US chemical affiliates dropped from 5.2 to 3.2 percent during the same period (see Table 9). Compared with other countries, these ratios are relatively low. US chemical affiliates in Malaysia had a share of 11 percent, 85.1 percent in Singapore, 21.2 percent in Taiwan, and 34.2 percent in Hong Kong.

The country was able to attract FDI flows in the past because of its protectionist policy. Experience proved that protection discourages exports and the efficient production of manufactures. It is to be noted that garments and semiconductors, the country's major exports and leading exports of Philippine-based TNCs, have not developed strong backward linkages because of their high import content. Raw material inputs to these products top the country's total imports. Efficient industrialization requires the creation of strong inter-industry linkages. In our case, manufactured exports are concentrated in garments on consignment and subcontracted electronic devices which are made from raw materials consigned abroad. The inter-industry linkages created are weak because these exports are produced separately from the domestic economy through export processing zones (EPZs) and bonded warehouses. In 1992, special transactions which consisted mainly of imports of EPZs accounted for the bulk of total imports at 17 percent. EPZs and bonded warehouses were established to allow exporters to import their inputs at world prices through tax and duty exemptions and tax credit/drawback schemes. However, these export incentives may only partially offset the distortions created by the protectionist structure. These inconsistent policies may explain the inability of export incentives to attract substantial export-oriented FDI and promote significant expansion of the export sector.

TABLE 9

EXPORTS AND TOTAL SALES OF MONANUS

Exports of MONANUS (in US$ million)

	Chemicals and Allied Products			Electric and Electronic Equipment		
	1982	1986	1987	1982	1986	1987
Philippines	25	9	16	242	325	376
Malaysia	12	20	15	1,283	1,614	2,068
Singapore	41	D	275	991	1,384	1,832
Taiwan	12	22	62	728	1,042	926
Hong Kong	66	92	119	584	395	446

Total Sales of MONANUS (in US$ million)

	Chemicals and Allied Products			Electric and Electronic Equipment		
	1982	1986	1987	1982	1986	1987
Philippines	479	455	507	334	357	411
Malaysia	87	114	136	1,335	1,649	2,139
Singapore	57	277	323	1,034	1,509	2,039
Taiwan	114	222	293	821	1,085	1,019
Hong Kong	211	248	348	641	471	603

TABLE 9 (CONTINUED)

	Exports Export Propensity (in percent)					
	Chemicals and Allied Products			Electric and Electronic Equipment		
	1982	1986	1987	1982	1986	1987
Philippines	5.2	2 0	3.2	72.5	91.0	91.5
Malaysia	13.8	17.5	11.0	96.1	97 9	96.7
Singapore	71.9	D	85.1	95 8	91.7	89.8
Taiwan	10.5	9 9	21.2	88.7	96 0	90.9
Hong Kong	31 3	37.1	34 2	91.1	83 9	74.0

Sources: US Direct Investment Abroad: 1982 Benchmark Survey Data
US Department of Commerce, Bureau of Economic Analysis, December 1985.
US Direct Investment Abroad, Operations of US Parent Companies
and their Foreign Affiliates, Revised 1987 Estimates
US Department of Commerce, Bureau of Economic Analysis, July 1990.
US Direct Investment Abroad, Operations of US Parent Companies
and their Foreign Affiliates, Revised 1986 Estimates
US Department of Commerce, Bureau of Economic Analysis, July 1989.

CHAPTER 5

FDI in Four ASEAN Countries: A Comparison

Table 10 shows the differences in FDI flows to the Philippines, Malaysia, Thailand, and Indonesia. FDI flows in the Philippines fluctuated widely between the years 1973 and 1990. Erratic annual FDI flows also characterized Indonesia and Thailand; however, steady increases were observed from 1987 in Indonesia and from 1988 in the case of Thailand. Among the four countries, Malaysia's performance in attracting FDI is particularly impressive. Its FDI flows showed a relatively more stable pattern with sharp increases from 1976 to 1982 and reductions from 1983 to 1987. Like Indonesia and Thailand, a resumption of growth was felt from 1987 to 1990. With a short-lived recovery after 1986, the Philippines experienced increases in its FDI flows, but after reaching a peak in 1988, FDI flows again started to fall. Compared with the three ASEAN countries, the performance of the Philippines has been disappointing.

Figure 1 gives an idea of the concentration of FDI flows during the past 18 years, i.e., 1973-1990. FDI flows were highly concentrated in Malaysia, followed by Thailand and Indonesia, while the Philippines came last. Malaysia's high average annual flows show that it had been the preferred site of foreign investors. Indonesia was also an important site, but since 1989, Thailand's annual average had outstripped the average flow of the former. Among the four, the Philippines had the lowest average annual flow.

Table 11 reveals that most of the investments in the Philippines and Malaysia are located in the secondary sector. In Thailand, these are predominantly found in the tertiary sector, although since 1975, the share of the

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TABLE 10

FDI FLOWS IN FOUR ASEAN COUNTRIES, 1973-1990

(in million US$)

Year	Philippines	Indonesia	Malaysia	Thailand
1973	55	15	171	77
1974	4	(49)	570	188
1975	98	474	348	86
1976	126	343	380	79
1977	209	235	408	106
1978	101	219	466	51
1979	8	226	573	50
1980	(107)	179	933	186
1981	172	133	1,266	291
1982	15	226	1,393	190
1983	105	292	1,261	348
1984	9	222	797	400
1985	12	310	695	162
1986	127	258	489	261
1987	307	385	423	182
1988	936	576	719	1,081
1989	563	682	1,668	1,727
1990	530	964	2,902	2,236
TOTAL	3,270	5,690	15,462	7,704
Average				
1973-1990	182	316	859	428
1973-1977	98	204	375	107
1978-1982	38	197	926	154
1983-1987	112	293	733	271
1988-1990	676	741	1,763	1,681

Source: International Monetary Fund, Balance-of-Payments Statistics, various issues.

FIGURE 1

TOTAL FDI FLOWS IN FOUR ASEAN COUNTRIES: 1973-1990

(In US$ million)

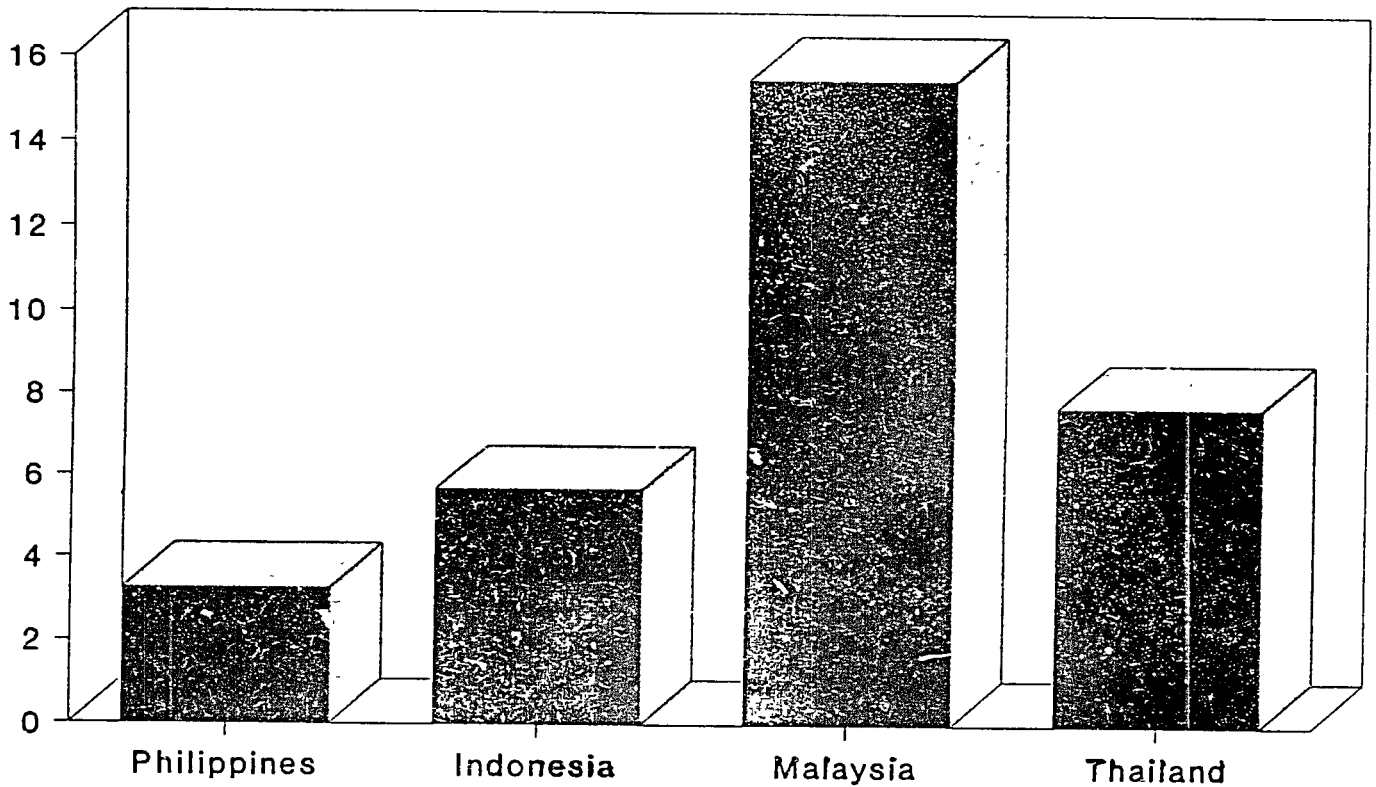

TABLE 11

SECTORAL AND GEOGRAPHIC DISTRIBUTION OF FDI STOCK

(percentage)

		Primary	Secondary	Tertiary
Malaysia	88	28.3	41.2	30.5
	80	31.3	30.1	38.6
	75	39.3	30.6	30.1
Thailand	89	9.2	42.8	48.0
	80	13.5	31.7	54.7
	75	15.1	29.9	55.0
Indonesia	90	81.7	15.4	2.9
	80	70.4	25.4	4.2
	75	61.2	32.5	6.3
Philippines	90	28.6	48.3	23.1
	80	18.8	50.4	30.7
	75	9.2	44.9	45.9

DISTRIBUTION OF FDI INWARD STOCK BY HCME COUNTRY

(percentage)

		Developed Countries			All Developed Countries	All Developing Countries
		N. America	W. Europe	Japan		
Malaysia	87	12.4	46 1	33.9	59.2	40.8
		11.5	49.4	30.0	58.6	41.4
Thailand	88	31.7	19 9	47.5	77.3	22.8
		40.5	22.5	36.2	80.2	20.3
Indonesia	88	12.2	34.4	38.4	72.8	27.9
	80	6.3	14.0	48.6	77.1	22.9
Philippines	87	65.0	17.2	14.7	90.6	9.4
		63.7	13.7	18.3	92.0	8.0

Source: *World Investment Directory* 1992, Volume 1, Asia and the Pacific. UN Centre on TNCs, United Nations, New York, 1992.

secondary sector had been steadily gaining ground. In Indonesia, the primary sector, mostly petroleum, remains the most important recipient of FDI. The table also shows that between the 1970s and 1980s, the share of the primary sector in Malaysia and Thailand fell while the share of the secondary sector increased. In all four countries, the share of the tertiary sector declined during the period under review.

It is also evident from Table 11 that for Thailand, Indonesia, and the Philippines, the importance of developed countries as a source of FDI decreased and, in contrast, the share of developing countries increased. For Malaysia, the share of developed and developing countries remained roughly the same. Western Europe is the most important investor in Malaysia, Japan in Thailand and Indonesia, and the US in the Philippines. What are the factors that explain the uneven distribution of FDI flows in the four ASEAN countries? Compared with the three other countries, what accounts for the unfavorable position of the Philippines as a recipient of FDI flows?

In terms of their basic investment regulations and incentive policies, the four ASEAN countries do not differ much. In recent years, they have liberalized their FDI policies and have opened many sectors which were previously restricted. The four countries have guarantees for repatriation of profits, convertibility of currency, employment of aliens, and against expropriation. They also provide tax holidays (although in the case of Indonesia, generous fiscal incentives are granted instead of tax holidays), net loss carry forward provision (except for the Philippines), export incentives, duty-free importation of raw materials, machinery, equipment, and parts as well as investment and expansion allowance.

A vast literature exists on the ineffectiveness of investment incentives in attracting FDI flows. According to Helleiner, investment incentives play a minimal role in foreign investment decisionmaking. Incentives can never substitute for the fundamentals: the investment climate, political stability, and profit opportunities (OECD, 1983 as cited in Helleiner 1991). In analyzing the effectiveness of incentives in attracting investment flows to the ASEAN 4, Alburo et al. (1992) argued that although there were no significant additions to the incentives granted by these countries, then FDI flows have increased dramatically. Looking at the same issue, Manasan (1988) computed the impact of investment incentives on a hypothetical firm's user cost of capital and internal rate of return. She found that ASEAN countries are generally competitive before and after incentives. She concluded that "these countries are wasting away precious government revenues in exchange for an edge that is largely illusory."

The mid-1980s witnessed economic liberalization in Malaysia, Indonesia, Thailand, and the Philippines. Except for the Philippines, the three ASEAN countries vigorously pursued outward-looking strategies. The major economic policies consisted of the liberalization of import restrictions, promotion of foreign investment particularly in export-oriented activities, adjustment of the exchange rate to maintain competitiveness,[8] and liberalization of the financial system to facilitate trade and investment flows (Chintavarangsan 1992). The implementation of these economic changes occurred at a time when Japan and Taiwan were relocating their labor-intensive industries and were investing abroad. This explains the huge FDI inflows in the three ASEAN countries after the mid-1980s.

Table 12 shows the direct investments of Japan in the ASEAN-4. In 1980, total Japanese investment in the Philippines was valued at US$615 million, a respectable figure in contrast with Thailand, US$396 million and Malaysia, US$650 million. Indonesia, which has been Japan's most preferred site, had a total investment of US$4,424 million. In subsequent years, Japanese investments quickly expanded, with Thailand and Malaysia becoming very important destinations.

Table 13 presents the direct investments of the US in the four ASEAN countries. In the 1960s and 1970s, Malaysia and Thailand did not claim a large portion of US direct investments. In the 1960s, US direct investments were highly concentrated in the Philippines. Starting in 1970, however, the US started to invest heavily in Indonesia. In the 1980s, Malaysia and Thailand began to emerge as important recipients of US capital. The average annual investment flow of the US for the period 1982-1992 stood at $1,396.4 million in Indonesia, followed by $633.3 million in Malaysia, $349.2 million in Thailand, and $184.4 million in the Philippines.

The depressed economic conditions and political instability in the Philippines are a central explanatory factor for the sluggish FDI flows. In addition, the persistence of a trade policy regime that is biased toward import-substitution and defends an overvalued currency has prevented the flow of export-oriented FDI. Unable to utilize its exchange rate policy as aggressively as its neighbors, the country is unable to make a genuine switch

8 International competitiveness summarizes an economy's success in world markets, generally as an exporter of manufactured goods. It is determined by the ability of the enterprises located in that country to produce goods and services that are more attractive than those of competitors, and by the ability to take advantage of changing opportunities in the internal marketplace to sustain that attractiveness (World Bank 1993).

TABLE 12

JAPANESE OVERSEAS DIRECT INVESTMENTS IN INDONESIA, MALAYSIA, THAILAND AND THE PHILIPPINES: 1973-1989

(in US$ million)

	Indonesia	Malaysia	Thailand	Philippines
1973	341	126	34	43
1974	376	48	31	59
1975	585	52	14	149
1976	929	54	19	15
1977	1,185	150	135	183
1978	610	48	32	53
1979	150	33	55	102
1980	529	146	33	78
1983	374	140	72	65
1984	374	142	119	46
1985	408	79	48	61
1986	250	158	124	21
1987	545	163	250	72
1988	586	387	859	134
1989	631	673	1,276	202
1990	1,105	725	1,154	258
1991	1,193	880	807	208
1992	1,676	704	658	160
Cumulative Total FY 1951-1980	4,424	650	396	615
Cumulative Total FY 1951-1990	11,540	3,231	4,422	1,580

Source Ministry of Finance, Japan. *Monthly Finance Review.*
Research and Planning Division, Ministers' Secretariat

TABLE 13

CAPITAL EXPENDITURES BY MAJORITY-OWNED FOREIGN AFFILIATES OF US COMPANIES
(in US$ million)

	Hong Kong	Indonesia	South Korea	Malaysia	Philippines	Singapore	Taiwan	Thailand
1966		(D)	(D)		61			
1967		19	19		78			
1968		50	(D)		60			
1969		58	23		46			
1970		155	(D)		56			
1971		261	16		65			
1972		250	33		67			
1973		289	21		62			
1974		524	24		97			
1975		776	29		120			
1976		318	29		102			
1977		236	83		106			
1978		324	84		170			
1979		431	339		256			
1980		656	233		323			
1981		849	116		267			
1982	401	1,963	137	681	192	258	99	252
1983	495	1,948	84	493	171	224	109	410

TABLE 13 (CONTINUED)

	Hong Kong	Indonesia	South Korea	Malaysia	Philippines	Singapore	Taiwan	Thailand
1984	432	1,182	99	460	157	193	133	366
1985	443	1,176	76	357	114	245	154	192
1986	329	1,114	79	360	129	215	154	82
1987	330	1,046	65	451	144	220	165	98
1988	353	851	228	485	145	496	288	259
1989	512	1,214	260	616	181	651	283	311
1990	603	970	304	828	181	586	336	377
1991	654	1,166	238	919	187	730	338	413
1992	717	1,801	198	932	266	972	299	621
1993	975	2,326	365	1,017	346	1,066	289	809
Average 1982-1992	520.3	1,396.4	177.8	633.3	184.4	488.0	220.6	349.2

Source: US Department of Commerce, *Survey of Current Business*, March 1977, 1987 and 1993.

to an export-oriented type of industrialization. Indonesia, like South Korea, deliberately undervalued its currency to boost exports. Both theory and the experience of its Asian neighbors show that, *ceteris paribus*, countries pursuing export-oriented strategy rather than import substitution are likely to attract more FDI. The Philippines has been seeking to attract export-oriented FDI in a context where there is a high level of protection in the economy. This makes it difficult to export and to attract more FDI into export-oriented activities. As such, FDI in the Philippines has remained import-substituting.

CHAPTER 6

Regression Analysis

One of the earlier attempts to explain the determinants of FDI in the Philippines was done by Subido (1974). Based on a time series model, her regression results showed the rate of return as the most significant explanatory variable. Employing the regression technique, Lamberte (1993) found the real GNP growth rate, real effective exchange rate, and wage-productivity differential to be significant determinants of FDI flows in the Philippines.

The analysis in this section is based on two steps First, the variables which may be statistically associated with total FDI and country-specific FDI are examined. For the latter, three equations are estimated for three selected source countries viz. the US, Japan, and the EC 6 (the UK, Netherlands, Germany, France, Luxembourg and Denmark). Second, the relationship between FDI and exports is tested with the hypothesis that FDI flows stimulate our exports.

Determinants of FDI

Market size and market growth

Most studies suggest that FDI is a positive function of output and growth in the host country. Output is approximated by the size of the market, usually by the GDP or GNP of the host country, while market growth is proxied by the GDP or GNP growth rate. In empirical analyses, GDP, GNP, per capita GNP, and GNP or GDP growth rates are often used as surrogates for market size. The size of the market and its potential growth can signal the attractiveness of the host country as a site for FDI. It should be noted that the size and

growth of the market of the host country are likely to influence FDI concentrated on the production of goods for the domestic market rather than on the production and export of goods for the world market. Access to a large domestic market is important to import-substituting FDI but is not necessary for export-oriented FDI. Size and access are guaranteed through import protection. For outward-oriented FDI, international competitiveness and stable exchange rates are the more important considerations.

Real effective exchange rate

In its general form, the real exchange rate is defined as the price in real terms of a real foreign currency a country uses for its international transactions. The real exchange rate RER, can be expressed as:

$$RER = En * Pw/Pd$$

where

En	=	nominal exchange rate expressed in units of domestic currency per unit of foreign exchange,
Pw	=	the price deflator for the foreign currency, and
Pd	=	the deflator for the domestic currency.

The consumer price index (CPI) is used as deflator for the domestic currency. With regard to the deflator for the foreign currency, a measure of the price level of international goods is needed. The CPI would not be a good measure because it includes the prices of many domestic services and home goods. Instead, the wholesale price index (WPI) which is heavily weighted with tradable goods is used as proxy for such an index.

An increase in the RER implies a real depreciation while a decline implies a real appreciation. The concepts of overvalued and undervalued currencies are frequently used to refer to situations in which the real exchange rate is considered to be "too high" or "too low" respectively, in relation to its "correct" or "equilibrium" level.

Many variants of the real exchange rate are possible, depending on what analysts want to emphasize. For our purposes, a trade-weighted real exchange rate known as real effective exchange rate (REER) is used. The REER is an indicator of the competitive position of a country with regard to its main

trading partners. The real effective exchange rate REER, is defined as follows:

$$REER = wj * Enj * Pwj/Pd$$

where

wj	=	trade weight of partner country j,
Enj	=	number of units of domestic currency per unit of foreign exchange j,
Pwj	=	price level of partner country j, and
Pd	=	domestic price level.

With unchanged exchange rate and constant foreign prices, an increase (decrease) in domestic prices or an appreciation (a depreciation) of the domestic currency constitutes a decline (an increase) in the country's competitiveness and is expressed by an index fall (rise). A persistent fall (increase) indicates an overvaluation (undervaluation) of the domestic currency which makes domestically produced goods and services more (less) expensive than goods and services produced abroad. If the exchange rate does not equalize production costs among different countries, there is a potential disincentive (incentive) for foreign direct investment to flow to the country with an overvalued (undervalued) currency.

Infrastructure availability

Infrastructure availability — roads, ports, airports, telecommunication networks and facilities, energy — also affects the attractiveness of a country as a site for FDI. A country with poor infrastructure may have difficulties in capturing a significant amount of FDI.

Trade policy

International trade policy is important in promoting a wider role for FDI. Foreign investors will respond to the profit opportunities in the economy arising from the country's trade policy. The type of FDI that a country attracts can be influenced by the type of trade policy that the country pursues. A protectionist trade policy with an anti-export bias implies a greater incentive for domestic production and encourages the establishment of import-substituting FDI.

Political stability

Domestic political stability plays a crucial role in attracting FDI. Political risk is associated with production disruption, confiscation or damage to property, threats to personnel, changes in macroeconomic management or the regulatory environment. Because of these, foreign investors will not risk their capital in an environment that is perceived to be unstable.

Government incentives

Another determinant of FDI flows are the fiscal incentives provided by the host country. These include tax holidays, accelerated depreciation, and other investment allowances and subsidies which are believed to encourage FDI. However, some studies found that government incentives have a statistically insignificant effect on the inflow of FDI. The major explanation for this cancellation of the positive effect of incentives is that in most cases, incentives are accompanied by a number of disincentives like restrictions on size, ownership, location, dividends, and entry into certain industries, as well as mandatory provisions concerning local purchases and exports (Balasubramanyam 1984).

The aforementioned variables are operationalized as follows:

(1) The market size of the Philippine economy is approximated by the country's real gross domestic product GDP (1985 prices).

(2) The real exchange rate is given by the real effective exchange rate REER[9] index (1985=100)

(3) Infrastructure availability is represented by the stock of public investment PUBINV (1985 prices) which refers to buildings/construction and machinery/equipment expenditures of the government reported in the National Income Accounts. The stock of public investment was derived using the perpetual inventory method.[10]

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9. The real effective exchange rate index (REER) is the nominal effective exchange rate (NEER) multiplied by the ratio of the wholesale price index of the countries whose currencies comprise the NEER basket to the Philippine consumer price index. The NEER is a 15-year trade weighted average exchange rate of the peso vis-a-vis the basket of foreign currencies composed of the US dollar, Japanese yen, German DM, UK pound, South Korean won, Canadian dollar, Australian dollar, Belgian franc, and the Danish krone

10 $K_t = K^*_{t-1} - K_{t-1}*d + GI_t$ where K_t is capital stock in period t, K_t is capital stock in period t-1, d is assumed rate of depreciation, and GI is gross investment in period t (see Tan, E.S. in "Estimating the Shadow Price of Capital," unpublished paper, 1993)

(4) Trade restrictions are the principal instruments of industrial policy. Effective protection rates (EPRs) computed on the basis of nontariff barriers are used to measure the restrictiveness of trade policy. Unfortunately, this kind of assessment is limited by the paucity of data. Instead, the average effective protection rates of the manufacturing sector calculated on the basis of tariffs are used as proxy for the restrictiveness of the country's trade policy (in percent).

(5) Since there are no continuous representations available, a dummy variable is used to represent political instability, POLDUM, which takes a value of 1 if a certain year is characterized by political instability and 0 otherwise. Political instability is defined here as uncertainties and negative perceptions arising from mass unrest demonstrations, political assassinations, anticipated and unanticipated government actions, as well as government discontinuities which may be brought about by left-wing or right-wing rebellion. The years 1984, 1985, 1989 and 1990 are chosen as political dummy variables

(6) A dummy variable is used to represent significant changes in government incentives policy, CHIP, which has a value of 1 if liberalizing changes in incentives policies are announced by the government in a certain year and 0 otherwise. Investment incentive laws in the Philippines have been changed several times to keep the domestic climate as attractive as possible. To analyze the effect of these changes, the years 1983 and 1987 are chosen as dummy variables. BP 391 was promulgated in 1983 while EO 226 was legislated in 1987. These two laws represent the most significant changes in the country's investment incentives.

It is assumed that a positive relationship exist between FDI and

(a) the size of the host country economy as expressed by GDP,
(b) REER,
(c) PUBINV;
(d) EPR; protection encourages the flow of FDI toward the domestic market; the higher the effective protection, the greater the incentive to invest; conversely, a decline in protection results in a reduction in this type of FDI; and
(e) CHIP; while
(f) a negative relationship exists between FDI and POLDUM.

Multiple regression analysis is employed to estimate the relationship among host country economic variables, political risk, and total FDI. FDI from the US, Japan, and the EC 6 are also regressed on the same host country economic and political variables. It is expected that some delay will occur between the decision to invest and the completion of the transaction. The FDI model was tested with explanatory variables containing lagged values.

Several alternatives were applied in estimating the relationship. First, the dependent variable used was the ratio of FDI flows from each investor country to total FDI flows in the Philippines (in percent). This was regressed on the following explanatory variables: three-year moving average of real GDP growth rate (in percent), two-year moving average of the real effective exchange rate index (in percent), three-year moving average of the real growth rate of public investment stock (in percent), effective protection rate (in percent), political dummy, and investment incentive dummy. In the second alternative, the dependent variable used was the share of manufacturing FDI to total FDI (in percent) and this was regressed on the same explanatory variables. However, the results were found to be unsatisfactory in terms of fewer significant coefficients (as indicated by lower t-statistics) and lower adjusted R^2. In order to improve the specification of the model, the logarithmic form was employed. A linear relationship of the logarithmic FDI model is assumed as follows:

$$\ln FDI_t = \alpha_0 + \beta_1 \ln GDP_{t-k} + \beta_2 \ln REER_t + \beta_3 \ln PUBINV_{t-k} + \beta_4 \ln EPR_t - \beta_5 POLDUM_t + \beta_6 CHIP_{t-k} + \mu_t$$

where

t	=	year 1, ... n;
α_o	=	constant
μ	=	error term
FDI	=	foreign direct investment flows (1985 prices in million pesos)
GDP	=	real gross domestic product (1985 prices in million pesos)
REER	=	real effective exchange rate index (1985=100)
PUBINV	=	stock of public investment (1985 prices in million pesos)
EPR	=	average effective protection rate of the manufacturing sector (in percent)

POLDUM = dummy variable representing domestic conflictive events in the Philippines, it is equal to 1 for year t = 1984, 1985, 1989, and 1990

CHIP = dummy variable representing changes in investment incentive policies, it is equal to 1 for t = 1983 and 1987.

This equation is first tested using the log of country-specific FDI as dependent variable. USFDI, JAPANFDI, and EC6FDI are the direct investments of the US, Japan, and EC 6, respectively (in million pesos at 1985 prices). Another equation is estimated with the log of total FDI in the Philippines (in million pesos at 1985 prices) as dependent variable. The regression results are presented in Table 14. The coefficients are the elasticities of the relevant variables with respect to the relevant FDI flows.

The empirical results provide strong support for the importance of EPR, GDP, PUBINV, REER, and POLDUM as determinants of total FDI in the Philippines. As hypothesized, the Total FDI variable is positively correlated with effective protection rate, real GDP, stock of public investment, and real effective exchange rate and is negatively correlated with political instability. The results for the country-specific FDI points to the importance of effective protection rate and the stock of public investment. Both variables play a role in explaining FDI from the US, Japan, and the EC 6.

For both total FDI and FDI from the three countries under review, the results show that the effective protection rate plays a significant role in attracting FDI. This supports the hypothesis that high EPRs are likely to discourage trade movements and thereby encourage the establishment of affiliates to serve the domestic market.

The results also point to the importance of the stock of public investment as a determinant of total FDI and FDI flows from the three countries under study. The statistical results reveal a significant positive effect on the inflow of total FDI as well as FDI from the US, Japan, and the EC. This confirms the hypothesis that the presence of adequate infrastructure is important for the inflow of FDI.

The statistical results for the three countries differed with respect to the remaining variables. Although the GDP and political dummy variables have the expected signs for all three countries under study, they are statistically significant only for the US and Japan. FDI flows from these two countries are positively correlated with real GDP and negatively correlated with political instability. As hypothesized, the statistical results yield a significant positive

TABLE 14

OLS ESTIMATES: DETERMINANTS OF FDI

	REGRESSION EQUATIONS			
Variables	**(1) US FDI**	**(2) Japan FDI**	**(3) EC6 FDI**	**(4) TOTAL FDI**
Constant	-26.559***	-35.953**	-8.893	-20.504***
	(-4.02)	(-2.62)	(-1.05)	(2.83)
LN EPR	0.637**	1.716***	1.716*	0.651**
	(2.38)	(2.96)	(2.06)	(2.31)
LN REER	1.622***	0.636	0.232	1.08*
	(3.36)	(0.66)	(0.37)	(2.0)
LN GDP	1.680***	2.011*	0.315	1.334**
	(3.12)	(1.75)	(0.46)	(2.39)
LN PUBINV	0.310**	0.657*	0.727***	0.444***
	(2.23)	(1.91)	(4.07)	(3.17)
POLDUM	-0.150*	-0.393**	-0.048	-0.197*
	(-1.70)	(-2.14)	(-0 42)	(-1.83)
CHIP	-0.077	-0.220	0.023	-0.1
	(-0.720)	(-1.01)	(-0.17)	(-0.81)
Adjusted R^2	0.964	0.869	0.945	0.946
F-STAT	81.004	21.946	52.081	53.882

Note For the country-specific equations (equations 1-3), the dependent variable is the log of foreign direct investment of each investor country described in the text. For the total FDI equation (equation 4), the dependent variable is the log of total foreign direct investment in the Philippines. The numbers from columns 2 to 5 are the beta coefficients and the numbers in parentheses are their corresponding t-statistics The sample period is 1973-1992

***significant at the 1 percent level (two tails)
**significant at the 5 percent level (two tails)
*significant at the 10 percent level (two tails)

relationship between American FDI and REER, indicating that a real depreciation of the currency has a positive effect on FDI flows from the US or an increase in competitiveness encourages the inflow of FDI from the US. In the case of Japan and the EC, the REER variable has the correct sign but is insignificant.

Contrary to the hypothesis, the coefficient of the CHIP variable has an insignificant t-value for both total FDI and country-specific FDI. This implies that the 1983 and 1987 changes in investment incentive policies do not have a significant statistical effect in attracting FDI flows. This may be because government investment incentive policy changes have little influence on foreign investors who are more strongly motivated by political and economic conditions.

FDI and Exports

In general, FDI flows to a specific host country are either meant to produce for the local market or to establish the host country as an export base. The results of the previous analysis suggest that FDI in the Philippines is very responsive to the rates of effective protection. This may be due to the inward-oriented nature of multinational firms which are operating in the country. To determine whether these firms contribute positively to the country's exports, two equations which look at the relationship between FDI and exports are tested. In the first, the explanatory variables are denoted by the shares of FDI flows from the US, Japan, and the EC6. In the second, the explanatory variable is given by the share of manufacturing FDI to total FDI. To improve the specification of the models, the real effective exchange rate REER is included in the equations. The dependent variable is given by the share of manufactured exports. The first equation is specified as follows:

$$X_t = \alpha_0 + \beta_1 \text{USFDISH}_t + \beta_2 \text{JAPANFDISH}_t + \beta_3 \text{ECFDISH}_t + \beta_4 \text{REER}_t + \mu_t$$

where

α_0	=	constant
t	=	year 1, ... n
μ	=	error term;
X	=	ratio of manufactured exports to total Philippine exports (in percent)

REER	=	real effective exchange rate index (1985=100)
USFDISH	=	share of US to total foreign direct investment in the Philippines (in percent)
JAPANFDISH	=	share of Japan to total foreign direct investment in the Philippines (in percent)
ECFDISH	=	share of the EC 6 to total foreign direct investment in the Philippines (in percent)

In the first equation, the ratio of manufactured exports, X, is regressed on country-specific FDI and REER. In the second, the share of manufacturing FDI to total, TOTFDISH, is subtituted for country-specific FDI variables. The beta parameters are expected to be positive. The results of the OLS estimation are shown in Table 15. The coefficient of manufacturing FDI, TOTFDISH is positive, as expected, but is not significant. This result reinforces the earlier observation that FDI in the country is largely import-substituting. However, it can be observed that the coefficients of country-specific FDI are negative and are statistically significant on a 1 percent (for the US and Japan) and 5 percent (for the EC 6) significance level. This runs contrary to our assumption. Thus, the hypothesis that there is a positive association between exports and FDI flows from the US, Japan, and the EC is rejected. The negative sign of their coefficients suggest that FDI flows lead to a deterioration of our exports. This could be an indication of the anti-export orientation of FDI flows from the US, Japan, and the EC6. This also reflects the fact that FDI flows from these countries are directed to the domestic market and are intended to substitute for imports instead of complementing the country's exports. These results are consistent with the earlier finding on the prevalence of protection-hopping FDI in the Philippines. For both equations, the remaining variable, REER, is positive and significant. This indicates that an increase in competitiveness or a real depreciation encourages exports.

TABLE 15

OLS ESTIMATES : FDI vs EXPORTS

	Regression Equations	
Variables	**(1)**	**(2)**
Constant	809.253***	68.994
	(4.33)	(0.15)
TOTFDISH		0.129
		(0.29)
USFDISH	-11.583***	
	(-4.55)	
JAPAN FDISH	-12.778***	
	(-4.90)	
EC FDISH	-5.04*	
	(-2.02)	
REER	1.121***	0.141**
	(3.75)	(2.06)
Adjusted R^2	0.643	0.896
F-Stat	9.103	52.416

Note: The dependent variable is the ratio of manufactured exports to total exports. The numbers from columns 2 to 3 are the beta coefficients and the numbers in parentheses are their corresponding t-statistics. The sample period is 1973-1992.

***significant at the 1 percent level (two tails)
**significant at the 5 percent level (two tails)
*significant at the 10 percent level (two tails)

CHAPTER 7

Conclusions and Policy Recommendation

Foreign investment has played a key role in the industrial development of many countries throughout the world. It is not, however, a magic wand that will eliminate the problems of poverty and underdevelopment in a single stroke.

(Prosperity Papers)

This paper has shown that trade policy plays an important role in influencing the type of FDI that the country attracts. Since our trade policy has continued to provide strong incentives to import-substitution, FDI in the Philippines has become heavily oriented toward the domestic market. This policy has constrained the inflow of export-oriented FDI in the manufacturing sector. Even though the country has offered various export incentives, these incentives have been unable to bring about a significant increase in export-oriented FDI. The adverse effects of import substitution have clearly offset any beneficial impact that the export incentives may have had. As already noted, the high level of protection promoted by the trade and investment structure, resulted in an inefficient manufacturing industry. Although the protectionist policy was inappropriate, multinationals nevertheless responded to the profit opportunities it offered and set up inefficient local production in industries where the country did not have comparative advantage. This investment decision by both foreign and domestic investors clearly entailed a misallocation of resources and a loss of consumer welfare.

Five facts stand out in the paper:

(1) FDI flows to the Philippines have been largely concentrated in the manufacturing sector, particularly in the following highly protected

Previous Page Blank

industries: chemicals, processed food, transport equipment, machinery and appliances, textiles and garments, basic metal products, and petroleum and coal.

(2) The investment incentive system tends to reinforce the import-substituting nature of the economy. BOI approvals are biased toward sectors receiving high protection and toward the capital intensive production of import substitutes.

(3) While FDI flows from the US and Japan have increased rapidly in Malaysia, Thailand, and Indonesia, particularly since the mid-1980s, FDI flows to the Philippines have grown slowly. Compared with US TNCs in other Asian countries, the export propensity ratio of US affiliates in the Philippines (25 percent in 1987) is much lower than those in Malaysia (60 percent), Singapore (82 percent), Taiwan (48 percent), or Hong Kong (58 percent).

(4) The applied regression analysis supports a strong positive correlation between FDI and the level of effective protection The statistical results also reveal significant positive relationships between total FDI and the stock of public investment, real gross domestic product, and real effective exchange rate. As expected, total FDI has a significant negative relationship with political instability. The same results are obtained for the US. FDI flows from this country have been responsive to EPR, PUBINV, GDP, REER, and political instability. FDI flows from Japan are influenced by EPR, PUBINV, GDP and political instability. For the EC 6, only EPR and PUBINV are signicant. The variable CHIP does not adequately explain FDI flows. Since it is not a significant inducement to FDI, the government should instead use tax revenues otherwise foregone in the form of incentives to develop much needed infrastructure in the country.

(5) The empirical analysis provides support for the negative relationship between exports and FDI flows from the US, Japan, and the EC 6. The results obtained for total manufacturing FDI and exports reveal an insignificant positive sign. This indicates the anti-export orientation of FDI flows and may reflect the fact that these FDI flows are inward-oriented and are intended to substitute for imports instead of complementing our exports. Given this effect of FDI on exports, it is necessary to reexamine the country's export incentives and export strategy side by side with its trade policy which continues to promote import-substituting industries. Unless these inconsistent policies are corrected, export incentives alone may not be effective

in attracting export-oriented FDI. Export incentives may only partially offset the distortions created by a protectionist structure. If FDI is expected to significantly increase the country's exports, then policies at all levels must make exports attractive.

If the domestic market is not protected by high import barriers, then foreign investment is likely to be geared toward exports as well as the domestic market. But with the high level of protection in the economy, it becomes difficult to encourage exports and export-oriented FDI. Moreover, the restrictive trade regime tends to limit the contributions of multinationals to the economy. Note that export-oriented industries like garments and electronics are often observed to be heavily dependent on imported inputs and have low value added. As Naya and Ramstetter asserted (Ramstetter and James 1992), the promotion of free trade is the single most effective way of maximizing the benefits that multinationals offer. Unless a policy environment that encourages competitiveness and economic efficiency is created, the impact of the government's export promotion policy would only end up in frustration and the country would not be able to attract substantial amounts of export-oriented FDI.

With the decline in commercial bank loans and foreign aid, developing countries like the Philippines would have to rely more on foreign direct investments to sustain their economic growth. Unfortunately, the task ahead is not made any easier by the world economic environment. Given the collapse of the Soviet Union, the market transition among the Eastern European countries, and the opening up of Vietnam, competition for resources and markets would have to be intense. Recent global developments like the creation of the European Union and NAFTA implies that competition in the industrialized countries would be fierce. As a result, TNCs would always be in search of new markets to develop. Developing countries that have pursued the appropriate policies are most likely to capture these foreign investments. Experience has shown that countries pursuing export-oriented strategy rather than import substitution are more likely to lure FDI flows which are geared toward industries where the countries have a comparative advantage. The prospects for an increase in FDI flows to the Philippines appear promising in view of recent reports on the current level of interest in the country among potential investors. However, the extent to which the potentials are realized depends ultimately on our attitude toward FDI and on our economic and political environment.

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Special Paper No. 3

A Review of the Remaining Import Restrictions

Loreli C. de Dios

Previous Page Blank

312

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CHAPTER 1

Background

This paper discusses the status of the Import Liberalization Program as of June 1994 by examining its record in the past decade and then focusing on the remaining restrictions and how they are implemented. The effects on relative prices and the industrial structure are next taken up within the framework of an imperfect competition model. The automotive assembly industry serves as a case study of the welfare effects of import control. Some conclusions are drawn at the end, after the experience of other countries that liberalized trade is briefly described.

Import restrictions have been a feature of the economy since 1948, primarily imposed as a response to balance-of-payments difficulties. At that time, the Central Bank (CB) was first authorized to determine and implement policies affecting foreign exchange and, because of the need to allocate this scarce resource, subjected all such transactions to licensing. This was the most common form of import control (de Dios 1987) and usually affected nonessential goods initially, and then all other commodities not long afterwards. In the following decade, there was a conscious attempt to follow an industrial priority system although it was only in 1957 that such a system was implemented. Import regulations subsequently took on a broader purpose of stimulating domestic production.

The first post-war attempt at foreign exchange decontrol was in 1960, but another foreign exchange crisis in 1964 disrupted this. It is noteworthy, however, that the National Economic Council Resolution which defined priorities for foreign exchange allocation then emphasized a need "to be consistent with the policy that controls are never intended to be a permanent

feature of the economy." That, unfortunately, still has to be realized as the following will show.

In the 1970s, other government agencies began issuing import permits. The immediate, although not always explicit, purposes varied from simple monitoring to supply and price stabilization, state-trading, institution of local content programs, public health and safety, and industry protection. In contrast to the previous decades, commodity-specific restrictions were common during this period. Whether they were a result of planning is not clear, especially since many were short-term stabilization measures which were never dismantled, and others did not have fixed periods of effectivity, the latter a notable feature of regulations in the earlier decades. However, "essentiality" and local sufficiency, which have always been the guiding principles for the restrictions, were based respectively on the immediate needs and existing pattern of production of the country rather than on its longer-term requirements and capacity constraints or potentials.

In the 1980s, the government embarked on the Import Liberalization Program (ILP) which was to complement tariff reform as one of the major thrusts of structural adjustment. This was implemented in two main phases: the first from 1981 to 1983 and the second from 1986 to 1989, with some deregulation occurring in between and after the second phase. In the current decade, 1993 may be considered as another major phase. Table 1 shows this trend with a list of the Central Bank Circulars from the start of the program up to 1994 and the number of goods liberalized under each. It also shows that a total of 2,856 commodities have been deregulated during the 13-year period.

To find out the number of remaining regulated items, this total was compared with what were listed as restricted in the official issuance which was supposed to be a consolidation of all previous import regulations, i.e., Circular 1029. One notes that "restricted" is a more general term than "regulated" which refers only to goods requiring permits from government agencies, including the CB. The two other categories of restrictions are: "prohibited" (importation not allowed under existing laws), and "banned" (luxury items needing CB approval). Summing up all commodity lines covered by all restrictions yielded a total of 2,679, but this only includes those commodities whose classification codes were specified.

The difference between the liberalized and regulated totals is 177 items which is very close to the official count of 178 remaining items, based on another consolidated listing of the regulated commodities as of April 1993, i.e., Circular 1389. However, this is merely a congruence of totals which

TABLE 1

CB CIRCULARS LIBERALIZING COMMODITIES, 1981-1994

CB Circular	Date Issued	Number of Liberalized Commodities[a]	Remarks
758	1 Jan 1981	263	
850	15 Feb 1982	612	Includes 3 which were double-counted
MAAB 8	15 Feb 1982	4	
918	18 Mar 1983	48	
1029[b]	15 Oct 1984	6	Date when regulated cannot be traced (67 were double-counted in regulated listing)
1060	22 May 1985	46	
1074	14 Aug 1985	28	
1096	24 Mar 1986	65	Includes 2 which were double-counted and 3 with the date when regulated could not be traced
1100	30 Apr 1986	143	
1105	6 Jun 1986	437	Includes 2 with the date when regulated could not be traced
1109	18 Jul 1986	272	
1117	30 Sep 1986	80	
1128	9 Jan 1987	7	
1149	30 Jun 1987	12	
1150	23 Jul 1987	21	
1161	31 Oct 1987	73	
1167	31 Dec 1987	59	Includes 1 which was previously liberalized
1174	31 Apr 1988	129	
1192	31 Dec 1988	94	Includes 7 not in C1029 but in lists
1195	31 Mar 1989	3	
1205	14 Jul 1989	59	Includes 36 not in C1029 but in list and 3 previously liberalized
1210	14 Sep 1989	13	

TABLE 1 (CONTINUED)

CB Circular	Date Issued	Number of Liberalized Commodities[a]	Remarks
1212	6 Oct 1989	17	Includes 12 not in C1029 but in lists
1219	31 Dec 1989	39	Includes 22 not in C1029 but in lists
1231	22 Feb 1990	12	Includes 7 not in C1029 of which 2 are not in lists and 5 previously liberalized
1279	19 Mar 1991	27	Includes 3 not in C1029 but in lists and 3 previously liberalized
1337	27 Apr 1992	102	Includes 18 not in C1029 of which 9 are not in lists and 1 previously liberalized
1347	27 Jul 1992	42	Includes 1 not in lists and 2 previously liberalized; count excludes 5 ex-PSCC lines due to change in nomenclature.
1356	25 Sep 1992	136	Includes 3 not in lists, 5 previously liberalized and 9 not in C1029 but in lists.
1389[b]	13 Apr 1993		Consists of 124 regulated items (of which 35 were previously liberalized), 42 that are not in lists and re-restricted, 14 not in C1029 or lists and 5 new codes; excludes 78 that are not in lists.
23	4 May 1994	7	Consists of 6 ex-PSCC lines which correspond to 3 1977 PSCC lines and 1 1983 PSCC line which corresponds to 4 1977 PSCC line, all of which were previously liberalized.
TOTAL		2856	

[a]The 1977 Philippine Standard Commodity Classification (PSCC) was used throughout.

[b]Consolidating Circulars.

conceals several interesting facts about the liberalization program. One of these is the issue on whether there was an exact correspondence between the items regulated and those liberalized. A detailed look at the different pertinent circulars reveals that such was not the case.

Using Circular 1029 as a starting point, an attempt was made to trace the dates each commodity was originally restricted by examining all available CB Circulars, Circular-Letters, Memoranda to Authorized Agent Banks (MAABs), as well as Presidential Decrees, Letters of Instruction, and Executive Orders issued from 1970 onwards. This yielded a masterlist of commodities which is summarized in Appendix 1, classified at the two-digit level of the Philippine Standard Commodity Classification (PSCC) scheme, the 1977 version of which has been consistently used in this paper. The annual number of goods newly regulated and liberalized from 1970 to 1994 are shown.

The year 1970 was chosen as benchmark because that was the year Circular 289 was issued, which defined the different degrees of "essentiality" upon which the categories still used today are based; also, the succeeding regulations referred to it. What resulted from this "essentiality" criterion was the categorization of a large number of items into nonessential and unclassified consumer (NEC/UC) goods or luxury imports, and the restriction of such imports in the form of a ban. New regulations by other government agencies covering the other groups appeared yearly up to 1984 but most were issued in 1975, 1982 and 1983. Many of these were from the Board of Investments (BOI). The annual sums of the liberalized items are slightly different from what Table 1 yields, nevertheless, the same pattern is apparent.

Among others, it is interesting to note that goods already liberalized were rerestricted and left as is, or liberalized again. These are marked by footnotes in Appendix 1.[1] The bulk is found in the food and machinery category and in transport equipment. For example, 13 meat product imports which were liberalized in 1982 were regulated again in 1983, then deregulated in 1992 and once more restricted in 1993.

The inventory is also complicated by the issuance of Lists A, B, and C in 1988 which constituted the official schedule of the remaining liberalization although it was not covered by a circular. Included were a substantial number (95) of goods that were not specified in Circular 1029 yet which were

1. For a detailed listing, please refer to Appendix 2, p. 80 of de Dios, Loreli C. "A Review of the Remaining Import Restrictions." (PIDS Research Paper Series No. 94-08. Makati: PIDS, 1994.)

liberalized from 1988 to 1993, as well as 29 other items which were not liberalized. Most are machinery and transport equipment. This makes the circular an incomplete listing, and indicates a more worrisome possibility that a significant number left out of it may still be restricted. As it turns out, it was not meant to be an exhaustive list. One reason is the extreme difficulty of obtaining complete lists from the various licensing agencies themselves, which accounts for the disclaimer contained in liberalizing circulars which states that other agencies' approval may still be required. Another reason may be that complete transparency may work to the country's disadvantage in the General Agreement on Tariffs and Trade (GATT) negotiations. Nevertheless, CB Circulars, if completely accounted for, are sufficiently comprehensive since importers have been obliged (at least until late 1992) to go through the banking system, which in turn is informed by the CB of the various restrictions and delistings usually at the instance of the licensing agencies themselves.

Still another interesting fact is the double liberalization of some 42 goods.[2] The "second" liberalization is more likely an oversight rather than real because the goods in question were not restricted more than once. A similar oversight occurred in the doublecounting of about 72 commodities in the various circulars enumerated in Table 1. This has been justified by the fact that sometimes, there is more than one agency involved in regulating some commodities so that they get listed twice but this only shows that there was no unified accounting system, or the liberalization was not real if the requirement of only one agency was removed while another agency could still issue permits.

In like manner, Lists A, B, and C contain a large number that have already been deregulated, consisting mainly of food and live animals (45 items), then chemicals (3 items) and machinery (1 item); some (18 goods) were listed twice. Conversely, about 40 commodities, most of which are under Section 9 or "not elsewhere classified (n.e.c.)," are left out of these Lists but are in Circular 1029. Also, some circulars deregulated about 11 items while Circular 1389 added to the regulated list 16 items not found in either the Lists or Circular 1029. The generality of some commodity codes is supposedly the reason why certain PSCCs are not in Circular 1029, especially when the regulation is meant to cover only some specific types or uses included in the description. An example is gaskets for motor vehicles which line is not listed since the old description covers all types which are essentially unregulated.

2. Listed in Appendix 3, p. 82 of de Dios (1994).

The new commodity classification scheme has solved this problem by breaking up the old description and a new line for the specific type adds to the regulated list. However, because the 1977 codes were consistently used in the inventory throughout the paper, this reasoning is not relevant: new classifications which have no correspondence in the old code are excluded from the count.

Making a thorough accounting of all commodities ever regulated and liberalized is rendered difficult by the incompleteness of the circulars themselves. For instance the supposed liberalization of a very substantial number of various machinery and equipment under Circular 1029, Chapter III, Section 12 (i.e., imports valued at less than $50,000 of machinery and equipment under Section 7 of the PSCC, which consists of 1,013 items), cannot be included in the inventory since their PSCC lines are not specified. Dangerous drugs are similarly placed because they are listed under 35 generic names rather than under their PSCCs. Toy guns and radioactive materials are mentioned without their classification codes so they are excluded from the count. Moreover, there are at least ten items whose restriction dates cannot be traced.

All these suggest that the liberalization program may have been carried out less than systematically, and the choice of what and when to liberalize were arbitrary. This is not to say there was no attempt at all to follow rational criteria; in fact, where before it was a "numbers game," the committee determining trade policy (TRM) now tries to follow the raw materials — intermediate inputs — finished goods priority scheme as much as possible. However, given the difficulty of carrying this out, facility of implementation is what characterizes the system instead; that is, the least problematic are the first ones to be liberalized.

The frequent shift from liberalization back to regulation and vice versa for certain groups of commodities may also be due to political reasons such as lobbying for continued import protection by strong interest groups. The fact that some industries are organized into associations enables them to plead their case effectively while the unorganized do not have the means or machinery to deliver a unified protest. An obvious example is agricultural products, which were among the first to be liberalized. Similarly, the implementation of Lists A and B was not as scheduled because of fear of adverse reaction from the business sector which would be doubly hit because tariff changes brought by EO 413 took place at the same time that the Lists were up for implementation. The same pressure also exists when some senior government officials come from the private sector or from families with

major business interests, or are appointed to the Board of Directors in dominant firms in protected industries. All of these indicate the lack of decisiveness or commitment of the government in implementing the program thoroughly, much less rationally. In turn, the signal sent to business is that lobbying is effective.

Tables 2 and 3 summarize the data in Appendix 1, showing both single and repeated moves in regulation and liberalization, as well as the bases for the inventory. The proportion of all commodities regulated out of the total possible number of PSCC lines is 50.1 percent, of which beverages and tobacco and then food show the highest shares at 93.0 percent and 86.2 percent, respectively. Miscellaneous manufactures (Section 8), commodities, n.e.c (Section 9), and manufactured goods classified by material (Section 6) were the next most regulated groups. On the other hand, liberalization was complete or all restrictions were removed in beverages and tobacco, crude animal and vegetable materials, and animal and vegetable oils. It was almost complete in manufactured goods, miscellaneous manufactures, machinery and transport equipment, and food and live animals. Of the total regulated number, 94.0 percent has been delisted. However, if the repeated moves are taken into account, the totals become 3,077 regulated and 2,824 liberalized, or 91.8 percent liberalized.

The annual trend in the number of regulated items (net of liberalized commodities) as of June 1994 is given in Table 4. Regulations were numerous in 1983, and many new ones were imposed even in 1988 and 1993. Liberalization was significant in 1982, 1986, 1988 and in 1992 when the net figure was at its lowest. The remaining 250 items in 1994 exceeds the figure still regulated in Table 2 (174 items) by about 76, which corresponds to the number of items in Lists A, B and C that were excluded from Circular 1389. Since circulars are the bases for determining which are regulated, liberalized or not, the procedure is to consider these 76 items liberalized. The CB confirmed that the NEC-UC were left out to signify their liberalization. However, upon examining these items, it turned out that only 55 percent fall under the NEC-UC categories[3] hence the ambivalence about the status of the other 45 percent.

The figures greatly differ from those given by the World Bank in its 1993 Country Report (Vol. II, Table 10.6, p. 268) which acknowledged the National Economic and Development Authority (NEDA) and CB as its sources. Inquiries at both agencies confirmed the use of Circular 1029 as the

3 Please refer to Appendix 5, p. 89 of de Dios (1994).

TABLE 2

NUMBER OF REGULATED AND LIBERALIZED COMMODITIES, BY MAJOR COMMODITY GROUP

	Commodity Group	Total No. of PSCC Lines	Regulated Once				Repeat		Still Regulated[a]			
			Based on C1029	Based on Lists	Not in C1029/ Lists	Total (% of Lines)	Based on 1029	Based on Lists	Total	Repeat	Never Liberalized	Not in C1029/ Lists
0	Food and live animals	739	628	4 0	5	637 (86 2)	126	45	68	46	15	7
1	Beverages and tobacco	71	66	—	—	66 (93)	—	—	—	—	—	—
2	Crude materials	481	65	—	—	65 (13 5)	2	—	1	—	1	—
3	Mineral fuels	59	22	—	—	22 (37 3)	—	—	17	—	17	—
4	Animal and vegetable oils	59	3	—	—	3 (5 1)	—	—	—	—	—	—
5	Chemicals	678	166	1.0	6	173 (25.5)	5	3	21	3	14	4
6	Manufactured goods	1,568	848	2 0	3	853 (54.4)	6	—	7	3	1	3
7	Machinery and transport equipment	1,013	234	117.0	1	352 (34.6)	61	1	57	21	25	11
8	Miscellaneous manufactures	874	589	—	—	589 (67 4)	9	—	1	—	1	—
9	Commodities, n e c.	90	58	—	1	59 (65 6)	—	—	2	—	1	1
	TOTAL	5,632	2,679	124	16	2,819 (50.1)	209	49	174	73	75	26

[a]Based on Circular 1389 but excluding 7 items liberalized in 1994. Total also excludes 5 new Codes toy guns, radioactive materials, dangerous drugs, PMP parts, machinery and equipment whose PSCCs were not specified in previous circulars.

TABLE 3

NUMBER OF LIBERALIZED COMMODITIES BY MAJOR COMMODITY GROUP

(as of June 1994)

Commodity Group	Total No. Regulated	Liberalized Once: Based on C1029	Liberalized Once: Based on Lists	Liberalized Once: Not in C1029/Lists	Total (% of Regulated Lines)	Repeat Based on C1029
0 Food and live animals	637	611	—	—	611 (95.9)	122
1 Beverages and tobacco	66	66	—	—	66 (100 0)	—
2 Crude materials	65	64	—	1	65 (100 0)	1
3 Mineral fuels	22	4	—	—	4 (18.2)	—
4 Animal and vegetable oils	3	3	—	—	3 (100 0)	—
5 Chemicals	173	147	—	—	147 (85 0)	2
6 Manufactured goods	853	840	2	—	842 (98 7)	3
7 Machinery and transport equipment	352	220	98	10	328 (93 2)	44
8 Miscellaneous manufactures	589	577	—	—	577 (98 0)	5
9 Commodities, n e c	59	7	—	—	7 (11 9)	—
TOTAL	2,819	2,539	100	11	2,650 (94.0)	177

TABLE 4

ANNUAL NET REGULATED NUMBER[a]

	Regulated Once			Repeat [c]		Liberalized Once			Repeat [c]	
	Based on C1029	Based on List	Not in C1029/Lists	Based on C1029	Based on Lists	Based on C1029	Based on Lists	Not in C1029/Lists	Based on C1029	Net
1970-1980[b]	1,820	—	—	—	—	—	—	—	—	1,820
1981	2	—	—	—	—	263	—	—	—	1,559
1982	253	—	—	56	—	617	—	—	—	1,251
1983	598	—	—	28	—	48	—	—	—	1,829
1984	6	—	—	42	—	1	—	—	—	1,876
1985	—	—	—	—	—	70	—	—	4	1,802
1986	—	—	—	4	—	951	—	—	28	827
1987	—	—	—	2	—	170	—	—	4	655
1988	—	124	—	—	49	209	7	—	3	609
1989	—	—	—	—	—	56	71	—	1	481
1990	—	—	—	—	—	4	1	2	—	474
1991	—	—	—	—	—	15	3	—	6	450
1992	—	—	—	—	—	135	18	9	124	164
1993	—	—	16	77	—	—	—	—	—	257
1994	—	—	—	—	—	—	—	—	7	250[d]
Total	2,679	124	16	209	49	2,539	100	11	177	250

[a]Difference between the number regulated and number liberalized.

[b]No liberalization took place during this period

[c]Means re-restriction after a distinct liberalization and vice-versa, hence, excluding doubly liberalized or double-counted goods.

[d]Exceeds the number still regulated by 77 items, which is the number of items in the Lists that were left out of C1389.

starting point for the count, which was done in this paper It is possible that the World Bank used a "backward count" starting from what are liberalized in the present year and adding up the previous year's liberalized figure to get that year's regulated sum and so on, backwards. The opposite was followed here, and the possibility of underestimation could only be due to an incomplete accounting of regulations because of the unavailability of these documents. For instance, CB Annual Reports do not report all issuances, nor were the unpublished issuances obtainable from the library at the time this paper was prepared.

CHAPTER 2

Remaining Regulated Commodities

Composition

The commodities still covered by import restrictions were enumerated in Circular 1389 using the new PSCCs. Appendix 2 gives the same list under their old PSCCs. In 1988, these were officially categorized according to those recommended for liberalization (List A), for review (List B), and for continued regulation for reasons of public health, safety and national security (List C). Although Circular 1389 does not mention these categories, they are likely to be still in use.

Excluded from the list are: no-dollar imports of used motor vehicles, computers and peripherals imported by government agencies in excess of P2 million within a year, radioactive materials, commodities originating from centrally-planned economies and the Union of South Africa, and legal tender Philippine currency in excess of P5,000. Prohibited goods under Section 101 of the Tariff and Customs Code also have no PSCCs, as do toy guns, radioactive materials, and dangerous drugs mentioned earlier.

Table 5 rearranges the commodities by 2-digit PSCC and lists the licensing agency. In terms of PSCC lines, more than one-third or 39.3 percent belongs to food and live animals and another 32.4 percent belongs to machinery and transport equipment. The rest is shared by chemicals (12.1%), petroleum and coal (9.8%), and manufactured goods (4.0%).

TABLE 5

REMAINING REGULATED COMMODITIES

(As of June 1994)

3-Digit PSCC	Commodity	List	No. of Items	Licensing Agency
001	Live swine and poultry	C	5	BAI
011	Meat, fresh, chilled or frozen	C	6	NMIC
012	Meat, salted, dried or smoked	B	8	NMIC
014	Meat, prepared, n.e.s.	B	11	NMIC
041	Wheat, unmilled		2	DA
042	Rice	C	7	NFA
043	Barley		1	DA
044	Corn, unmilled	C	2	DA
045	Cereals		4	DA
046	Wheat flour and meal		1	DA
047	Other cereal meals and flours		1	DA
048	Cereal preparations		3	DA
054	Rootcrops, vegetables	B	6	DA, BPI
071	Coffee and coffee substitute	B	9	ICOCA
081	Feeding stuff for animals		2	DA
269	Used clothing	B	1	DSW, DOH
322/3	Coal and derivatives	B	3	ERB
334	Refined petroleum products	B	13	ERB
341	Liquified petroleum products	B	1	ERB
511/3	Chemicals for explosives	C	3	PC-FEU, DOH, DDB
522/3	Inorganic chemicals	C	4	DOH-BFAD
541	Penicillin	C	3	DOH-BFAD
562	Fertilizers	B	1	FPA
584	Regenerated cellulose		1	PC-FEU
591	Pesticides	C	8	FPA
592	Starch residues		1	DA
625	Used tires and tubes	B,C	5	BOI
699	Solders	B	2	BOI

TABLE 5 (CONTINUED)

3-Digit PSCC	Commodity	List	No. of Items	Licensing Agency
751	Color reproduction machines	C	3	CB, NBI
781	Passenger motor cars	B	22	BOI
782	Motor vehicles for goods transport	B	11	BOI
783	Motor vehicles, n.e.s.		4	BOI
784	Parts of motor vehicles	B	9	BOI
785	Motorcycles	B	7	BOI
793	Warships	C	1	MARINA
892	Banknotes	C	1	CB
961	Coins	C	1	CB
971	Gold, nonmonetary		1	CB
	TOTAL		174	

Although frequency tabulations are inadequate indicators of the severity of the restriction, the composition of the remainder can show which are the "hardcore" whether by accident, policy intent, or the result of effective lobbying.

It is reasonable to find goods regulated for national security or public health and safety objectives, and this applies to chemicals, penicillin, rice and corn, petroleum products, color reproduction machines, pesticides, used tires, banknotes and coins, and warships. For the rest, the reasons are not clear or acceptable, e.g., motor vehicles. Many of the agricultural products were recently regulated once again on the strength of Republic Act 7607 or the Magna Carta for Small Farmers. Such products were at a disadvantage at the start of the ILP because of the early liberalization of many of them, and this is probably why a rethinking was done to compensate the sector, leading to a reimposition of restrictions. The debate on whether or not there is a need to protect agriculture seems to have been positively resolved, but this need should be met by more transparent measures such as tariffs instead of quantitative restrictions (QRs).

The value of 1991 imports of the remaining regulated commodities as of June 1992 was also examined.[4] Altogether, this remainder took up a mere 12.9 percent of 1991 imports (excluding dangerous drugs), but the restrictions themselves form part of the reason for this small share. Lists A and B consisted of 299 goods then, and made up 12.2 percent of 1991 imports, while List C with 106 goods comprised 0.8 percent of imports. Although the relative importance of the commodity groups cannot be ascertained given varying strengths of restrictions, the ex-post nature of the data, or the different relative values of the commodities, the shares of consumer electronic product parts, refined petroleum products, passenger cars and jeeps, and fertilizers are relatively large because they are essential and not locally produced. The Department of Agriculture and the Board of Investments take charge of the majority of the remainder.

Licensing Procedures

The nature of the restriction is often a result of the peculiarities of the commodity being regulated. What follows is a brief description of the procedure and criteria used by the various government agencies in issuing import licenses for some goods. This is based on interviews conducted in 1992, and therefore encompasses the commodities regulated at the time. While the coverage is now much smaller, those that are now liberalized were included in order to gain an idea of how the process was implemented.

Animal and animal effects

Anyone may import animals but certain requirements are needed such as: rabies vaccination and quarantine site for dogs and cats; CITES certification and quarantine site for exotic animals; farm inspection, landing permit, and quarantine clearance for chicks and hatching eggs, hogs, sheep and goats. Importation of gamefowl is only from July to October, and limited to four cocks and eight hens or 60 hatching eggs per permit. Importers of gamefowls for breeding need to be bona fide breeders with farms, have to go through the Bureau of Animal Industry and the CB for authority to import, must open a special time deposit of $1,120 per permit and submit numerous other documents. Horse importation is limited to four per permit and one must be a registered breeder in order to import breeder and racing horses of which only the thoroughbred are allowed. For cattle, a monthly raffle of

4. Please refer to Appendix 6, p. 96 of de Dios (1994).

allocations is held to enable smaller farms to import; a quarantine site and landing permit are also required. Imports are allowed in order to improve the stock/breeder base and increase the dwindling local population. There are no quantity limits for the importation of cattle and imports are not that voluminous anyway as to discourage local industry even if prices abroad are lower. (Most of these items were excluded from Circular 1389 although they fall under the EP, UP, and SUP categories. Only live swine and poultry are now regulated.)

Meat and meat products

In the past, only meat processors accredited by the National Meat Inspection Commission and hotels certified by the Department of Tourism were allowed to import but limited to frozen meat and choice cuts. The rated capacity and projected needs of processors were evaluated and only 50 percent of the volume requested was granted; for hotels and restaurants their size and seating capacity plus projected requirements were the bases for granting requests. Now, beef and beef product imports have been liberalized. Pork or chicken will be importable only during an actual or predicted shortage of local supplies, but with a specified maximum quantity. Some 80 percent will go to large integrators or meat processors while 20 percent is allotted to small-scale producers. Canned products are not allowed, and processed meat is said to be importable but no requests so far have been filed. Imports are generally cheaper.

Fish and fish preparations

Anyone can import fish and fish products; the major items included under frozen fish have already been liberalized with differential tariffs and there are few import applications for the remaining smoked and dried fish. There is only a need to check imports of live fish for diseases and dangerous species, and there is a concern that frozen fish imports will go to local wet markets instead of canners. Bangus is regulated since other Asian countries also produce it and the timing of the harvest can be controlled. The re-restriction of those liberalized in 1986 is due to local availability of the items. There are, however, no quantity restrictions on the remainder. Prices abroad are lower and quality is better and during the lean season, importation is encouraged so that domestic prices will not rise too much and pressure on depleted local reserves is eased. (All types have already been liberalized as of 1994.)

Garlic, onion, potato, cabbage

Any person wishing to import these must have a farm certified as suitable, whose area and seeding rate determine the volume to be allowed, and post a bond equal to the cost of the seed material. Requests to import seeds and nuts are granted only if local supply is insufficient, and limited amounts are allowed especially since the seed materials are also classified as food. There is no need to import cabbage seeds, because of sufficient local supply; importation of potato seed pieces are allowed when local supply is lacking, garlic supply is highly seasonal and bulb onion seeds cannot grow here because of the climate. These are usually cheaper abroad.

Coffee

Importation of coffee beans and processed coffee is disallowed to assure local growers of a market. Most of domestic production goes to the local processors who, because of the current international glut, are said to offer better prices and translate lower costs of raw materials into "bonus" grams in retail packages rather than lower prices. A rise in bean prices, however, results in the use of lower quality beans. Exports of beans are governed by the International Coffee Agreement allocation system.

Fertilizers and pesticides

Any person wishing to formulate, distribute or import these items must first have a license to do so. Second, the raw materials, active ingredients, intermediate and finished products must also be registered. This entails an analysis of the substances, a field test report, and a pathological and bacteriological test by a licensed laboratory, among others. Finally, one needs an authority to import. Only fertilizer types that are not locally produced may be imported and when domestic supply is lacking, only the raw materials are allowed. There are no quantity limits on those allowed, however, since the objective is only to monitor imports. (Except for ammonium nitrate which is also used for explosives, all fertilizer imports were liberalized in 1993; pesticides remain restricted.)

Consumer electronic product parts

Only participants in the Progressing Export Program for Consumer Electronics (PEPCEP) are allowed, and this includes existing and new manufacturers who are self-sufficient in foreign exchange, as well as BOI-registered export manufacturers who are able to export at least 70 percent of production. Only imports of completely-knocked-down (CKD) consumer durables

are allowed; import replacement parts are allowed as long as they are not in commercial quantities. (Items liberalized as of 1992.)

Home appliances, fluorescent tubes, incandescent lamps
These are allowed if importation is not in commercial quantities and for consumption/end-use purposes only. Import applications are first referred to the Association of Home Appliance Manufacturers which will certify if the request should or should not be denied. (Items liberalized as of 1992.)

Automotive spare parts
Nonparticipants in the Car and Commercial Vehicle Development Programs (CDP and CVDP) such as dealers, traders and users may import those parts to the extent that the programs are not jeopardized. Importation of used parts are banned and new motorcycle parts are regulated but the other locally available parts can be imported if the Association of Car Parts Producers allows it, with BOI concurrence.

Used trucks and special purpose vehicles
Accreditation is required of end-users, traders, manufacturers and assemblers of utility vehicles and CVDP participants, and only trucks 18 tons and above and of models not older than 8 years are importable but subject to pre-shipment inspection. There are no limits to the number allowed.

Shipping vessels
Import licenses are issued for vessels for interisland use (landing ship transport, ro-ro, cargo, container, passenger, ferry) but must have a minimum size limit of 500 gross tons (tugboats have a 1,000 BHP limit), a maximum age limit of 15 years, and must be classed by an internationally recognized classification society. There are no limits on specialized vessels, but importers must submit a survey report by an accredited surveying company. Import of barges and pleasure crafts are totally restricted. Fishing vessels should be at least 25 gross tons, not more than 15 years old, and subject to a satisfactory condition evaluation report. Importers of cargo passenger vessels must have a paid-up capital of P1.25 million and also promise to rehabilitate the vessel whether or not it is over-aged. (Items liberalized as of 1992.)

The rule generally followed by licensing agencies is to allow imports if, at the same quality and at a comparable price, domestic production of the local substitute is insufficient, and this applies more often than not to those

regulated for the industry's protection. Low import shares combined with rampant smuggling are the expected outcome of such regulations. Indeed, these are more observable among the commodities which are being regulated for the protection of the industry rather than the others. Furthermore, most of the industry-protective restrictions cover consumer goods, making these scarce; smuggling becomes profitable because quality differences between the local and foreign product are large. It is thus easy to find foreign-made counterparts of the restricted imports enumerated above in the domestic market, and in commercial volumes.

Certain government agencies are quick to add that the regulation is only for monitoring purposes, especially if the allowable imports have to be of a specific grade or quality, e.g., antibiotics and coal. However, discretionary powers are just as wide in the implementation of these measures.

At least two product groups have Republic Acts (R.A.) to cite as the basis of their restriction without denying that the industry-protective rationale is just as useful. These are potato, onion, garlic, and cabbage which are covered by R.A. 1296 enacted in 1955, and coffee, covered by R.A. 2712 of 1960. Used clothing is again regulated after it was already liberalized in 1986, by citing another Republic Act on national dignity (R.A. 4653) as a justification. Deregulation of these items will therefore require Congressional action. Toy guns were also prohibited under Letter of Instruction (LOI) 1264 in 1982. Color reproduction machines are restricted because of the likelihood of their use in counterfeiting.

Together with these examples which attest to the difficulty of dismantling restrictions, is a group of commodities that were included under CB MAAB 37 in 1983, which empowered the BOI to monitor the import of some 300 high-tariff items. This was meant to be a temporary measure to discourage the outflow of foreign exchange at that critical time. However, up to now, quite a number of these are part of the remainder; examining them further shows that most were freely importable prior to 1983.

The most entrenched restrictions which are likely the last to be dismantled are those covering machinery and transport equipment because of the progressive manufacturing programs initiated in 1973. Import shares of these items are large relative to the other remaining regulated items since the import figures consist of components to be assembled locally. However, encouraging certain domestic industries through a system of import control has already been shown to be detrimental in the long run. It is therefore puzzling why the same outdated thinking is still being implemented, espe-

cially since protecting strategic industries, which is what the remaining protected items are supposed to do, only encourages inefficiency.

Likewise, meat products seem to be protected not only by high tariffs but also by QRs which are restored almost immediately after they are removed. It is difficult to think of any other explanation for this, aside from the lobbying or political economy factor. In fact, a simplistic view of the remaining protected items would be to subdivide them into those privately and those "publicly" lobbied for, meaning either the private sector or the government does not want to let go. This partly explains the composition of the items to be liberalized first — no one lobbied for them.

It is not immediately obvious whether or not the scope for discretion is wider for goods regulated for reasons other than protection; it is only clear that the rationale is so direct that a person evaluating an import application for such goods has very exact guidelines on which to base his decision and therefore decides less arbitrarily than one who has to think about local demand and supply balances, quality, and relative prices. Examples are goods regulated for public health and safety reasons (animals, chemicals, antibiotics, pesticides, pyrotechnics, used tires, floating structures, and ammunitions and firearms). The same may be said of those regulated for national security reasons (rice and corn, refined petroleum products, fertilizers, used vessels and warships, banknotes and coins), although there is undeniably an industry-protective element here. Chemicals have varied uses and actual imports of these are not differentiated according to use, hence, the regulation for safety and national security purposes.

It is logical to expect that the scope for discretion is wide, for agencies in charge of commodities regulated for industry-protective purposes precisely because the criteria they use are variables, but at the same time, there is an inherent desire to limit imports. On the other hand, the opposite may be said of goods regulated for public health and safety reasons — narrower discretionary powers but no inherent need to limit imports.

CHAPTER 3

Framework

Since the assumption of perfect competition is not always applicable in the real world, the more recent positive theories of trade, systematized and integrated by Helpman and Krugman (1985) which deal with imperfectly competitive markets will be used. Here, firms are not price-takers, and price does not equal marginal costs but instead exceeds it. The ratio of price to marginal cost is a measure of market power, and trade policy under imperfect competition may change this ratio. The simplest model of an import-competing monopolist shows that protection allows firms to increase their market power or creates market power where none exists, and import quotas create more market power than tariffs. This stems from the premise that if free trade enhances competition, then the converse applies, i.e., protection creates domestic monopoly or is anti-competitive.

Figure 1 shows a domestic firm with an upward sloping marginal cost curve MC, domestic demand for its output D, and the corresponding marginal revenue curve MR. Not all points along MR are feasible, however, because of the threat of import competition. Imports are perfect substitutes for the firm's output and are available at world price P_w. The possibility of exports is ignored.

Without import competition, the firm would choose the profit-maximizing price P_m and the corresponding output level X_m. However, under free trade, it is unable to do this: at any price above P_w, imports will undercut the firm, so P_w is the upper bound on the firm's price. Its profit-maximizing output decision will be to produce up to the point where this external price

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FIGURE 1

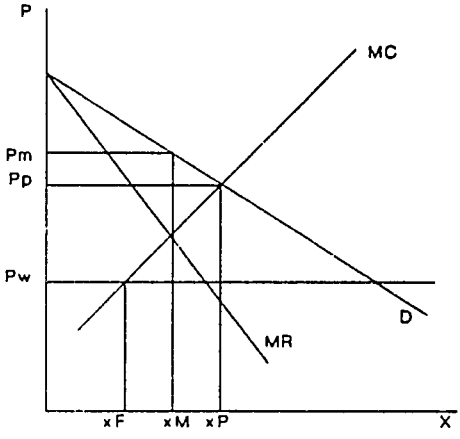


FIGURE 2

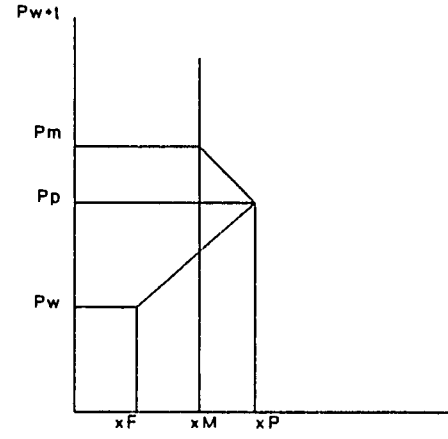


FIGURE 3

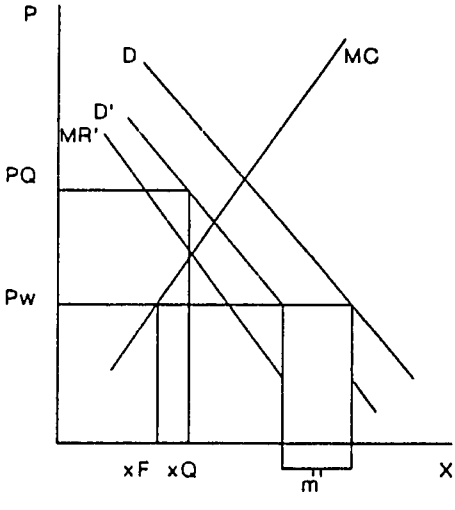
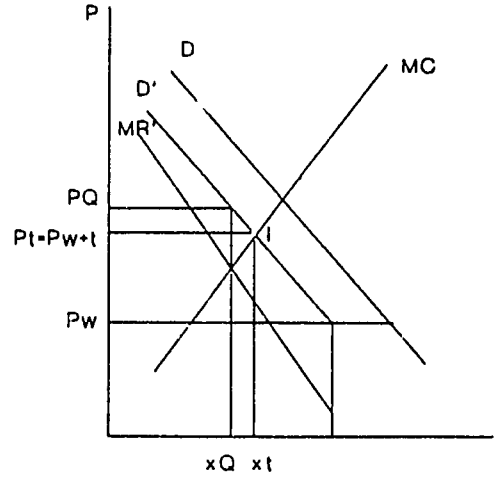


FIGURE 4



equals MC, i.e., behave like a perfect competitor. Output will be X_f. Under free trade, the monopolist has no monopoly power.

Effects of a Tariff

Suppose the monopolist is protected by a tariff t. Then the import price becomes $P_w + t$. The effect of the tariff on the output and price of the domestic firm depends on how large t is. Suppose P_p is the price at which the tariff becomes prohibitive; P_p is defined by the intersection of MC and D. The tariff's effect depends on whether it is small so $P_w + t < P_p$; middle-ranged so that $P_p < P_w + t < P_m$; or large so that $P_m < P_w + t$.

If the tariff is low, the firm's basic position is the same as that under free trade. Hence, the effect of tariffs in this range is the same as it would be in a perfectly competitive industry with marginal cost curve MC. The higher the t within this range, the higher are output and price of the firm.

If the tariff is moderate, the price of potential imports still constrains the firm from charging P_m. However, it can no longer set output where MC equals the $P_w + t$, since this would involve producing more than domestic consumers want to buy at that price. Instead, the profit-maximizing strategy is to equate price to $P_w + t$ but produce only as much as is demanded. Two points are to be noted: it is the threat of imports, and not the actual, that limits the price the firm can charge and increases in t within this range have a perverse effect on output.

If the tariff is high, the price of competing imports will not be binding on the firm. It is free to charge P_m, and changes in the t within this range will have no effects.

The effects are summarized in Figure 2, showing how the firm's output varies with the tariff-inclusive price of competing imports. For low t, the firm matches tariff increases with its own price increases and slides up its MC curve. For tariff increases beyond the prohibitive level, domestic price rises but the firm slides back along the D curve. At high t, domestic price and output remain unchanged at the closed economy monopoly levels.

Effects of an Import Quota

Figure 3 shows the effects of an import quota m. If the firm charges a price below P_w, this limitation will not be binding since there will be no incentive to import. For any price above P_w, m will be imported and the firm will satisfy the residual demand. The result is a new demand curve D' that has three

segments: for prices above P_w, it is the domestic market demand shifted left by the quota m; for prices below P_w, it is the total domestic market demand and there is a horizontal segment at P_w. Corresponding to the D' curve is a new marginal revenue curve MR' also with three segments.

In this situation, the quota is set at a level smaller than the free trade import level. The firm maximizes profits by choosing the level of output where MC equals this new MR', shown as X_q with price P_q.

Comparing the Effects

A tariff and an import quota that lead to the same import level have differing effects, with the quota leading to a higher domestic price and a lower domestic output than the equivalent tariff.

Comparing prohibitive tariffs with a total import ban shows this. There is a range of t for which imports are zero, but for which domestic price is below P_m and domestic output is larger than X_m. On the other hand, a restriction that prohibits imports will allow the firm to move to the monopoly price and output. Where $P_w + t < P_m$, it is the threat of imports that constrains domestic price; an import quota eliminates this threat, creating more market power and thus a higher domestic price.

The same is true when some imports are allowed, as in Figure 4. If the quota limits imports to the same level as an arbitrary tariff, the post-quota demand curve D' facing the firm passes through the tariff production/price point 1. The corresponding MR curve lies below, leading to a quota equilibrium with a lower output X_q and a higher price P_q. This is because the tariff-constrained demand curve is more elastic than the quota-constrained demand curve for output X_t.

This serves as the framework for discussing the behavior of prices and producers in the following chapter.

CHAPTER 4

Price Ratios

To find out the effects of import restrictions and liberalization on relative prices, the ratio of domestic to world or border price (P_d/P_b) of about 180 commodities was computed for the period 1985 to 1992. Data on wholesale domestic prices from the National Statistics Office were used as P_d; the composition of goods to be analyzed was therefore determined by the wholesale market basket, which could be considered a representative sample, although some goods were dropped because data gathering by the NSO was discontinued. Unit import values in Hong Kong and the Philippines were used as P_b for regulated and liberalized commodities, respectively.

Because the domestic price data was at the individual commodity level while the closest Hong Kong or PSCC description was sometimes for a heterogenous group of commodities, there was no choice but to match these. However, where possible, the domestic prices of several commodities belonging to the same group were averaged in order to suit the Hong Kong description more closely, e.g., marine water fish, noodles, tropical fruit not elsewhere specified (n.e.s.), fruit and tubers, canned fruit, sauces n.e.s., paint n.e.s., machine-made printing paper. Nevertheless, majority were directly comparable.[5] In other cases, units of measurement had to be converted before the ratios could be computed, or certain assumptions made such as in

5. Those that are not directly comparable are noted in Appendix 7, p. 98 of de Dios (1994), which gives the detailed description of the commodities being compared.

the case of fresh milk, edible oil and paints (specific gravity), fresh fruit (weight per piece), bread (weight per piece), cigarettes (weight per carton), or paper (weight per ream). A number of domestic price data for important goods (e.g., drugs) could not be utilized for lack of information on weight, which is the main unit of measurement used by the Hong Kong statistics. On the other hand, the latter did not report quantities for many items and changed the nomenclature for many commodities in 1992.

The results are tabulated in detail in Appendices 8 (using Hongkong unit import values) and 9 (using Philippine unit import values) of the research paper,[6] which also give the year the items were liberalized, the tariff rates, and import levels. The tables show patterns of movements of prices and import volumes which are as varied as the goods themselves and are not easy to analyze. In order to explain such differing behavior, the commodities are differentiated according to those whose price ratios either fall below or are above unity, and import levels are either substantial (in excess of $100,000) or not. The resulting typology may be visualized as four quadrants depending on the combination; the goods included under each group are listed in Table 6 for regulated and 7 for liberalized goods. (Again, note that the regulated group used the Hong Kong import data as P_b while the liberalized group used that of the Philippines.) Several factors other than import restrictions influence relative prices and import levels, and since it is beyond the scope of this study to examine the demand and supply conditions for each commodity, the typology merely aims to find out what is common among goods that show roughly similar behavior.

Price ratios below unity and insubstantial or zero imports describe the lower left quadrant. The commodities are either nontradable or exportable and prices are therefore not directly affected by tariff or import policy changes but rather by demand patterns. Liberalization is redundant for this group although price ratios went down further and imports grew for two out of six items which were deregulated after 1985 and whose units of measurement were comparable. There are four restricted goods in the list, most of these, including those liberalized, are protected by a 50 percent tariff.

The goods listed in the lower right quadrant, where P_d/P_b is still less than one but imports are large may be characterized as tradables with quality differences or imperfect substitutes. There are only three restricted goods included here, and two carry a 20 percent tariff while the third has a 50 percent rate. Half of those delisted have a 50 percent tariff, and the same

6. See p. 112 for Appendix 8 and p. 118 for Appendix 9 of de Dios (1994).

TABLE 6

TYPOLOGY OF SAMPLE REGULATED COMMODITIES

$P_d/P_b > 1$, $M < 100{,}00$	$P_d/P_b > 1$, $M > 100{,}000$
Bacon	Chicken
Ham	Pork
Frankfurters	Rice[b]
Vienna sausage	Centrifugal sugar[a]
Liverspread[d]	Fuel oil
Potato	Diesel oil
Garlic	Lubricating oil
Red onions	LPG
Coffee beans	Freon dichlorofluoromethane[d]
Ground/instant coffee	Penicillin[a]
Gasoline	Urea
Kerosene	Insecticide
Glycerine	Car, CKD[d]
Acetic acid	
Chloromycetin[a]	
Aircon	
TV set[d]	
Radio phono[b d]	
Electric fan	
Dry cell battery	
Electric bulb	
Fluorescent tube	
$P_d/P_b < 1$, $M < 100{,}00$	**$P_d/P_b < 1$, $M > 100{,}000$**
Fresh fish	Beef
Crabs[d]	Ammonium sulfate
Cabbage	Passenger jeep[a d]
Perfect gro fertilizer[c]	
Radio receiver, transistor[d]	

[a]Used Philippine unit import value for P_b because Hong Kong units of measurement were incomparable.

[b]Borderline cases, with $P_d/P_b > 1$, half of the time and < 1 half of the time.

[c]Only one observation.

[d]Denote items whose Hong Kong counterpart descriptions were much broader.

TABLE 7

TYPOLOGY OF SAMPLED LIBERALIZED COMMODITIES

P_d/P_b > 1, M < 100,000

Dried fish
Canned mackerel/tuna
Bihon
Soda crackers
Mixed pickles[e]
Calamansi[d]
Desiccated coconut[d]
Mango[d]
Mango preserves[d e]
Pineapple slices[d e]
Syrup[d]
Cocoa butter[d]
Margarine
Shortening
Catsup/tomato sauce/ vetsin/patis[e]
Vinegar[d]
Tonic food drink[c e]
Caustic soda[b]
Talcum powder
Laundry soap[b]
Detergent

P_d/P_b > 1, M > 100,000

Swine
Fresh milk
Powdered milk
Evap. filled milk
Sweet. condensed milk
Butter
Cheddar cheese
Canned sardines
Yellow corn grain
Wheat flour
Macaroni
Sotanghon
Butter cookies[e]
Guava jelly[e]
Orange concentrate[e]
Fruit cocktail[e]
Refined sugar
Ground cocoa
Whiskey
Soybeans
Sodium hydroxide
Cough syrup
Skin cream
Toilet soap
Rubber tire, car
Newsprint
Kraft paper
Woven fabric, cotton[e]
Woven fabric, ramie
Knitted fabric, cotton
Cement
Drinking glass
Steel bars, round[b e]
Steel bars, deformed[e]
Spoon and fork
Metal sink
Porcelain lavatory[a]
Steel bed[b e]
Dining set[a e]
Undershirtb
Handkerchief
Rubber shoes[e]
Voltmeter[e]
Piano[b]
Candles
Umbrella
Toothbrush
Plastic buttons[a]

Pd/Pb < 1, M < 100,000

Eggs, duck
Bread[e]
Tomatoes
Beans
Lettuce
Green pepper
Other vegetables
Bananas[d]
Pineapple[d]
Avocado
Chico[d]
Papaya[d]
Watermelon
Pineapple juice[e]
Red hot pepper
Rice bran[d]
Ice cream[d]
Gin
Rum
Charcoal[d]
Table salt
Columnar pad[a]
Rice sack[d]
Table top, glass
Chair, narra[e]
Cotton blouse
Comics[e]
Phono record[a]
Matches

Pd/Pb < 1, M > 100,000

Eggs, leghorn
Poultry feeds
Soy sauce
Soft drinks
Beer
Cigarettes
Edible oil[e]
Enamel paint[e]
Rubber tire, truck
Yarn, cotton, grey
Wooven fabric, rayon[e]
Knitted fabric, nylon
Cinematographic film

[a]Used HongKong unit import values for Pb because Philippine units of measurement are incomparable.
[b]Borderline cases
[c]Only one observation.
[d]Used Hongkong unit import values for Pb because Philippine imports were zero
[e]Denote items whose PSCC descriptions were much broader

proportion showed a lowering of relative prices and an increase in imports after being liberalized.

Domestic prices above border and zero or low import levels mark those goods listed in the upper left quadrant. Majority of the regulated commodities included in the whole tabulation belong to this group. Most of both the restricted and deregulated goods listed carry a tariff of 50 percent and the goods may be described as nontradable, highly perishable, or have high weight-to-value ratios or high domestic landed costs, that is, these are the natural import-substitutes. Price ratios exceed tariffs for most. Liberalization was followed by a fall in the price ratios together with a rise in imports for only one commodity, although as separate phenomena, these changes were exhibited by at least five goods.

The expected combination of domestic prices greater than border and substantial imports is shown by the goods included in the upper right quadrant. One-third of all restricted goods come under this heading, of which more than half carry a 20 percent tariff. Of the liberalized goods, most still have a 50 percent rate, but one-fourth is protected by a 40 percent tariff, and one-fifth by a 20 percent rate. Relative prices exceed tariffs for most goods. The expected lowering of price ratios and increase in imports took place only for one-fourth of the deregulated commodities; more than half showed both higher relative prices and imports instead.

There are quite a number of cases where tariffs exceed the price ratios — about 20 deregulated and 7 regulated items. Sometimes, there were also cases where tariffs would be greater and other times, they are less than relative prices. Two reasons for this occurrence may be suggested: either quality differences are large and are reflected in low domestic prices and hence, low ratios or smuggling renders the tariffs redundant especially for regulated goods. Where imports are zero, the tariff is also redundant.

On the whole, the level of relative prices and imports can be explained by the characteristics of the goods. However, the movement of these variables as a result of deregulation is not always in the expected direction, that is, assuming the direction of causation to be from deregulation to quantity and price changes. One reason may be that for the period covered in the table, it is too early to feel the effects of liberalization, say, of those delisted from 1988 to 1990, or too late to pinpoint for those liberalized as early as 1981 and 1982. An alternative reason is that the tariffs which replaced the restrictions serve to inhibit imports, enabling domestic producers to maintain the same price differences. Similarly, the price-disciplining effect of imports is not realized because quality differences are great. One other explanation espe-

cially for some liberalized goods in the upper right quadrant is that domestic costs are rendered high not by inefficient production methods but by extraneous factors, and this prevents producers from competing with imports, e.g., corn and milk. The latter shows that for certain commodities, unfavorable domestic conditions (such as poor infrastructure) deter producers from responding positively to liberalization.

Focusing on the regulated group, what are found mainly are examples of commodities that are long protected by import restrictions and therefore enable domestic prices to exceed the border. In addition, the upper left quadrant shows that imports are insubstantial particularly for those which are tightly restricted, that is, not merely monitored such as meat products, potato, garlic, onions, coffee, gasoline and kerosene, consumer appliances, electric bulbs and fluorescent tubes. Only chemicals are restricted for health and safety purposes, the rest being part of List B. In these cases, the threat of imports has been eliminated allowing local producers to exercise more market power than that possible under freer trade. For the upper right quadrant, imports are substantial because of inadequate local production, and this time more are from List C, e.g., chicken, pork, rice, freon, penicillin, and insecticides.

Prices are also affected by market structure, however, and the following chapter attempts to establish this relationship.

CHAPTER 5

Industrial Structure

Characteristics

The industries affected by import restrictions were examined by matching the 4-digit groupings of the Philippine Standard Industrial Classification (PSIC) scheme with the 7-digit PSCC of the remaining regulated commodities; the same was done for the liberalized sector as well as for those that were never covered by import regulations. However, since this was based on the list as of June 1992, it still includes sugar milling and refining, fish, fertilizers, chemicals, sewing machines, refrigerators, consumer electronic product parts, primary cells and batteries, shipbuilding, and firearms and ammunitions, which were all liberalized by 1993. For the moment, this suffices since the purpose is to find out whether any relationship exists between the industrial structure and trade policy.

The resulting sets of industries are presented in the research paper as Tables 8 (Protected), 9 (Liberalized), and 10 (Unprotected).[7] The 4-digit PSIC are fairly homogenous in terms of the remaining restricted items, with a few exceptions, i.e., where the industry descriptions were highly heterogeneous, which led to the use of the 5-digit level instead. Industry characteristics from the 1988 Census of Establishments conducted by the National Statistics Office enable a comparison of the sectors.

7. De Dios (1994), pp. 38, 40 and 46, respectively.

The sector averages, excluding those with suppressed data, are as follows:

	All Manufacturing	Protected Sector	Liberalized Sector	Unprotected Sector
Number of firms	83	53	100	54
Employment/firm	74	111	72	52
Compensation/emp. (P000)	37	54	34	30
VFA/firm (P000)	7,728	23,784	5,935	2,373
VA/firm (P000)	11,392	26,916	10,120	3,984
VFA/emp. (P000)	104	214	82	46
VA/emp. (P000)	153	242	140	77
Tariff	34.7	31.8	37.3	26.7
VACR 1983	58.5	68.1	54.6	60.4
VACR 1988	61.9	68.2	60.6	59.3
Foreign equity	5.5	13.1	3.9	2.8

Note: VFA is the value of fixed assets, VA is value added VACR is three-firm value-added concentration ratio, or the share of the top three firms' value-added in each industry total. Foreign equity is the proportion of foreign-controlled establishments in each industry.

The above averages show that the liberalized sector has twice the number of firms that the protected and the unprotected sectors have. The protected sector, however, employs the most workers, pays the highest wages, uses the largest amounts of capital, thus it has the highest capital-labor ratio, uses more foreign equity and contributes more value in production, both at the firm and worker level. The protected industries are the most concentrated among the three sectors, and they became slightly more concentrated during the 5-year period. On the other hand, the liberalized industries became more markedly concentrated and the unprotected, slightly less concentrated. Tariff protection is also a little lower than that of the deregulated sector but much higher than the unregulated.

The averages for all manufacturing industries are expectedly closest to the liberalized sector averages for almost all variables, ie., industry size, employment, compensation, capitalization, valueadded, capital/labor, labor valueadded, tariffs, and foreign equity. Moreover, the overall manufacturing averages fall between the protected and the liberalized sector averages. It is

only in industry size and tariff levels that the positions are reversed, where manufacturing averages are lower than the liberalized but higher than the protected sector averages. The exception is for average VACR, which is close to both the liberalized and unprotected averages.

The overall VACR average also increased during the period 1983 to 1988 due to a slight rise in the protected sector average and a more than modest increase in the liberalized average. Almost half (46.4 percent) of protected sectors showed a lower VACR, and more than half (54.2 percent) of the deregulated sector was less concentrated. Considering the closeness of these proportions to each other, it seems that liberalization has no great impact on industrial concentration, although it may be too early to feel the effects especially since the major items were liberalized only in 1986 and 1988, or the tariffs that replaced the quantitative restrictions may be just as binding.

Data for the protected sector shows that majority are highly concentrated: 17 industries or 60.7 percent register VACRs greater than the sector average, and 64.2 percent exceed the manufacturing average. Two-thirds either became more concentrated or did not show any substantial change in their already high ratios. VACRS decreased in 13 out of 28 industries, but only 8 of these show substantial reductions in their concentration, while about five had low VACRS to begin with. In the case of fish, one likely reason for lower concentration is the previous deregulation of live fish imports. Industries with larger numbers of firms tend to be less concentrated, and vice-versa.

About half of the sector consists of up to 10 establishments; one-fourth has between 11 to 30 firms while the rest have between 31 to 50. Only one is extremely large — rice and corn milling, with 521 firms.

One-fifth of the protected industries employ up to 50 workers, another fifth employs between 51 to 100, one-sixth has from 101 to 200 employees and the rest employ from 201 to as many as 900 workers. Compared to the manufacturing average, the protected industries are relatively large employers. Annual compensation per worker is also high relative to the manufacturing average, and four-fifths of the protected industries exceed it.

Capital-labor ratios are given by the value of fixed assets (VFA) per worker. About one-third of the protected sector exhibits ratios larger than the manufacturing average. High capital-labor ratios characterize smaller industries, but the average employment in these industries varies from high to low.

With respect to value-added, slightly more than half have averages that are higher than the manufacturing sector average. Only one industry con-

tributed less than P1 million on the average. Many of both large and small industries contribute much to value-added; these same industries tend to be large employers. Those with fewer workers contribute less to value-added and have lower capital-labor ratios.

Tariff rates range from 12 to 50 percent and more than half are at the higher end of the range, i.e., protected by at least a 31 percent rate. Foreign-controlled firms are common, as in one out of five firms in petroleum refinery and products, coffee roasting and processing, pesticides, drugs and medicine, explosives, and primary cells and batteries. Except for drugs and medicine, these industries are made up of few firms compared to the rest of the sector. Besides, these same industries are highly concentrated.

Industries producing the liberalized goods are far more numerous given the wide coverage of import restrictions that were lifted over the period 1981 to 1991. Two-thirds are either very large or very small: about one-third (36.2 percent) consists of one to 20 establishments and another third (37.4 percent) consists of over 50 establishments. Two industries were extremely large (bakeries and ready-made clothing) with over a thousand firms each. The middle range, with 21 to 50 firms, characterize the remaining industries.

The distribution of industries according to average employment declines as employment increases with majority (34.9 percent) of industries employing up to 50 workers, the next biggest group (30.1 percent) employing 51 to 100, the third group (18.1 percent) employing 101 to 200, the fourth (10.8 percent) employing 201 to 500 and the remainder (6.0 percent) employing above 500 workers. Average compensation ranges from P11,000 to P108,000 per employee.

One-fourth (26.5 percent) of the liberalized industries exhibit capital-labor ratios that are greater than the sector average, and one-third (31.3 percent) have ratios exceeding that of manufacturing. The average value-added of more than a third (36.1 percent) is greater than the manufacturing average and that of about two-fifths (39.8 percent) exceed the sector average.

Majority of the delisted industries (60.2 percent) are protected by tariffs ranging from 30 to 49 percent. About one-fifth (18.1 percent) have a 50 percent tariff wall, and another fifth (21.7 percent) are covered by 10 to 29 percent average tariffs.

Only a few industries (12.1 percent) have at least one-tenth of the firms controlled by foreigners. Moreover, these industries are small, consisting of much fewer establishments relative to the sector average and ranging from 5 to 67 firms.

Slightly more than half (51.8 percent) of the deregulated group have higher VACRs than the sector as a whole. Concentration was less pronounced after five years in more than half (53.0 percent) of the group, and substantially less in two-fifths (43.4 percent). However, one-third (32.5 percent) became more concentrated, possibly because imports drove the smaller firms away, leaving fewer establishments and a higher concentration as a result. Smaller industries tend to exhibit very high VACRs and larger industries, very low VACRs, although the trend in the middle range is not as clear as that of the protected group.

The unprotected sector consists of those industries which produce goods that were never subject to import restrictions. Many of these are on the extreme ends of the size distribution: either small, consisting of up to 20 establishments (55.5 percent) or very large, with a range of 101 to 500 firms (22.2 percent). The rest are made up of 21 to 100 firms.

Employment is low for most industries (70.4 percent), with an average of up to 50 workers per establishment. Those employing 51 to 100 workers comprise one-fourth of the sector (22.2 percent). Only two industries have more than 100 workers on the average — veneer and plywood and metal containers.

Capital per worker is greater than the manufacturing average for only four industries (14.0 percent) and greater than the unprotected sector average for 14 industries (51.8 percent).

The value-added per firm of only five industries (18.5 percent) exceeds the manufacturing average, and that of 12 industries (44.4 percent) is higher than the sector average.

A 10-29 percent average tariff protects 70.4 percent of the industries in the sector, of which 48.2 percent are covered by a 20-29 percent rate. Only three industries out of the total (11.1 percent) show that at least 10 percent of their firms are foreign-controlled. These are the smaller-sized industries such as inks, other chemical products, and aircraft.

The majority (59.3 percent) of industries show VACRs exceeding the manufacturing average. However, almost half (48.2 percent) of the sectors also registered declining ratios, and one-third (33.3 percent) exhibited the opposite, increased VACRs. The smaller the number of firms in the industry, the more concentrated it is, while the larger populations are more disperse.

Some Regression Results

The industrial structure is partly a response to the presence or absence of government intervention (at the extreme, either the excess or lack, respectively) which serves to encourage or inhibit certain industries and not others, i.e., a particular structure will thrive depending on the configuration of regulations and incentives. At the same time, government policy does not operate in a vacuum and is influenced by the structure of the economy, unless there is a deliberate move to change that structure drastically. In the Philippines, this politico-economic nexus is inescapable knowing the long history of government regulations affecting industry, and the nature of Philippine business and politics.

Three sets of relationships were therefore tested using the industry data and the price ratios. These equations were run on three sets of data: (a) both protected and liberalized sectors excluding those with suppressed information (n = 111); (b) all sectors excluding the suppressed (n = 139); and (c) all sectors excluding those whose share in manufacturing output was 0.1% and below (n = 91).

The first relationship uses a logit model to find out which establishment characteristics in 1988 explain whether or not an industry was protected by import restrictions in 1992. The dependent variable is the probability that an industry is protected given the characteristics of that industry:

$$P_1 = 1 \text{ if protected by import restrictions} \quad (1)$$
$$= 0 \text{ if not}$$
$$= f\,(\text{NOFIRM, TOTEMP, FOREQ, VACR, CAPLAB, AVEVA, TARIFF})$$

where NOFIRM = number of firms
TOTEMP = total employment
FOREQ = foreign equity
VACR = value-added concentration ratio
CAPLAB = capital-labor ratio, given by VFA per worker
AVEVA = average value-added
TARIFF = average tariff rate for the industry.

Industry size or NOFIRM is an indicator of degree of competition. Hence, a negative sign is expected since industries with a smaller number of firms are likely to behave monopolistically and secure their market shares by lobbying for protection. TOTEMP is expected to be positively correlated

since industries "which can plead a strong case for labor are most likely to secure protection" (Alabastro and Irlanda 1991) FOREQ is expected to have a positive relationship if the government's incentives to foreign investors are to be consistent with other policies such as import regulations. VACR should have a positive sign given that concentrated industries would tend to be more organized and lobby more strongly than if they were competitive. Similarly, the sign of CAPLAB should be positive since industries with huge capital investments are more likely to lobby for protection in order to secure these investments, or obtain a protective guarantee from the government even before actually investing. AVEVA is expected to be positively correlated since firms which contribute more value-added may use this to justify protection. Low TARIFF levels are expected to be associated with the likelihood of protection given that tariffs replaced import restrictions such that industries no longer protected by QRs would have high tariff barriers instead.

An alternative equation only posits FOREQ, MARKUP, VACR, and TARIFFS as explanatory variables. This time MARKUP or the excess of price over costs is included because it shows the market power of firms, and would be positively related to the likelihood of enjoying import protection.

Table 8 gives the results of the regression. For all data sets, Equation 1a shows that FOREQ is the significant explanatory variable, with the correct sign. For the first data set, NOFIRM, TOTEMP, CAPLAB, and TARIFF also exhibit the expected signs, but VACR and AVEVA do not. For the second data set, TARIFF also has the unexpected sign. The third data set shows better results, with AVEVA carrying the only unexpected sign.

Equation 1b shows similar results across data sets, and again FOREQ is the significant variable with the correct sign. Only MARKUP has the opposite sign.

The second relationship tested was that of the intensity of restrictions, as measured by the price ratio of 30 regulated goods, with the corresponding industry characteristics, given at the 5-digit PSIC level. Least squares was used in estimating the equations, and the variables described above were also used as explanatory since it was the strength of the restriction that was to be explained.

$$\text{PRATIO} = f\ (\text{NOFIRM, FOREQ, VACR, CAPLAB}) \qquad (2a)$$

No variables came out as significant although only CAPLAB had the incorrect sign.

TABLE 8

REGRESSION RESULTS

Equation (1a)
Dependent Variable: DUM

Independent Variables	Coefficients and (t-stat) Dataset A n=111		Dataset B n=139		Dataset C n=91	
constant	-0.76		-1.97		-0.95	
NOFIRM	-0.0015	(-0.60)	-0.0017	(-0.65)	-0.0016	(-0.56)
TOTEMP	1.16E-05	(0.44)	1.59E-05	(0.62)	6.08E-06	(0.21)
FOREQ	0.05	(1.93)	0.06	(2.37)	0.07	(2.21)
VACR	-0.0005	(-0.05)	-0.0001	(-0.01)	0.0031	(0.22)
AVEVA	-1.70E-07	(-0.15)	-1.80E-07	(-0.16)	-5.15E-07	(-0.41)
CAPLAB	0.0004	(0.75)	0.0006	(1.08)	0.0002	(0.44)
TARIFF	-0 02	(-0 85)	0.0039	(0.18)	-0.02	(-0.80)
Log likelihood	-56.10		-61.98		-45.94	

Equation (1b)
Dependent Variable: DUM

Independent Variables	Coefficients and (t-stat) Dataset A		Dataset B		Dataset C	
constant	-0.67		-1.78		-0.84	
FOREQ	-0.05	(2.15)	0.07	(2.76)	0.07	(2.33)
MARKUP	-0.63	(-0.71)	-0.70	(-0.78)	-1.16	(-1.05)
VACR	0.0042	(0.42)	0.0039	(0.42)	0.0095	(0.85)
TARIFF	-0.02	(-1.10)	-0.0013	(-0.07)	-0.03	(-1.06)
Log likelihood	-56.35		-62.62		-45.57	

TABLE 8 (CONTINUED)

Equation (2a)
Dependent Variable: PRATIO n=30

Independent Variables	Coefficients and (t-stat)			
constant	1.94		1.70	
VACR	0.0065	(0.36)	0.0091	(0.61)
FOREQ	0.05	(1.76)	0.05	(1.84)
CAPLAB	-0.0005	(-1.19)	-0.0006	(-1.24)
NOFIRM	-0.0012	(-0.26)		
Adjusted R-squared	-0.004		0.03	

Equation (2b)
Dependent Variable: PRATIO n=71

Independent Variables	Coefficients and (t-stat)			
constant	2.86		2.21	
VACR	-0.0064	(-0.38)		
NOFIRM			0.0014	(0.60)
PDUM	-1.21	(-1.34)	-1.13	(-1.23)
TARIFF	0.04	(1.12)	0.04	(1.17)
Adjusted R-squared	0.02		0.02	

TABLE 8 (CONTINUED)

Equation (3a)
Dependent Variable: VACR

Independent Variables	Coefficients and (t-stat)					
	Dataset A		Dataset B		Dataset C	
constant	69.73		68.32		69.23	
TARIFF	-0.31	(-1.38)	-0.29	(-1.50)	-0.42	(-1.77)
PDUM	8.68	(1.73)	9.33	(2.04)	8.51	(1.55)
Adjusted R-squared	0.04		0.03		0.04	

Equation (3b)
Dependent Variable: MARKUP

Independent Variables	Coefficients and (t-stat)					
	Dataset A		Dataset B		Dataset C	
constant	0.15		0.27		0.12	
VACR	0.0033	(2.42)	0.0025	(2.16)	0.0036	(2.23)
PDUM	-0.02	(-0.28)	-0.03	(-0.40)	-0.06	(-0.68)
TARIFF	4.58E-05	(0.01)	-0.0016	(-0.63)	0.0019	(0.53)
CAPLAB	6.68E-05	(0.87)	6.37E-05	(0.89)	4.95E-05	(0.60)
Adjusted R-squared	0.04		0.003		0.03	

As a measure of price-setting ability, price ratios were hypothesized as positively influenced by the level of tariffs across industries, whether or not protected by import restrictions (a dummy variable with 1 representing protected and 0 liberalized), and the extent of concentration as an indicator of market power. The price ratios of 71 regulated and liberalized goods and their corresponding industry characteristics were run using least squares:

$$PRATIO = f\ (TARIFF, DUM, VACR) \tag{2b}$$

None came out significant. TARIFF carried the expected positive sign but DUM and VACR showed the opposite, perhaps because liberalized industries were highly concentrated in the first place.

The third relationship tested was between the extent of monopolization in the market structure as approximated by the VACR, and the level of tariffs and presence or absence of import restrictions. The objective was to see whether protection in either form influences industrial concentration. Because the causation was reversed, the regulatory structure in 1986 was instead examined vis-a-vis the 1988 establishments characteristics.

$$VACR = f\ (TARIFF, DUM) \tag{3a}$$

For all data sets, the three resulting regressions show DUM to be significantly positively related to VACR. This supports the view that QRs contribute to less than perfectly competitive markets or grant monopoly power to protected producers.

Market power may be approximated by the price-cost markup of firms, estimated here as the ratio of the value of output net of wages and costs to wages and costs. To examine what relationship it has with the degree of concentration in the industry, tariff protection, the presence or absence of import restrictions, and capital-intensity, least squares was used in estimating the following equation:

$$MARKUP = f\ (VACR, DUM, TARIFF, CAPLAB) \tag{3b}$$

Only VACR was significant in all three data sets described above. Together with CAPLAB, it carried the expected positive sign. DUM was negatively correlated with MARKUP for all data sets, and TARIFF only in the second data set. Given the aforementioned finding that restrictions contri-

bute to high VACRs, if the latter in turn contribute to high MARKUPs, then the negative relationship between DUM and MARKUP is unexpected.

The above regressions, at best, present tentative results given the aggregation done, less than perfect correspondence between commodity and industry codes (especially where only a few items out of a whole range of goods are affected, and whose relative importance is hard to ascertain), use of unweighted variables such as average tariffs, suppressed information, and simplifying dummy variables. The cumulative impact of deregulation may also not be too obvious when looking at a single-year cross-section of industries on which many other influences are acting but which have been left out of the equations.

Welfare Effects in Car Assembly

The purpose of this section is to provide some estimates of the welfare effects of import restrictions covering passenger cars. The model developed by Wendy E. Takacs (1991) is used to examine and measure the distortions, costs, and transfers among groups arising from the car industry protection scheme.[8] In the Philippines, this consists of a combination of tariffs on imported vehicles and parts, import restrictions and local content and compensatory export requirements, which are all embodied in the Car Development Program (CDP) which replaced the Progressive Car Manufacturing Program in July 1987.

Tariffs are 50 percent on fully assembled or completely-built-up (CBU) vehicles and 30 percent on completely-knocked-down (CKD) components for assembly purposes. Only passenger cars up to 2,800 cc. engine displacement are assembled under the program and are importable in CKD condition. Imports of new and used CBU units are not allowed, with some exceptions, i.e., no-dollar imports, those purchased by diplomatic officials, prototype units, and those with engine displacement of 2,500 to 2,800 cc. required by tourist-oriented service establishments not later than 1988.

The minimum vehicle local content requirement is determined by the BOI annually in consultation with the assemblers and parts suppliers; in 1990, it was 40 percent. Assemblers may select those components which they will manufacture or purchase locally, but certain parts are to be mandatorily

8 For a detailed presentation of the model, see Appendix 10, p. 124 of de Dios (1994). Takacs again developed in 1994 a model to specifically assess the net impact of the Philippine protective regime on its motor vehicle industry (including cars and commercial vehicles). Her estimates are higher than the calculations of this paper mainly because of differences in the values of parameters.

deleted, that is, the assembler is compelled to buy them locally. A maximum cost penalty of 15 percent is imposed on the locally manufactured part which means that the percentage by which its selling price is greater than the landed cost of its imported CKD counterpart should not exceed 15 percent. The program encourages increased local content above the prescribed minimum through an incentive scheme which gives the assembler additional foreign exchange credit equal to the foreign exchange equivalent of the value-added of the local component, excluding cost penalties. In addition, a premium on local content percentages is given to high-technology items which are domestically produced and which have already attained the minimum local content rate, e.g., diesel/gasoline engines, transmissions, transaxles and axles.

To import CKD parts, assemblers must earn 50 percent of their foreign exchange through exports of both automotive and non-automotive products, the former being given higher foreign exchange credits and the latter progressively phased out until none are credited in 1993.

Ad valorem taxes are imposed on automobiles, based on the selling price of the manufacturer or importer and this in turn is included in the base for computing the value-added tax. Excise tax rates are 15 percent, 35 percent, 50 percent, or 100 percent depending on the engine displacement and type of engine.

To comply with the compensatory export requirement, at least one components manufacturer verified that the assembler pays him a premium of 5 percent of export credits on the products he exports. Domestic prices of components exceed world prices by a range of 2 to 20 percent, although some suppliers say that it is difficult to compare prices because of the differences in models and therefore components used. Other suppliers claim low labor costs enable them to price parts more cheaply than competitors abroad, but at the same time lower labor productivity (it takes more man-hours to produce one unit here compared to Japan) accounts for higher domestic prices. Because prices in the export market are lower, profit margins are also lower but this is compensated for by the large volumes exported.

The local assemblers are subsidiaries of foreign companies and are able to intercede for component makers in the latters' search for foreign contacts and get credit for it. The assembler is also in a position to change the export price because it usually exports to its parent company or deals with other foreign markets through the parent company.

The magnitude of the areas in the Takacs model identified as net welfare losses and transfers can be calculated based on the actual values of the policy parameters t_A, t_C, x_K, and δ, and observed values of prices, quantities, and the premium paid for export invoices for compensatory exports. The data used in calculating the effects of the domestic content and compensatory export requirements are as follows:

Variable	Value	Measure and Year
π	0.05	percentage of the value of export receipts paid to the exporter of components for receipts to be credited for purposes of fulfilling the compensatory export requirements (1992)
t_A	0.6325	price-increasing effect of the 50 percent tariff on CBUs taking into account the fact that the tariff-inclusive price is the base for the 15 percent excise tax, and the tax-inclusive price is the base for the 10 percent value-added tax (1992)
t_K	0.3795	price-increasing effect of the 30 percent tariff on CKDs, taking into account the 15 percent excise tax and the 10 percent VAT (1992)
x_K	0.2244	actual compensatory exports for CKDs, i.e., the ratio of auto-related exports to the value of CKD imports (1990)
δ	0.2223	average physical domestic content ratio (1990)
P_A^*	387152	price of imported 1.6L CBU car (1992)
P_A	485700	price of locally assembled equivalent (1992)
Q_A	21658	number of cars assembled (1991)
D_A	26101	number of cars bought plus imported (1991)
σ	0.5133	share of component cost in the final cost of the assembled car (1992)
V_C	1,967,000,000	value of components production computed as (ration of components export to car sales in 1990) x (car sales in 1991) / (1 - ratio of components exports to production in 1990)

Tentative estimates of the magnitude of the welfare effects were computed (Table 9) using the aforementioned data, the equations for the areas,

TABLE 9

WELFARE EFFECTS OF PROTECTION IN THE CAR INDUSTRY, 1992

(P millions)

Assumed parameters			
Premium on local parts	0.05	0.05	0.05
Demand elasticity: cars	1	0.5	1
Supply elasticity: cars	1	1	2
parts	1	1	2
Consumer loss (adek)	2,833.1	2,702.6	2,833.1
Transfer to assemblers (nlik)	743.5	743.5	710.6
Efficiency loss, cars (def + lhi)	293.7	163.3	326.6
Transfer to parts manufacturers (oqtu)	95.9	95.9	93.4
Efficiency loss, parts (qrt)	2.5	2.5	4.9
Total transfer to producers (nlik + oqtu)	839.4	839.4	804.0
Total efficiency loss (def + lhi + qrt)	296.2	165.8	331.5
Consumer loss per unit assembled (P)	130,806	124,804	130,806
Efficiency loss per unit assembled (P)	13,676	7,655	15,306

and assumed elasticities of demand of -0.5 and -1.0 and elasticities of supply of 1.0 and 2.0.

The results show a loss to car buyers of P2.7 to P2.8 billion a year, transfers from buyers to assemblers of P711 million to P744 million, and efficiency losses of P163 million to P327 million. In the components market, the transfers to manufacturers range from P93 to P96 million, while the efficiency losses are between P2.5 and P4.9 million. The total efficiency losses are between P166 to P332 million.

These figures serve to illustrate the impact of protection on the car industry, but are tentative for the following reasons:

(a) The model assumes a competitive assembly industry, when in reality entry is limited to a few participants. The results are therefore understated.

(b) For lack of elasticity estimates based on actual Philippine data, the elasticity assumptions in the Takacs model for the Uruguayan market are used.

(c) A number of interviews were conducted with three components manufacturers, one assembler and the association representative for cars and for car parts. Their verbal estimates of price differences rather than actual recorded data were used in assessing the arrangements described in the Takacs model obtained here. In fact, the estimate of the export premium came from only one parts supplier, since it was very difficult to get unambiguous answers from the rest.

(d) The commercial vehicle industry is not included in these estimates, even if they purchase their parts from the same component manufacturers.

(e) The estimate of the compensatory export requirement used includes only auto-related exports rather than both auto and non-auto, which are allowed in the CDP until 1992. Including the latter would result in a 59.7 percent foreign exchange self-sufficiency rate (equal to total net foreign exchange credits divided by total foreign exchange used). Likewise, the domestic content ratio used only includes local physical content and excludes the "assembly allowance" of 15 percent.

(f) The data spans three years because of the difficulty of obtaining a consistent set for a single year, or of interpolating from what is available for one year.

(g) The values for t_A, t_K, P_A* and P_A are for one particular model, a 1.6L gasoline engine manual transmission, rather than an average of tariffs and prices of all models.

The model indicates that the protective regime keeps car prices high, maintains high-cost domestic production of cars and car components, and transfers large amounts to special interest groups. Import restrictions and higher car prices encourage greater output from assemblers, but the local content and compensatory export requirements and tariffs on CKDs discourage production by increasing input costs, the net effect depends on the relative strengths of each element. Considering that assembly is limited to three firms only, even if they are constrained with respect to the number of models to produce, more rather than less assembled cars is the net effect of the regulations. Hence, the consumer loss from higher prices represents partly a transfer to assemblers, and partly an efficiency loss due to increased domestic assembly of cars at a higher cost than the world price of CBUs.

Components manufacturers are favored by all aspects of the protective regime: the tariff on CKD packs protects them from imported components, the tariff on CBUs and restrictions on imports maintains domestic assembly operations and the demand for components, the local content requirement forces assemblers to use local parts and the compensatory export requirement increases the demand for parts to be exported. All these increase the demand for components, raising prices and output. Part of the consumer loss from higher car prices is a transfer to components makers, and another part an efficiency loss due to higher cost of producing components domestically rather than importing them at lower world prices.

CHAPTER 7

Summary and Conclusions

In 1990, a detailed and exhaustive study was made of every attempt at significant trade reform undertaken by developing countries after the war (Papageorgiou et al. 1990); this covered the course of liberalization in 19 countries during 36 reform episodes. The results were found to be encouraging and in some cases surprising, for two reasons. One is that the transitional costs of liberalization seem smaller than feared: the balance of payments did not deteriorate in most reforming countries, its effects on employment were small and was associated with higher output instead, and the distribution of income did not necessarily worsen since there was no proof that low-income groups gained nor were worse-off.

The second is that despite the complexities of the process and the different circumstances surrounding each program, the successful ones had common elements. Prominent among these was momentum because programs that started boldly and followed through proved durable, as in the cases of Chile and Greece. The other elements identified were (a) competitive real exchange rates which usually began with depreciation and avoided sharp fluctuations, (b) prudent macroeconomic policies wherein budget deficits were kept smaller than output, (c) properly sequenced reform, and (d) political stability. Thus, a weak or hesitant approach, expansionary fiscal and monetary policies, and capital-market preceding trade liberalization were associated with failures. Credible pre-announcement of further measures also meant either full or partial survival, and initial economic conditions promoted success to the extent that they promoted bold reforms and the policies needed to back them up.

But the clearest finding is that a decisive reduction in import restrictions generally led to success; this in fact was the only critical element for the survival of reform. Six years also seemed to be the minimum duration for a program to last indefinitely. Furthermore, the longer the distorting policies had been in place, the harder it was for reform to succeed. Therefore, a failure in the initial attempt means that the second should be bold since a history of failures undermines the credibility of reform.

The main results of this paper may be summarized as follows: An accounting of commodities subjected to import regulations shows that a significant number were either restricted after being liberalized, liberalized after being restricted a second time, liberalized twice in a row, liberalized but not in Circular 1029, double-counted, mentioned as liberalized but having no specific PSCCs, or could not be traced to previous regulations. In the same way, Lists A, B, and C contain those already liberalized, those not listed in Circular 1029, or double-counted. A substantial number are also not found in the lists which appeared in Circular 1029. Likewise, the latest consolidating Circular includes items which are not found in either the lists or Circular 1029. This indicates that the implementation of the program was less than systematic, even if criteria are said to exist.

Taking the above into account yields 250 remaining regulated commodities, which exceeds the official count of 174 by 76 items or the number that was left out of the lists by Circular 1389. Half (50.1 percent) of the universe of commodities was subject to restrictions at any time in the last two decades, and 91.8 percent have been liberalized although this excludes several whose PSCCs were not specified. The remainder mainly consists of machinery and transport equipment, food, and chemicals. The import licensing criteria indicate that many are restricted for national security, public health and safety reasons, the rest are regulated to protect domestic industry. The procedures suggest wide discretionary powers exercised by the agencies implementing these regulations, and arbitrary decisionmaking is possible if not inevitable.

The characteristics of both regulated and liberalized commodities enabled us to explain their relative prices and import levels. However, the expected changes in price ratios and imports after liberalization occurred only for some goods, perhaps because of any of the following reasons: (a) the time period covered was not long enough or it is too early to establish the effects for those liberalized much later; (b) tariffs are effective in maintaining the price gaps; (c) quality differences preclude any disciplining

effect on prices; or (d) domestic conditions deter local producers from competing with relaxed imports.

The industries producing the regulated and liberalized goods as of 1992, as well as those that were never subject to import regulations were examined separately and compared with manufacturing as a whole. The protected industries, on the average, employed the most workers, paid the highest wages, used the largest amounts of capital, had the most foreign equity, contributed the highest value-added, and were the most concentrated among the three sectors. The liberalized sector averages were closest to that of manufacturing. Between 1983 and 1988, concentration ratios did not change significantly even though many restrictions were lifted from 1986 to 1988.

The regression results showed that foreign equity is significantly positively correlated with the likelihood that an industry is protected by import restrictions. Price ratios, as an indicator of the intensity of restrictions, are correlated negatively with industry size and positively with foreign equity and concentration ratios, as expected, but they are not significant. As a measure of the ability of industries to be price-setters, the price ratio has a positive relationship both with tariffs and with industry size but a negative relationship with concentration ratios and protection, although none were significant.

Further tests showed that industrial concentration is significantly positively correlated with the presence of import restrictions and negatively but not significantly correlated with tariffs. The price-cost markup, which is a measure of price-setting ability, is significantly positively correlated with concentration ratios.

As an illustration of welfare effects of protection, the automotive assembly industry reveals huge consumer and efficiency losses and large transfers to assemblers and components manufacturers because of a combination of import restrictions, tariffs, and local content and compensatory export requirements. It is likely that import restrictions cause prices to differ more than just tariffs do, as in the example where the selling price of the locally-assembled car is 95.2 percent higher than the price of the CBU equivalent, and tariffs are only 50 percent. Removing these restrictions or converting them into tariffs would be a laudable first step in transferring revenue to the government and reducing consumer and efficiency losses.

To conclude, import controls have undoubtedly become a permanent feature of the economy, considering that three decades ago, the government declared that it should not be so. From the original intent of rationing scarce

foreign exchange, industry protection became the justification for the imposition of several restrictions. This would have been reasonable if this strategy was pursued based on an industrial priority system, with clear criteria. But even the principles of essentiality and local sufficiency were short-term constructs. Once instituted, controls were difficult to remove, as is borne out by the recent liberalization record. Facility of implementation resulted in an unsystematic phasing and sequencing, again traceable not merely to the lack of definite criteria but to the absence of an industrial ranking system once again. The lack of decisiveness or commitment by the government, manifested in the reimposition of restrictions or subscription to outdated thinking, has also made lobbying effective.

Trade policy has therefore determined the structure of industry rather than the other way around, with nontariff import control being a significant policy tool. This is unfortunate because import restrictions are more distortive than tariffs since they disallow the price mechanism from working, and are neither fixed nor transparent. Inefficiencies are even more costly if they take place in strategic industries, such as chemicals, which in fact comprise part of the remainder. For the other "hardcore" items such as machinery and equipment for local content programs, the inefficiencies are classic and affect consumer welfare. Even within an imperfectly competitive framework, quotas allow firms to create market power where none existed before, or increase it more than tariffs do. Our regression results have shown that indeed, the presence of QRs is correlated with high industrial concentration, which in turn is asociated with large price margins. Their continued protection is thus cause for concern.

The cumulative effects of all liberalization episodes will probably be felt over a longer period of time than the four years that have passed since the last deregulation of important items. For those whose price ratios and import levels are not responsive to delisting, other reasons could be more constraining. Unfavorable domestic conditions such as poor infrastructure stand out as a hindrance to the competitiveness of our industries. Therefore, it is imperative that this constraint is dealt with before one expects an improved performance. Nevertheless, the "ineffectiveness" of liberalization in these cases is not a justification for continued restrictions, knowing that the decisive removal of QRs is crucial to success. The hesitant or unsystematic manner in which the ILP has been implemented has undermined the credibility of reform. It seems that the obvious — the commitment of the government as the key to a sustainable reform process — has escaped the policymakers themselves.

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APPENDIX 1

NUMBER OF COMMODITIES REGULATED AND LIBERALIZED, 1970-1994 BY TWO-DIGIT COMMODITY LEVEL

Commodity	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
00 Live animals for food	1					17				9									16[a]					5[a]	
																	16		6			5[b]	11[b]4		
01 Meat and preparations	29					15				4				13[a]	15[a]				11[a]					25[a]	
												16	13				3		8				38[b]8		
02 Dairy products, birds' eggs	11					2	18							4	4[a]										
												3	8			4[b] 20	4								
03 Fish and preparations	47					1	1				1		24[a]	10	23[a]				12[a]						
												23	24				24[b]10		2				3[a]33[b]	1	
04 Cereals and preparations	31					5								16				2[a]	6[a]					6[b]3[c]	
												18	7				21						2[b] 1		
05 Vegetables and fruit	176													2[a]72										2[a]	
												15	99			7	2[b]99	5	19						
06 Sugar, honey and preparations	11					1								14											
												6	5				12						3		
07 Coffee, cocoa, tea, spices	49													1					4[c]						
												10	1	31			1								
08 Feeding stuff for animals						20								2										2[a]	
																	22								
09 Miscellaneous edible products	35					1								24											
												10	22	2			24	2							
Total regulated	390					62	19			13	1			143					4[c]					5[d]	
Total liberalized												101	179	33		27	212	7	35				17		
11 Beverages	45													2											
												2				7	38								
12 Tobacco	10													9											
																	12	5	2						
Total Regulated	55													11											
Total liberalized												2				7	50	5	2						

APPENDIX 1 (CONTINUED)

Commodity	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
21 Hides, skins, furskins														3											
22 Oil seeds, oleagnous fruit	2					1											3								
23 Rubber latex												2					1								
24 Cork and wood	4																								
25 Pulp and waste paper																4									
26 Fibers, animal hair, old textile articles	5					11									1		1								
27 Crude minerals, fertilizers	1													3			2[a]								
28 Ores and concentrates, metal waste and scrap																4	13	1[b] 2							
29 Crude animal and vegetable materials, n.e.s.	5			1		1							1	1				1					1[c]		
Total regulated	17			1		13						2		25			1								
Total liberalized																	29								
32 Coal and coke									2					33	1										
33 Petroleum							11		3			4	1			8	48	3					1[d]		
34 Gas				1										5											
Total regulated				1			11		5					5				2		2					
Total liberalized																									

APPENDIX 1 (CONTINUED)

Commodity	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
4 Animal and vegetable oils	1													2											
												1							2						
51 Organic chemicals	1											1		6	1				1[c] 2[d]					3[d]	
												1					5								
52 Inorganic chemicals							2	3		1			2[a]	2	4				1[d]					1[a]	
													4				2[b] 3						1		
53 Dyeing materials, pigments	4													1											
												4					1								
54 Medicinal and pharmaceutical products	3							23																1[e]	
													1	2									21		
55 Essential oils, soap, toilet preparations	24																								
												17	6				1								
56 Fertilizers			19																					1[a]	
																							18		
57 Explosives	2																								
58 Artificial resins, plastic materials										1			59		1		49	4	6					1[d]	
59 Miscellaneous chemical products	2							7																2[d]	
												1	1												
Total regulated	36		19				2	33		2		1	59	9	5				1[c]					6[d]	
Total liberalized												23	12	2	1		59	4	6				40		

APPENDIX 1 (CONTINUED)

Commodity	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
61 Leather and manufactures	3													15											
												2				1	15								
62 Rubber and articles	12						8						6	8										1[a] 3[d]	
													6				20								
63 Cork and wood manufactures	16								1					14											
												13	3				15								
64 Paper and paperboard	55		1						1				1[a] 87	17											
												45	7				49	1[b] 57		2		1			
65 Textile yarn and fabrics, made-up articles	55					21				79			57	64			2[a]								
												15	21				96	2[b] 67	77						
66 Mineral manufactures	26					2			1		1	1	5	44					2[c]						
												3	12			2	37	10	10	2[c] 5			1		
67 Iron and steel						128																			
																	109	15	4						
68 Nonferrous base metals														8											
																	8								
69 Manufactures of base metals	57								1					54										2[a]	
												2	30	6		2	65		6				1		
Total regulated	224		1			151	8		4	79	1	1	155	224					2[c]					3[c]	
Total liberalized												80	79	6		5	414	149	97	2[c] 7		1	2		

APPENDIX 1 (CONTINUED)

Commodity	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
71 Power generating machinery							4	4					7	4					10[c]					3[a]	
																			3	10[c] 15	1[d]				3[b]
72 Specialized industrial machinery and equipment	2												1[a] 1 2	4					35[c] 7[c]	28[c] 5			1[b]		
73 Metalworking machinery														4					8[c]						
																				8[c] 4					
74 Nonelectric machinery	4		2										3[a] 6	2					13[c]						
													4				2		6	8[c] 2			3[c] 2[c] 1		
75 Office machines								3																	
															5[f]										
76 Telecommunications equipment	16								21				4[a] 16	12[c] 16					7[c] 2[c] 8			1[b]3[b] 8	13[c] 1[c]20		
77 Electric machinery and apparatus	34								3				16[a]	1[a] 32					1[c] 20[c]						
													34							1[c]12[c]5	1[c]	3	17[c]7[c] 5[c]28		
78 Motor vehicles	22			5	1		9	7											24[c]					1[c]21[e]	
													1						10	3[c]	1[d] 4		3[c]7[c]19		
79 Railway vehicles, aircraft, and ships	1					20																			
																	1			14			5		
Total regulated	79		2	5	1	20	13	14	24				14	62					117[c]					1[e]	
Total liberalized													57				3		7[c] 27	69[c]45	2[c]1[c]4	3[c] 11	18[c]8[c]73		

APPENDIX 1 (CONTINUED)

Commodity	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
81 Sanitary, plumbing heating and lighting fixtures	1													9											
82 Furniture	22											1		7			8		1					4[e]	
83 Travel goods	14											16	6				7								4[b]
84 Wearing apparel	222											5		7		2									
85 Footwear	25												211	12		11	12								
87 Measuring and controlling instruments	2												25	2			2								
88 Photographic apparatus, optical goods, watches	7												5[a] 24	1					1[b] 20	2					
89 Miscellaneous manufactures	158					2			1	1		1	5	1			1		4						
Total regulated	451					2			1	1		29	2	77		10	135		13				1		
Total liberalized													40												
90 Commodities n e c	54									4		52	25	109		23	165		38	2			1		
Grand totals													289	7										1[d]	
Regulated	1307	0	22	7	1	248	53	47	34	99	2	2							2			3	2		
Liberalized													253	598	6				124[c]					16[d]	
												263	617	48	1	70	951	170	7[c]209	71[c]56	2[d]1[c]4	3[c] 15	8[d]18[c]135		

* Figures in the upper row of each commodity description refer to regulated items and figures below, to liberalized items.

a Re-restricted

b Re-liberalized

c Not in C1029 but in lists

d Not in C1029 or lists

e In C1029 but not in lists, re-restricted or re-liberalized

f No record of date regulated.

g Re-restricted based on lists

APPENDIX 2

REMAINING REGULATED COMMODITIES

(as of June 1994)

PSCC	Description
001.4109	Other live poultry of a weight not exceeding 185 g, n.e.s.
001.4901	Chickens, live, exceeding 185 g, for breeding
001.4902	Chickens, live, exceeding 185 g other than for breeding
001.4909	Poultry, live, exceeding 185 g, n.e.s.
001.9900	Other live animals chiefly for food, n.e.s.
011.3000	Meat of swine, fresh chilled or frozen, n.e.s.
011.4100	Chickens, killed or dressed, fresh chilled or frozen
011 4200	Ducks and geese, killed or dressed, fresh chilled or frozen
011.4300	Turkeys, killed or dressed, fresh chilled or frozen
011.8902	Poultry meat, n.e.s., fresh chilled or frozen
011.8903	Meat, fresh chilled or frozen, n.e.s.
012.1100	Bacon
012.1200	Ham and shoulders, dried, salted or smoked
012.1300	Pork, salted
012.1900	Other dried, salted or smoked meat of swine
012.9201	Chicken meat, salted, in brine, dried or smoked not in airtight containers
012 9901	Meat meal and flour, fit for human consumption
012.9903	Poultry liver, salted, in brine, dried or smoked
012.9904	Edible offals of swine, salted, in brine, dried or smoked
014 2100	Sausages, all kinds, not in airtight containers
014.2200	Sausages, all kinds, in airtight containers
014.9101	Bacon, in airtight containers
014.9102	Ham, in airtight containers
014.9103	Pork, in airtight containers
014.9104	Pork luncheon meat, in airtight containers
014.9109	Meat and meat preparations, in airtight containers, n.e.s.
014.9201	Chicken meat, in airtight containers
014.9209	Other poultry meat, in airtight containers
014.9300	Meat pastes and spreads

APPENDIX 2 (CONTINUED)

PSCC	Description
014.9900	Other prepared or preserved meat and edible offals, n.e.s.
041.1000	Durum wheat, unmilled
041.2000	Other wheat (including spelt) and meslin, unmilled
042.1102	Non-glutinous rice in the husk, for propagation
042.1109	Rice in the husk, for purposes other than propagation
042.1201	Glutinous rice husked but not further prepared
042.1202	Non-glutinous rice husked but not further prepared
042.2101	Glutinous rice, semi- or wholly milled, whether or not polished or glazed
042.2102	Non-glutinous rice, semi- or wholly milled, whether or not polished or glazed
042.2103	Non-glutinous rice for emergency importation
043.0000	Barley, unmilled
044.0100	Maize (corn), unmilled
044.0200	Corn seed, all varieties, for propagation
045.1000	Rye, unmilled
045 2000	Oats, unmilled
045.9200	Sorghum, unmilled
045.9900	Other cereals, unmilled, n.e.s.
046.0200	Groats, meals and pellets of wheat, including meslin
047.0202	Meal, groats and pellets of maize
048.1101	Barley, pearled, rolled or flaked
048.1102	Maize, kibbled
048.1103	Oats, kibbled or rolled
054.1100	Potatoes, fresh
054.5101	Garlic, fresh or chilled
054.5102	Onions, fresh or chilled
054.5909	Cabbage, fresh or chilled
054.8101	Manioc (cassava), fresh or chilled
054.8103	Sweet potatoes (camotes), fresh or chilled
071.1101	Arabica coffee, raw or green, not roasted
071.1102	Coffee, raw or green, not roasted, n.e.s.
071.1103	Coffee husks and skins

APPENDIX 2 (CONTINUED)

PSSC	Description
071.1104	Robusta
071.1201	Coffee, roasted, unground
071.1202	Coffee, roasted, ground
071.1203	Coffee, roasted, ground, decaffeinated
071.1300	Coffee substitutes containing coffee
071.2000	Extracts, essences or concentrates of coffee and preparations with a basis of those extracts, essences/or concentrates
081.2100	Bran, sharps and other residues from the shifting, milling or working of rice or maize
081.9304	Corn gluten feed and other residues from the manufacture of starch
269.0101	Used clothing
322.1000	Anthracite, whether or not pulverized but not agglomerated
322.2000	Other coal, whether or not pulverized but not agglomerated
323.1100	Briquettes, ovoids and similar solid fuels manufactured from coal
334.1101	Gasoline, aviation
334.1102	Gasoline, motor
334.1901	Petroleum naphtha
334.2100	Kerosene, including kerosene type jet fuel
334.3001	Diesel oil
334.3009	Gas oil, n.e.s.
334.4001	Bunker fuel
334.4009	Fuel oils, n.e.s.
334.5101	Lubricating oil
334.5102	Lubricating oil
334.5104	Lubricating oil base stock
334.5105	Lubricating oil base stock
334.5109	Prep. n.e.s. or inc., cont. not < 70% by weight of petroleum oils or those obtained from bituminous minerals
341.3902	Liquified petroleum gas
511.3901	Chloroflourocarbon
513.7101	Acetic anhydride, commercial
513.7102	Acetic anhydride, USP and NF and reagent grades

APPENDIX 2 (CONTINUED)

PSCC	Description
522.2300	Nitric acid; sulphonitric acid
523.1400	Chlorates and perchlorates (incl. potassium chlorates and perchlorates)
523.2100	Nitrates and nitrites
523.2500	Sodium cyanide
541.3100	Penicillin and derivatives
541.7104	Penicillin
541.7119	Other antibiotics, n.e s.
562.1100	Ammonium nitrate, whether pure or not pure
584.2100	Cellulose nitrates, non-plasticized
591.1001	Agricultural insecticides
591.1002	Insecticidal preparations with a basis of Paris green (copper aceto-arsenite)
591.1004	Fumigants, soil and grain
591.1009	Insecticides in forms or packs for retail sale or as preparations or as articles, n e s.
591 2000	Fungicides in forms or packs for retail sale or as preparations or as articles
591.3000	Weed killers (herbicides) in forms or packs for retail sale or as preparations or as articles
591.4901	Rat poisons
591.4902	Anti-sprouting, parasiticidal and similar products
592.1200	Wheat gluten, whether dried or not dried
625.9103	Automobile tubes, of all sizes, used
625.9107	Truck tubes, of all sizes, used
625.9901	Automobile tires, of all sizes, used
625.9907	Truck tires, of all sizes, used
625.9919	Other tires for agriculture, construction and industrial equipment, n.e.s.
699.6915	Coin blank essentially of steel
699.7503	Coin blank essentially of nickel
699.7705	Coin blank essentially of zinc
699.7804	Coin blank essentially of tin
699.7905	Coin blank essentially of aluminum

APPENDIX 2 (CONTINUED)

PSCC	Description
699.8141	Doors, window frames and other structural parts, of copper
699.8146	Pre-fabricated and sectoral buildings and assemblies and parts thereof, of copper
751.8201	Photocopying apparatus with optical system
751 8202	Contact-type photocopying apparatus
751.8203	Thermocopying apparatus
781.0100	Passenger cars (excl. buses), diesel or semi-diesel, CKD (to be imported by assemblers)
781 0200	Passenger cars other than diesel or semi-diesel, with not more than 4 cylinders, CKD (to be imported by assemblers)
781.0300	Passenger cars other than diesel or semi-diesel, with 6 cyclinders, CKD (to be imported by assemblers)
781.0400	Passenger cars other than diesel or semi-diesel, with more than 6 cylinders, CKD (to be imported by assemblers)
781 0500	Jeeps and similar vehicles with 4 cylinders CKD (to be imported by assemblers)
781.0600	Jeeps and similar vehicles with 6 cylinders CKD (to be imported by assemblers)
781 0700	Passenger cars
781 0800	Passenger cars other than diesel or semi-diesel, with not more than 4 cylinders, assembled, new
781.0900	Passenger cars other than diesel or semi-diesel, with 6 cylinders, assembled, new
781.1100	Passenger cars other than diesel or semi-diesel, with more than 6 cylinders, assembled, new
781 1200	Passenger cars, diesel or semi-diesel, used
781 1300	Passenger cars other than diesel or semi-diesel, with not more than 4 cylinders, used
781 1400	Passenger cars other than diesel or semi-diesel, with 6 cylinders, used cylinders, used
781 1500	Passenger cars other than diesel or semi-diesel, with more than 6 cylinders, used
781.1600	Jeeps, jeepsters and similar vehicles, new
781 1700	Jeeps, jeepsters and similar vehicles, used

APPENDIX 2 (CONTINUED)

PSCC	Description
781 1800	Station wagons, new
781 1900	Station wagons, used
781 2300	Components, parts and/or accessories for passenger car assembly
781 2800	Passenger road motor vehicles, n e s
782 1100	Specially fabricated logging trucks
782 1200	Dumpers (dump trucks)
782 1400	Motor vehicles for goods transport (incl armored, non-fighting vehicles), used
782 1500	Trucks, diesel or semi-diesel, CKD and specially fabricated for assembly
782 1600	Trucks other than diesel or semi-diesel, CKD and specially fabricated for assembly
782 2100	Crane lorries
782 2200	Motor pump vehicles with a pump usually driven by the vehicle's engine
782 2300	Mobile radiological units
782 2400	Lorries with built-in concrete mixers
782 2801	Special purpose motor lorries, trucks and vans, n e s , unassembled
782 2802	Special purpose motor lorries, trucks and vans, n e s , assembled
783 1100	Buses and coaches, diesel or semi-diesel
783 1400	Buses and coaches, other than diesel or semi-diesel
783 1600	Public service type passenger motor vehicles other than diesel or semi-diesel, n e s
783 2000	Road tractors for semi-trailers
784 1100	Passenger motor car chassis fitted with engines, diesel or semi-diesel
784 1200	Passenger motor car chassis fitted with engines, other than diesel or semi-diesel
784 1300	Motor vehicles chassis fitted with engines, for the transport of goods or materials and for special purposes diesel or semi-diesel
784 1400	Motor vehicles chassis fitted with engines, for the transport of goods or materials and for special purposes other than diesel or semi-diesel
784 1500	Completely knock-down components when imported from one or more countries for assembly of trucks upon prior authorization and certification of the BOI
784 1800	Road motor vehicle chassis fitted with engine, n e s

APPENDIX 2 (CONTINUED)

PSCC	Description
784 2200	Motor vehicles bodies and/or shells (other than for trucks and buses) and cabs (to be imported by assemblers)
784 9100	Parts and accesories for crawler tracklying tractors
784 9400	Accessories for road vehicles, n e s
785 1300	Motorcycles (incl all types of motorized cycles) and sidecars, assembled
785 1400	Motorcycles, CKD, excl batteries (to be imported by assemblers)
785 1500	Scooters, unassembled
785 1600	Scooters, assembled
785 1700	Other motorized cycles, n e s , unassembled
785 1800	Other motorized cycles, n e s , assembled
785 3901	Motorcycle and sidecar parts (excl rubber tires, engines, electric parts, CKD parts and storage batteries)
793 1000	Warships of all kinds
892 8301	Banknotes, not yet currency or legal tender in any country
961 0000	Coin (other than gold), not being legal tender
971 0104	Gold (inc platinum-plated gold), unwroughted or semi-manufactures

About the Authors

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