LIBERALIZATION ATTEMPTS
AND CONSEQUENCES

by Anne O. Krueger

Ballinger Publishing Company • Cambridge, Massachusetts
A Subsidiary of J.B. Lippincott Company
NATIONAL BUREAU OF ECONOMIC RESEARCH

Studies in International Economic Relations

1. Problems of the United States as World Trader and Banker
   Hal B. Lary

2. Price and Quantity Trends in the Foreign Trade of the United States
   Robert E. Lipsey

3. Measuring Transactions Between World Areas
   Herbert B. Woolley

4. Imports of Manufactures from Less Developed Countries
   Hal B. Lary

5. The Responsiveness of Demand Policies to Balance of Payments: Postwar Patterns
   Michael Michaely

6. Price Competitiveness in World Trade
   Irving B. Kravis and Robert E. Lipsey

7. Money, Financial Flows, and Credit in the Soviet Union
   George Garvy

8. Foreign Dollar Balances and the International Role of the Dollar
   Raymond F. Mikesell and J. Herbert Furth

9. Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences
   Anne O. Krueger

10. Anatomy and Consequences of Exchange Control Regimes
    Jagdish N. Bhagwati

This book is printed on recycled paper.

Copyright © 1978 by the National Bureau of Economic Research, Inc. All rights reserved.

Library of Congress Card Number: 77-14401
ISBN for the series: 0-87014-500-2
ISBN for this volume: 0-88410-483-4

Printed in the United States of America
Foreign Trade Regimes
and Economic Development:
LIBERALIZATION ATTEMPTS
AND CONSEQUENCES
Foreign Trade Regimes and Economic Development:

A Special Conference Series on Foreign Trade Regimes and Economic Development

VOLUME X

National Bureau of Economic Research
New York 1978
# NATIONAL BUREAU OF ECONOMIC RESEARCH

Arthur F. Burns, Honorary Chairman  
James J. O'Leary, Chairman  
Eli Shapiro, Vice Chairman  
Martin S. Feldstein, President  
Victor R. Fuchs, Vice President, Director, Palo Alto Office  
Philip J. Sandmaier, Jr., Treasurer  
Charles E. McLure, Jr., Executive Director for Research  
Douglas H. Eldridge, Executive Secretary  
Sam Parker, Director of Finance and Administration  
Robert E. Lipsey, Director, New York Office  
Joel Popkin, Director, Washington Office

## DIRECTORS AT LARGE

Moses Abramovitz, Stanford University  
Art Karon, International Multifoods Corporation  
Andrew F. Brimmer, Brimmer & Company, Inc.  
Otis F. Brubaker, United Steelworkers of America  
Arthur F. Burns, Board of Governors of the Federal Reserve System  
Wallace J. Campbell, Foundation for Cooperative Housing  
Solomon Fabricant, New York University  
Martin S. Feldstein, Harvard University  
Eugene P. Foley, Pan American Building, New York  
Edward L. Ginzton, Varian Associates  
David L. Grove, International Business Machines Corporation  
Walter W. Heller, University of Minnesota  
Walter E. Hoadley, Bank of America  
Roy E. Moor, Becker Securities Corporation  
Geoffrey H. Moore, National Bureau of Economic Research  
J. Wilson Newman, Dun & Bradstreet Companies, Inc.  
James J. O'Leary, United States Trust Company of New York  
Peter G. Peterson, Lehman Brothers  
Robert V. Roosa, Brown Brothers Harriman & Co.  
Richard N. Rosett, University of Chicago  
Bert Seidman, American Federation of Labor and Congress of Industrial Organizations  
Eli Shapiro, The Travelers Corporation  
Arnold M. Soloway, Jamaica Way Tower, Boston, Massachusetts  
Lazare Teper, International Ladies Garment Workers’ Union

## DIRECTORS BY UNIVERSITY APPOINTMENT

Gardner Ackley, Michigan  
G. L. Bach, Stanford  
Charles H. Berry, Princeton  
Otto Eckstein, Harvard  
Walter D. Fisher, Northwestern  
John H. Kareken, Minnesota  
J. C. LaForce, California Los Angeles  
Robert J. Lampman, Wisconsin  
Maurice W. Lee, North Carolina  
James L. Pierce, California, Berkeley  
Almarin Phillips, Pennsylvania  
Lloyd G. Reynolds, Yale  
Robert M. Solow, Massachusetts Institute of Technology  
Henri Theil, Chicago  
William S. Vickrey, Columbia

## DIRECTORS BY APPOINTMENT OF OTHER ORGANIZATIONS

Richard M. Bird, Canadian Economics Association  
Eugene A. Birnbaum, American Management Associations  
Carl F. Christ, American Economic Association  
Robert G. Dederick, National Association of Business Economists  
Franklin A. Lindsay, Committee for Economic Development  
Paul W. McCracken, American Statistical Association  
Douglass C. North, Economic History Association  
Rudolph A. Oswald, American Federation of Labor and Congress of Industrial Organizations  
Philip J. Sandmaier, Jr., American Institute of Certified Public Accountants  
G. Edward Schuh, American Agricultural Economics Association  
James C. Van Horne, American Finance Association

## DIRECTORS EMERITI

Percival F. Brundage  
Emilio G. Collado  
Frank W. Fetter  
Thomas D. Flynn  
Gottfried Haberler  
Albert J. Hettinger Jr.  
George B. Roberts  
Murray Shields  
Boris Shishkin  
Willard L. Thorp  
Joseph H. Willis  
Theodore O. Yntema
Relation of the Directors to the Work and Publications of the National Bureau of Economic Research

1. The object of the National Bureau of Economic Research is to ascertain and to present to the public important economic facts and their interpretation in a scientific and impartial manner. The Board of Directors is charged with the responsibility of ensuring that the work of the National Bureau is carried on in strict conformity with this object.

2. The President of the National Bureau shall submit to the Board of Directors, or to its Executive Committee, for their formal adoption all specific proposals for research to be instituted.

3. No research report shall be published by the National Bureau until the President has sent each member of the Board a notice that a manuscript is recommended for publication and that in the President’s opinion it is suitable for publication in accordance with the principles of the National Bureau. Such notification will include an abstract or summary of the manuscript’s content and a response form for use by those Directors who desire a copy of the manuscript for review. Each manuscript shall contain a summary drawing attention to the nature and treatment of the problem studied, the character of the data and their utilization in the report, and the main conclusions reached.

4. For each manuscript so submitted, a special committee of the Directors (including Directors Emeriti) shall be appointed by majority agreement of the President and Vice Presidents (or by the Executive Committee in case of inability to decide on the part of the President and Vice Presidents), consisting of three Directors selected as nearly as may be one from each general division of the Board. The names of the special manuscript committee shall be stated to each Director when notice of the proposed publication is submitted to him. It shall be the duty of each member of the special manuscript committee to read the manuscript. If each member of the manuscript committee signifies his approval within thirty days of the transmittal of the manuscript, the report may be published. If at the end of that period any member of the manuscript committee withholds his approval, the President shall then notify each member of the Board, requesting approval or disapproval of publication, and thirty days additional shall be granted for this purpose. The manuscript shall then not be published unless at least a majority of the entire Board who shall have voted on the proposal within the time fixed for the receipt of votes shall have approved.

5. No manuscript may be published, though approved by each member of the special manuscript committee, until forty-five days have elapsed from the transmittal of the report in manuscript form. The interval is allowed for the receipt of any memorandum of dissent or reservation, together with a brief statement of his reasons, that any member may wish to express; and such memorandum of dissent or reservation shall be published with the manuscript if he so desires. Publication does not, however, imply that each member of the Board has read the manuscript, or that either members of the Board in general or the special committee have passed on its validity in every detail.

6. Publications of the National Bureau issued for informational purposes concerning the work of the Bureau and its staff, or issued to inform the public of activities of Bureau staff, and volumes issued as a result of various conferences involving the National Bureau shall contain a specific disclaimer noting that such publication has not passed through the normal review procedures required in this resolution. The Executive Committee of the Board is charged with review of all such publications from time to time to ensure that they do not take on the character of formal research reports of the National Bureau, requiring formal Board approval.

7. Unless otherwise determined by the Board or exempted by the terms of paragraph 6, a copy of this resolution shall be printed in each National Bureau publication.

(Resolution adopted October 25, 1926, as revised through September 30, 1974)
Contents

Foreword xiii
Preface xvii

PART I. Introduction

Chapter 1: The NBER Project 1
   The Focal Issues 2
   The Country Studies 7
   The Plan of the Work 8

Chapter 2: The Ten Countries and Their Payments Regimes 12
   Economic Characteristics of the Project Countries 12
   Delineation of the Phases 22
   Phases in the Project Countries 28

Chapter 3: Characteristics of QR Regimes 42
   Phase II Controls 43
   The Changing Nature of Controls 48

vii
PART II. Phase III Policies

Chapter 4: Devaluation and Related Policy Measures
Devaluation Packages
Devaluation in an Exchange Control Context

Chapter 5: Measuring Changes in Exchange Rates
Nominal and Effective Exchange Rates
Real Exchange Rate Changes

Chapter 6: QR-Related Aspects of Phase III
Interaction of Devaluation and the QR Regime
A Framework for Analysis
Liberalization during Phase III Episodes
The Extent of Bias Reduction
Rationalization of the Regime
Reducing Variance

Chapter 7: Macroeconomic Policies in Phase III Episodes
Objectives of Macro Policies
Behavior of Monetary Variables
Fiscal Policy
Import Liberalization

PART III. Outcome of Phase III Episodes

Chapter 8: Short-Run Response to Phase III
Price Level Behavior
The Level of Economic Activity
Short-Term Balance-of-Payments Response
Appendix (by Anne O. Krueger and Salih Neftci)

Appendix A
Appendix B
| Chapter 9: Longer-Term Response to Phase III |
|--------------------------------------------|---|
| Intermediate-Term Responses               | 185 |
| Long-Term Response to Phase III           | 186 |
|                                           | 206 |

| Chapter 10: Determinants of the Outcome of Phase III Episodes |
|-------------------------------------------------------------|---|
| Successes and Failures                                      | 218 |
| The Initial Transition Period                               | 219 |
| Macroeconomic Difficulties                                  | 220 |
| Macroeconomic Lessons                                        | 229 |

| PART IV. Liberalized Trade Regimes and Economic Growth      |
|-------------------------------------------------------------|---|
| Chapter 11: Impact of Phase IV and V Regimes on Growth      | 245 |
| Microeconomic Effects                                       | 246 |
| Macroeconomic Effects                                        | 247 |

| Chapter 12: Liberalization, Direction of Bias, and Economic Growth |
|--------------------------------------------------------------------|---|
| The Brazilian and South Korean Experiences                       | 277 |
| Export-Promotion versus Import-Substitution                     | 278 |
| Growth Strategies                                                | 283 |
| Conclusions                                                      | 296 |

| Appendix A                                                      |
|----------------------------------------------------------------|---|
| Appendix B                                                      | 304 |
Tables

2-2 Sectoral Composition of GDP, Ten Countries, 1960 and 1970 (percent of total GDP in each country)
2-3 Distribution of GDP by Expenditure Categories, Ten Countries, 1960 and 1970 (percent of GDP)
2-5 Behavior of Wholesale Prices, Ten Countries, 1950-1970
2-6 Number of Countries in Each Phase, 1950-1972 (quarterly count converted to annual basis)
5-1 Gross and Net Devaluations Accompanying Phase III Episodes, Ten Countries
5-2 Chilean PLD-EERs for Five Commodity Groups for Years Surrounding Phase III Episodes
5-3 Net Devaluation and Behavior of the Real Exchange Rate in Surrounding Years, Ten Countries
6-1 Number of Importable Items in South Korean Semiannual Trade Programs, 1961-1967
6-2 Bias of Trade Regimes before and after Phase III Episodes, Five Countries
6-3 Ratio of Import to Export EERs before and after Phase III Episodes, Nine Countries
6-4 Black Market Exchange Rates before and after Phase III Episodes (local currency units per dollar)

6-5 Brazilian Changes
7-1 Percent before and after Government Devaluation
7-2 Import 1 Countries
8-1 Rates of Devaluation: Wholesale
8-2 Rates of Years Surrounding Phase III Episodes
8-1A Regression (depressed economies, 1955-1977)
9-1 Indexes of Countries
9-2 Indices of Countries
9-3 Value of (millions
9-4 Value of (millions
9-5 Regression Minor Ex
9-6 Estimated Real Exchange Changes
9-7 Estimated Real Exchange
9-8 Changes
10-1 Exchange Peg Countries Nominal, 1955-1977
10-2 per U.S.
11-1 Indicator years, (195
11-2 Impact of Growth F
TABLES

6-5 Brazilian Effective Rates of Protection, before and after 1964 Changes
114
7-1 Percent Change in Money Supply over Specified Periods before and after Devaluation, Ten Countries
129
7-2 Government Expenditures and Deficits for Years Surrounding Devaluations, Ten Countries (percent of gross national product)
134
7-3 Import Flows for Years Surrounding Devaluations, Ten Countries
138
8-1 Rates of Inflation over Specified Periods before and after Devaluations, Ten Countries (percent increase in the wholesale price index)
148
8-2 Rates of Growth of Real GNP and Industrial Output for Years Surrounding Devaluations, Ten Countries
157
8-1A Regression Estimates of the Price Level Impact of Devaluation (dependent variable: quarterly observations on P(t))
183
9-1 Indexes of PLD-EERs for Traditional Exports, Nine Countries, 1950-1971 (1958 PLD-EER = 100)
188
189
9-3 Value of Traditional Exports, Nine Countries, 1954-1972 (millions of U.S. dollars)
190
9-4 Value of Nontraditional Exports, Ten Countries, 1954-1972 (millions of U.S. dollars)
191
9-5 Regression Estimates for Annual Percentage Changes in Minor Exports, Colombia
193
9-6 Estimated Coefficients for Export Earnings Model, Ten Countries
203
9-7 Estimated Coefficients of Response of Export Earnings to Real Exchange Rates and Phases
205
9-8 Changes in Incentives to Brazilian Exporters, 1964-1971
209
10-1 Exchange Rates, Nominal and Price-Adjusted, Three Sliding-Peg Countries (local currency units per U.S. dollar)
234
236
11-1 Indicators of Imported Capital Goods, Prices, Five Countries, 1954-1971 (index of PLD-EERs for capital goods, 1958 = 100)
254
11-2 Impact of Export Growth and Trade Regime upon GNP Growth Rates, Five Countries (1954-1971)
273
Figures

2-1 Phases of Exchange Control Regimes, Ten Countries, 1950-1972
6-1 Components of Devaluation

The National
Economic Dev
Anne O. Krue
Jagdish N. Bh
undertaking m
with internatio
economies of c
Bureau project
fessor Krueger
financed under
Ional Develop

For many
ternal problem
pects of one
as parts of Bur
ivity, and an
economic syste
lternational eco
Lary. A separ
Economic Rela
States as Wor
Trends in the P
Most of th
other develope
Foreword

The National Bureau's comprehensive project on Foreign Trade Regimes and Economic Development is completed with the issuance of this synthesis by Anne O. Krueger and the forthcoming publication of a companion study by Jagdish N. Bhagwati, co-director of the project with Professor Krueger. This undertaking marks a major step in the National Bureau's increasing concern with international economic problems, foreign economies, and particularly the economies of developing nations, and is being followed up by a new National Bureau project on Alternative Trade Strategies and Employment, under Professor Krueger's direction. That project, like the one reported on here, is being financed under a research contract with the United States Agency for International Development.

For many years the Bureau's research efforts were concentrated on the internal problems of the American economy. There were some studies of specific aspects of one or another foreign economy or U.S. trade or capital movements as parts of Bureau programs such as those in business cycles or government activity, and an occasional look at a specific feature of the international economic system. Only in the 1960s was a separate program begun on the international economic relations of the United States, under the direction of Hal Lary. A separate National Bureau publication series—Studies in International Economic Relations—began in 1963 with Hal Lary's Problems of the United States as World Trader and Banker and Robert E. Lipsey's Price and Quantity Trends in the Foreign Trade of the United States, and now includes 8 volumes.

Most of the Bureau's earlier studies were focused on the United States, other developed economies, and the relations among them. It was not until
Hal Lary's *Imports of Manufactures from Less Developed Countries* in 1968 and Simon Kuznets' contribution to NBER's 50th Anniversary Colloquia, published in 1972, that attention was shifted to the much larger world outside the developed countries.

This first major venture by the Bureau into studying the economies of developing countries is directed at one of the most controversial issues of development policy: the choice of exchange rate regimes, the implications of alternative regimes for resource allocation and growth, and alternative policy instruments for moving from exchange control regimes to regimes in which quantitative restrictions are unimportant as an instrument for regulating the balance of payments.

There has been, of course, no shortage of public discussion of the trade and exchange rate policies of developing countries. The basis for the Bureau’s project was that no single author could examine those policies and their consequences in a number of very different countries with the required degree of expertise and attention to the difficult problems of measurement involved, and that uncoordinated studies differed so in framework and method that results could not be compared and added up. The co-directors therefore brought together a distinguished group of collaborators, each of whom was an expert in the field of trade and development and was also well acquainted with one of the countries to be studied. The authors would all work under an agreed common framework and set of instructions, hammered out among them at an early working party, although they retained their freedom to modify the plans to fit the peculiarities of their particular countries.

The result was the series of coordinated studies that Professor Krueger has drawn on for this synthesis, each of which contains much valuable information and analysis of the country beyond what can be summarized here. Nine such studies have been issued, covering, in approximate order of publication, Turkey, Ghana, Israel, Egypt, the Philippines, India, South Korea, Chile, and Colombia. Studies of Brazil and Pakistan had been scheduled and, though not carried through on the scale envisaged for publication, yielded useful results in unpublished papers.

Of course, the country authors and Professor Krueger are well aware that trade policy and exchange rate policy are not the sole determinants of the rate of development. It is notable, however, that from the mass of factors affecting economic development, including political influences such as the stability of governments, Professor Krueger is able to discern some striking relations between trade policy and economic growth.

One point that recurs throughout the study is the importance of looking beyond the changes in nominal exchange rates (gross) to changes in effective exchange rates (net)—that is, the amounts actually paid for foreign currency.
The latter measure takes account of changes in, for example, the premium on import licenses or the abolition of export subsidies, which could offset the effects of devaluation. In one extreme case, Egypt, a 23 percent gross devaluation resulted in only about a 3 percent net devaluation. Professor Krueger suggests that many instances in which exports supposedly failed to respond to exchange rate changes were in fact cases where there was nothing to respond to: the nominal devaluation was offset by other factors affecting the exchange rate. Where there were changes in real effective exchange rates, she reports, almost all the authors found significant responses of exports to them.

Another point of importance is the distinction between devaluation and liberalization. The former alters the price of foreign exchange, while the latter shifts from quantitative restrictions to price intervention. One could, in principle, liberalize by substituting tariffs for quotas at an unchanged exchange rate. Professor Krueger denies that devaluation attempts necessarily lead to recession, as is often asserted. When such a juxtaposition occurred, she suggests, it resulted from efforts to curb domestic inflation (a separate objective important in its own right), not from the devaluation itself.

With respect to the fear that devaluation results in inflation, Professor Krueger finds that inflation in such cases is usually the result of expansionary monetary policy, although occasionally the success of the devaluation in producing payments surpluses and the subsequent failure of some governments to offset the effect of these surpluses on the money supply did result in inflation. Among the many inflationary forces in developing countries, devaluation was a minor one.

One of the purposes of this study was to examine the payments regimes themselves, and Professor Krueger argues that quantitative restriction regimes were often far more protective than the governments imposing them knew or intended. One indication of that lack of awareness was that when quotas were replaced by tariffs, the tariffs provided less protection, partly because, she suspects, the governments did not realize how high the levels of protection had been. Another indication of lack of awareness of the effects of quantitative controls, this time on the export side, was where the imposition of physical export targets in return for import licenses produced cases in which even the direct import content of the exports was greater than the foreign exchange earned by them.

Perhaps the most important conclusion from Professor Krueger's analysis is that a bias toward exports, and particularly a pervasive, well-publicized, and stable government commitment to exports, is most favorable to economic growth. Stress is laid a number of times on the importance of the known commitment to an export orientation, beyond the measurable effects of, for example, changes in effective exchange rates. The commitment influences expectations about future government actions and encourages export suppliers to
believe that currently favorable conditions will be maintained and are therefore worth adapting to. Expectations, unmeasurable but sometimes predictable, can, of course, work against a rational exchange rate policy if potential exporters have learned from experience to expect favorable conditions to be ephemeral.

The favorable effects of an export orientation are attributed by Professor Krueger not only to such traditionally cited factors as economies of scale or the stimulating effects of foreign competition, but also to the fact that such a policy limits the use of quantitative restrictions and the distortions of economic incentives that accompany them. It is a policy that forces the recognition and rectification of mistakes that are hidden by an import-substitution policy.

Academic scholars are sometimes accused of ignoring the world’s major problems and concentrating on trivial ones because they are more easily understood and solved. That is a charge that cannot be made against Professors Bhagwati and Krueger and their collaborators. The result of this collaborative effort is, we believe, the most authoritative examination of developing countries’ trade policies ever carried out, and one that will not be superseded for a long time. We hope and expect that it will be a major contribution to both academic discussion and to policymaking.

Robert E. Lipsey
Director, International Studies
Preface

This volume is devoted to analyzing two closely related questions: (1) What determines the outcome of devaluation and its accompanying policy measures when they take place in an environment of exchange control and quantitative restriction of international transactions? (2) How are domestic resource allocation and growth affected when trade and payments regimes are liberalized so as to reduce or eliminate reliance on quantitative restrictions? The analysis of these questions is set within the context of developing countries.

Both questions have been the subject of a great deal of discussion since the early 1950s. Early analyses generally failed to distinguish between devaluations when normal market reactions are being restrained by quantitative restrictions on trade and those that occur under liberalized regimes. Even after that important distinction came to be recognized, a general framework for analysis was lacking, and empirical investigations of individual episodes of devaluation tended to treat each event as unique.

By the late 1960s enough experience with devaluation under exchange control had accumulated so that it seemed feasible to attempt a systematic analysis based on a number of devaluations. Such a project was undertaken by the National Bureau of Economic Research, with Jagdish Bhagwati and me as co-directors of the project. “Foreign Trade Regimes and Economic Development” was designed to provide answers to the two questions above and to investigate other issues related to exchange control and its effects. The first phase of the project was the preparation, review, and revision of an analytical framework; the second phase comprised separate analyses of the experience of ten developing countries; the final phase is a comprehensive analysis of the findings from the ten country studies.

1Certain supplementary studies were also prepared on topics of particular interest. They cover aspects of the Indonesian, Japanese, and Pakistani experience.
The country studies undertaken in this project were carried out by economists well acquainted with their subject countries. The countries included and their study authors were:

- **Brazil**
  - Albert Fishlow, University of California, Berkeley

- **Chile**
  - Jere R. Behrman, University of Pennsylvania

- **Colombia**
  - Carlos F. Diaz-Alejandro, Yale University

- **Egypt**
  - Bent Hansen, University of California, Berkeley; and Karim Nashashibi, International Monetary Fund

- **Ghana**
  - J. Clark Leith, University of Western Ontario

- **India**
  - Jagdish N. Bhagwati, Massachusetts Institute of Technology; and T.N. Srinivasan, Indian Statistical Institute

- **Israel**
  - Michael Michaely, The Hebrew University of Jerusalem

- **Philippines**
  - Robert E. Baldwin, University of Wisconsin

- **South Korea**
  - Charles R. Frank, Jr., Princeton University and The Brookings Institution; Kwang Suk Kim, Korea Development Institute, Republic of Korea; and Larry E. Westphal, Northwestern University

- **Turkey**
  - Anne O. Krueger, University of Minnesota

This volume and a companion study by Jagdish Bhagwati represent the results of the final phase of this project. This phase draws upon the findings of the country authors in an attempt to provide an analytical framework that might prove useful in studies of other countries. This analysis also represents an effort to generalize—to the extent possible—on the apparent orders of magnitude of the parameters that theory predicts to be important. This book addresses the effects of devaluation and liberalization; the Bhagwati volume provides a comparable analysis of exchange control regimes and their effects.

The project on Foreign Trade Regimes and Economic Development began in 1969, and the period covered in the country studies generally ends with 1972. The research on the individual countries was largely completed before the changes in the international economy of the mid-1970s took place. The present analysis, therefore, which is based on the country studies, does not take these recent changes into account. A question of some importance is the extent to which the lessons emerging from the 1950s and 1960s are applicable to the changed international economic environment in which developing countries find themselves. Obviously, judgments will differ, but I do not think the conclusions and results need alteration in any fundamental regard.

To be sure, faster growth of world demand and rapidly rising levels of international trade provide a favorable climate for any set of economic policies. The comparative ranking of alternative policies does not, however, shift simply because conditions are less favorable for any of them. While the outlook for the not entirely clear, demand will nonetheless, in all sorts of difficult regimes of earlier followed in the

Some of the have probably policies. Other c the former is the rates. Rational undoubtedly end the currency ag action should ma tain realistic real 1960s. While so difficult as a co nicies, there does f are floating—a n level of reserves managemen tcy is no longer relatively simple reserve assets in (IMF) records th (SDRs); alterna expected future trading partners of safety again.

Although f sects of the o following the oil increase itself was, some other ter ntries have been d domestic oil res were the ones 1 outward-oriente to altered circu

See, for exam "c Needs of Deve Section, Essay in I 1975).
 outlook for the rate of growth of world trade in the latter half of the 1970s is not entirely clear, it is likely that—in real terms—the rate of growth of world demand will not be as rapid as in the decade between 1965 and 1975. Nonetheless, interdependence among countries is likely to continue; and the sorts of difficulties that resulted from some of the quantitative restriction (QR) regimes of earlier periods are equally likely to result should similar policies be followed in the present environment.

Some of the changes that have taken place in the international economy have probably made it easier for developing countries to follow rational policies. Other changes may have made the task more difficult. An example of the former is the shift in the world economy to a system of floating exchange rates. Rational exchange rate management in most developing countries will undoubtedly entail the use of one formula or another to adjust the parity of the currency against a market basket of other countries' currencies. Such an action should make the adoption of a sliding peg, or other policies that maintain realistic real exchange rates, somewhat easier than it was in the 1950s and 1960s. While some have asserted that reserve management has become more difficult as a consequence of realignments in rates among the major currencies, there does not seem to be any basis for this allegation. The fact that rates are floating—and perhaps set at more realistic levels—may reduce the desired level of reserves and thus reduce the size of the problem. Insofar as reserve management is concerned, it is true that holding all reserves in a single currency is no longer wise, if indeed it ever was. Countries can, however, find relatively simple rules that will suffice. For example, a country might hold its reserve assets in the same proportions as the International Monetary Fund (IMF) records the weighted exchange rates in terms of Special Drawing Rights (SDRs); alternatively it could keep its reserves in approximate proportion to expected future net liabilities, including debt-service obligations, to its various trading partners. The composition of reserves would thereby provide a margin of safety against short-term fluctuations in exchange rates.

Although floating rates are unlikely to have adverse effects upon the prospects of the developing countries, the impact of terms-of-trade changes following the oil price increase is far more difficult to assess. The oil price increase itself was, presumably, a once-and-for-all measure, really not as large as some other terms-of-trade shifts experienced in earlier years. Different countries have been very differently affected. In general, among countries without domestic oil resources, those whose trade regimes relied heavily upon QRs were the ones most adversely affected; those with liberalized regimes and outward-oriented growth appear to have been much more capable of adapting to altered circumstances.  

The evidence from the country studies demonstrates the potential payoff for development via reliance on international markets. Perhaps the major conclusions that should be drawn from consideration of the altered international economic environment are that developing countries have a major stake in the rapid expansion of the world economy and that developed countries can make a sizable contribution by providing access to their growing markets.

The development of the present analysis has been closely interrelated with the fortunes of the individual country studies. During the period when final revisions were being made, from September 1975 to March 1976, published volumes or galley proofs were available to me for all the country studies but that of Brazil. For that country I used a summary version prepared by Albert Fishlow for use at the Bogotá conference. During the spring and summer of 1974, drafts of what are now Chapters 2, 4, 5, 6, 7, 8, 9, and 10 were prepared. A working party of country authors was held in September 1974, and I benefited from the discussion at that time, as well as from numerous written suggestions from those present, including Robert Baldwin, Jere Behrman, Jagdish Bhagwati, Carlos Diaz-Alejandro, Albert Fishlow, Charles R. Frank, Jr., Bent Hansen, Hal Lary, Clark Leith and Larry Westphal. Sergio Molina and Anibal Pinto of the Economic Commission for Latin America were also present at that meeting and made numerous helpful suggestions.

Chapters 4 through 6 were revised on the basis of data provided by the country authors and the discussion and comments received at the working party. In addition, drafts of the remaining chapters were prepared. In December of 1974 the Asian Development Bank and the National Bureau jointly sponsored a conference in Manila on the results of the project. In April of 1975 a similar conference was held in Bogotá under the auspices of the Banco de la República, the Economic Commission for Latin America, and the National Bureau. Jose Encarnacion of the University of the Philippines, and Kiyoshi Kojima of the University of Tokyo, made especially useful comments on the manuscript at the Manila conference, and Patricio Meller of the National Bureau, and Juergen Donges of the Institut für Weltwirtschaft, Kiel, did so at the Bogotá conference. I am grateful to all the participants in both conferences, many of whom should recognize significant changes based upon their comments and suggestions.

I am especially indebted to Bent Hansen, Michael Michaely, and T.N. Srinivasan, who read the entire manuscript and commented extensively at that stage. I also benefited from comments from Richard Snape, who read the penultimate draft. Hal Lary has read and commented upon all drafts of the manuscript, and it is to him that my debt is greatest.

Salih Neftci provided invaluable assistance with the statistical work reported in Chapters 8, 9, and 11, in addition to our joint endeavor in the appendix to Chapter 8. Abraham Hollander served as a research assistant during the academic year 1974/75.
potential payoff
the major con-
international
or stake in the
tries can make
inkets.
interrelated with
period when final
1976, published
try studies but
pared by Albert
and summer of
were prepared.
er 1974, and I
merous written
Jere Behrman,
rials R. Frank,
Sergio Molina
merica were also
ons.
vided by the
ne working par-
ed.In December
ually spon-
April of 1975 a
the Banco de la
and the National
les, and Kiyoshi
ments on the
f the National
, Kiel, did so at
s in both con-
sed upon their
aely, and T.N.
ensively at that
, who read the
ll drafts of the
statistical work
avor in the ap-
assistant during

The facilities and staff of the National Bureau of Economic Research were invaluable in providing the coordination, editing, and administrative services without which a project of this kind could not have been undertaken. I particularly want to express my gratitude in this regard to Hal Lary, formerly project officer, and to Robert Lipsey, who succeeded him in that capacity and also provided helpful comments on the final draft of the manuscript. The major financial support for the project was provided by the United States Agency for International Development, whose assistance is gratefully acknowledged. Michael Roemer and Constantine Michalopoulos, in turn, were project monitors, and they contributed importantly to the intellectual development of the project.

Betsy Frederick and Carol Such each typed parts of the manuscript. Pat Kaluza bore primary responsibility for typing most of the first complete draft and also the final revision, and the manuscript is much improved because of her corrections and industry.

Anne O. Krueger
Minneapolis, Minnesota
May 1976