

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Foreign Trade Regimes and Economic Development: Chile

Volume Author/Editor: Jere H. Behrman

Volume Publisher: NBER

Volume ISBN: 0-87014-508-8

Volume URL: <http://www.nber.org/books/beh76-1>

Publication Date: 1976

Chapter Title: Front Matter to "Foreign Trade Regimes and Economic Development: Chile"

Chapter Author: Jere H. Behrman

Chapter URL: <http://www.nber.org/chapters/c4023>

Chapter pages in book: (p. -25 - 0)

**Foreign Trade Regimes
and Economic Development:
CHILE**

Foreign Trade Regimes and Economic Development:

*A Special Conference Series
on Foreign Trade Regimes
and Economic Development*

VOLUME VIII



NATIONAL BUREAU OF ECONOMIC RESEARCH
New York 1976

CHILE

by **Jere R. Behrman**

UNIVERSITY OF PENNSYLVANIA

DISTRIBUTED BY Columbia University Press
New York and London

NATIONAL BUREAU OF ECONOMIC RESEARCH

*A Special Conference Series on Foreign Trade Regimes
and Economic Development*

Library of Congress Card Number: 74-82376

ISBN for the series: 0-87014-500-2

ISBN for this volume: 0-87014-508-8

Printed in the United States of America

DESIGNED BY JEFFREY M. BARRIE

NATIONAL BUREAU OF ECONOMIC RESEARCH

OFFICERS

Arthur F. Burns, *Honorary Chairman*
J. Wilson Newman, *Chairman*
Moses Abramovitz, *Vice Chairman*
John R. Meyer, *President*
Thomas D. Flynn, *Treasurer*
Douglas H. Eldridge, *Executive Secretary*
Gary Fromm, *Director, Industrial Institutions and Processes Research*
Victor R. Fuchs, *Vice President; Co-director; NBER-West*
Edwin Kuh, *Vice President and Director, Computer Research Center*

Robert E. Lipsey, *Director, International and Financial Studies*
Joel Popkin, *Director, NBER-Washington*
Harvey J. McMains, *Vice President-Executive Director*
Sherman J. Maisel, *Co-director, NBER-West*
Geoffrey H. Moore, *Director, Business Cycle Research*
Edward K. Smith, *Director, Corporate Planning and Development*

DIRECTORS AT LARGE

Atherton Bean, *International Multifoods Corporation*
Andrew F. Brimmer, *Brimmer & Company, Inc.*
Arthur F. Burns, *Board of Governors of the Federal Reserve System*
Wallace J. Campbell, *Foundation for Cooperative Housing*
Erwin D. Canham, *Christian Science Monitor*
Emilio G. Collado, *Exxon Corporation*
Solomon Fabricant, *New York University*
Frank L. Fernbach, *United Steelworkers of America*
Eugene P. Foley, *Montrose Securities, Inc.*
Edward L. Ginzton, *Varian Associates*
David L. Grove, *International Business Machines Corporation*
Walter W. Heller, *University of Minnesota*

John R. Meyer, *Harvard University*
Geoffrey H. Moore, *National Bureau of Economic Research*
J. Wilson Newman, *Dun & Bradstreet, Inc.*
James J. O'Leary, *United States Trust Company of New York*
Rudolph A. Oswald, *American Federation of Labor and Congress of Industrial Organizations*
Robert V. Roosa, *Brown Brothers Harriman & Co.*
Eli Shapiro, *The Travelers Corporation*
Arnold M. Soloway, *Jamalcaway Tower, Boston, Massachusetts*
Lazare Teper, *International Ladies' Garment Workers' Union*
Theodore O. Yntema, *Oakland University*

DIRECTORS BY UNIVERSITY APPOINTMENT

Moses Abramovitz, *Stanford*
Gardner Ackley, *Michigan*
Charles H. Berry, *Princeton*
Francis M. Boddy, *Minnesota*
Otto Eckstein, *Harvard*
Walter D. Fisher, *Northwestern*
R. A. Gordon, *California, Berkeley*
J. C. LaForce, *California, Los Angeles*

Robert J. Lampman, *Wisconsin*
Maurice W. Lee, *North Carolina*
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*
Thomas D. Flynn, *American Institute of Certified Public Accountants*
Harold G. Halcrow, *American Agricultural Economics Association*

Walter E. Hoadley, *American Finance Association*
Philip M. Klutznick, *Committee for Economic Development*
Paul W. McCracken, *American Statistical Association*
Roy E. Moor, *National Association of Business Economists*
Douglass C. North, *Economic History Association*

DIRECTORS EMERITI

Percival F. Brundage
Frank W. Fetter
Gottfried Haberler

Albert J. Hettinger, Jr.
George B. Roberts
Murray Shields

Boris Shishkin
Willard L. Thorp
Joseph H. Willits

SENIOR RESEARCH STAFF

Gary S. Becker
Charlotte Boschan
Phillip Cagan
Stanley Diller
Solomon Fabricant
Milton Friedman
Gary Fromm
Victor R. Fuchs

J. Royce Ginn
Raymond W. Goldsmith
Michael Gort
Michael Grossman
F. Thomas Juster
John F. Kain
John W. Kendrick
Irving B. Kravis
Edwin Kuh

William M. Landes
Robert E. Lipsey
Sherman J. Maisel
Benoit B. Mandelbrot
John R. Meyer
Robert T. Michael
Jacob Mincer
Ilse Mintz
Geoffrey H. Moore

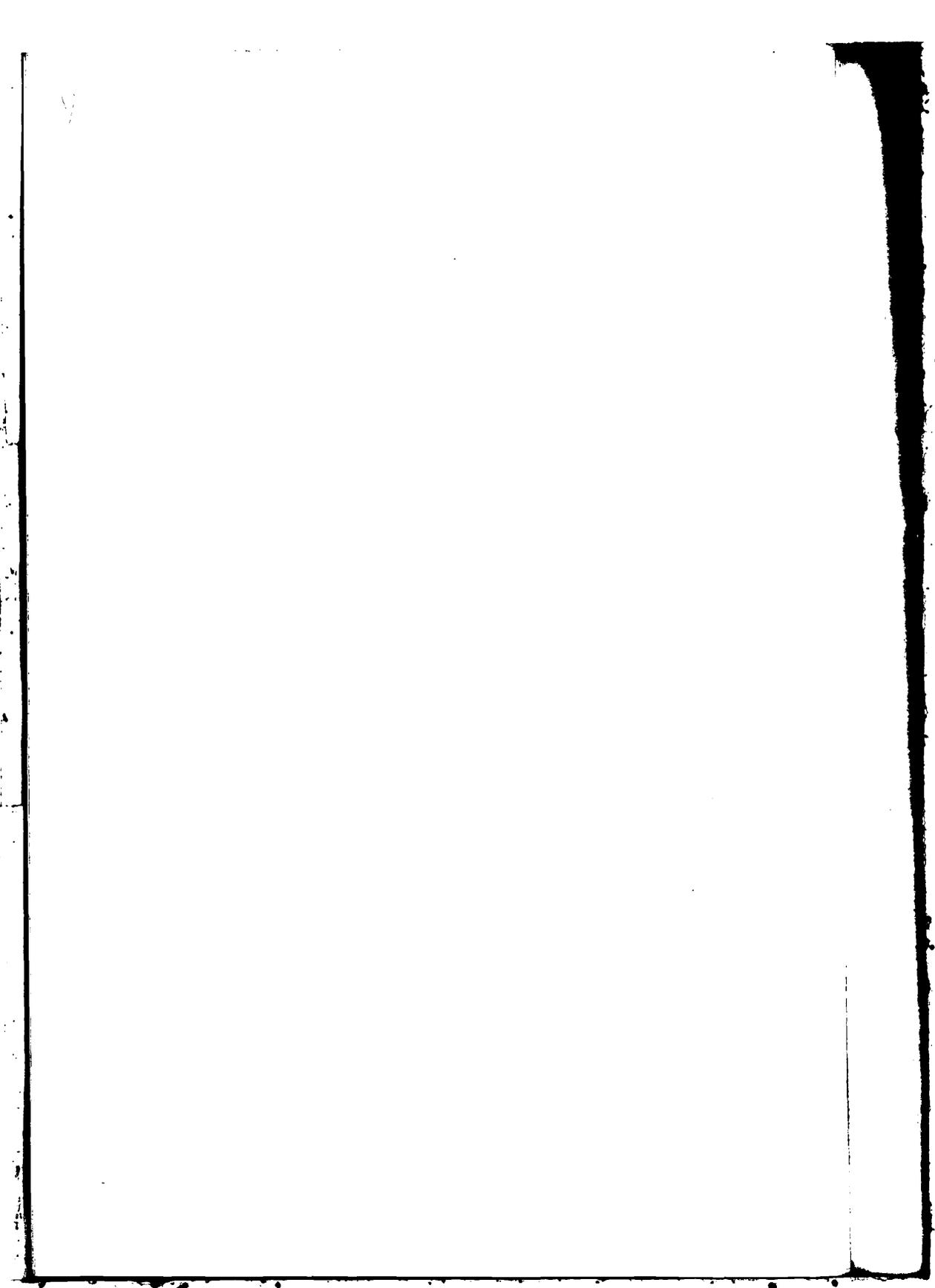
M. Ishaq Nadiri
Nancy Ruggles
Richard Ruggles
Anna J. Schwartz
Edward K. Smith
George J. Stigler
Robert J. Willis
Victor Zarnowitz

*Relation of the Directors of the National Bureau to
Publication of the Country Studies in the Series on
Foreign Trade Regimes and Economic Development*

The individual country studies have not passed through the National Bureau's normal procedures for review and approval of research reports by the Board of Directors. In view of the way in which these studies were planned and reviewed at successive working parties of authors and Co-Directors, the National Bureau's Executive Committee has approved their publication in a manner analogous to conference proceedings, which are exempted from the rules governing submission of manuscripts to, and critical review by, the Board of Directors. *It should therefore be understood that the views expressed herein are those of the authors only and do not necessarily reflect those of the National Bureau or its Board of Directors.*

The synthesis volumes in the series, prepared by the Co-Directors of the project, are subject to the normal procedures for review and approval by the Directors of the National Bureau.

To
Lucy



Contents

<i>Co-Directors' Foreword</i>	xix
<i>Acknowledgments</i>	xxii
<i>Principal Dates and Historical Events in Chile</i>	xxiv

Part I: Introduction

Chapter 1: The Foreign Sector and Chilean Economic Development: An Overview	3
1.1 Introduction	3
1.2 The Period Before the Great Depression	5
1.2.1 Failure to Re-establish Enduring Complete Convertibility	10
1.2.2 Shift to Foreign Ownership of Major Exports	10
1.2.3 Evolution and Impact of Import-Substitution Policies	12
1.2.4 Liberalization, Foreign Dependence, and Vulnerability	13
1.2.5 Liberalization and Economic Growth	17
1.3 The Impact of the Great Depression	19
1.4 Phases of Exchange Control After the Great Depression	21
1.4.1 1931-55: Phases I and II—A Quarter Century of Quantitative Restrictions	21
1.4.2 1956-58: Phase III—The Ibañez-Klein-Saks Stabilization and Liberalization Program	27
1.4.3 1959-61: Phase IV—The Alessandri Stabilization and Liberalization Policies	28

1.4.4 1962-64: Phase II—Reversal to Restrictionism, Interventionism and Inflation	29
1.4.5 1965-70: Phase III—The Frei Stabilization and Liberalization Program	30
1.4.6 1971-73: Phase II—Allende and Popular Unity Policies	31
1.5 Major Conclusions	34
Notes	39
Chapter 2: An Annual Macroeconometric Model for Chile, 1945-65	46
2.1 Structure of the Model	47
2.1.1 Policy Variables	48
2.1.2 Model Relationships	49
2.2 Simulation Procedure	52
Notes	54
Part II: Evolution of the Structure of Exchange Control Regimes in Recent Decades	
Chapter 3: Exchange Control Institutions and Patterns in the Nominal Exchange Rates	59
Summary and Conclusions	59
3.1 Institutional Responsibility for Exchange Control	61
3.2 Major Trends in Nominal Exchange Rates (NERs) and Price-Level-Deflated NERs (PLD-NERs)	65
3.2.1 Official PLD-NER	65
3.2.2 Export Draft PLD-NER	70
3.2.3 Gold PLD-NER	70
3.2.4 Wine PLD-NER	71
3.2.5 Free Funds PLD-NER	72
3.2.6 Black- or Free-Market PLD-NER	73
3.2.7 Bank Spot PLD-NER	74
3.2.8 Bank Future PLD-NER	77
3.2.9 Special-Commercial PLD-NER	78
3.2.10 Provisional PLD-NER	78
3.2.11 Central Bank PLD-NER	78
3.2.12 Brokers' PLD-NER	78
3.2.13 National Accounts PLD-NER	79
3.2.14 Other Rates	80
Notes	80

Chapter 4: Supporting Policies for Exchange Control Regimes	83
4.1 Import Policies	83
4.1.1 Tariffs and Related Indirect Taxes	85
4.1.2 Quotas, Licenses, Foreign-Exchange Budgets, and Permitted Lists	88
4.1.3 Time Constraints on Foreign-Exchange Cover for Imports	91
4.1.4 Prior Deposits on Imports	92
4.1.5 Special Regimes	95
4.1.6 Bilateral, Compensation, and Barter Agreements	99
4.1.7 Government Agencies	100
4.1.8 Regional Agreements	102
4.2 Export Policies	103
4.2.1 Large-Scale Copper Mining	104
4.2.2 Other Exports	110
4.3 Policies for Other International Economic Transactions	114
4.3.1 Tourism and Other Invisibles and Imports for Personal Use	115
4.3.2 Foreign Investment Other Than in Large-Scale Copper Mining	116
4.3.3 Official Capital Flows and Foreign Debts	118
4.3.4 Miscellaneous Transactions	119
Notes	120
Chapter 5: Effective Exchange Rates, Effective Protection Rates, and Domestic Resource Costs	126
Summary and Conclusions	126
5.1 Time Paths of Import Premiums, Price-Level-Deflated Effective Exchange Rates, and Premium-Inclusive Price-Level-Deflated Effective Exchange Rates	127
5.1.1 Time Patterns in Aggregate Import Premiums and Price-Level-Deflated Effective Exchange Rates	127
5.1.2 Time Patterns in Disaggregate Premium-Inclusive Price-Level-Deflated Effective Exchange Rates	131
5.2 Implicit Tariff Rates, Effective Protection Rates, and Domestic Resource Costs in the 1960s	137
5.2.1 Mean Level of the Rates	140
5.2.2 Sectoral and Subsectoral Differences in Relative Protection	140
5.2.3 Differences in Relative Protection over Time	143
Notes	144

Part III: Impact of Foreign-Sector Regimes

Chapter 6: The Behavior of Merchandise Imports	149
Summary and Conclusions	149
6.1 Import Patterns Since 1930	151
6.1.1 Aggregate Merchandise Imports	151
6.1.2 Disaggregate Merchandise Imports	155
6.2 Effect of the Regimes on Imports	161
6.2.1 Partial-Equilibrium Responses	162
6.2.2 General-Equilibrium Reaction of Imports	167
Notes	169
Chapter 7: The Behavior of Merchandise Exports	172
Summary and Conclusions	172
7.1 Export Patterns Since 1930	174
7.1.1 Aggregate Merchandise Exports	174
7.1.2 Disaggregate Merchandise Exports	176
7.2 Econometric Measures of the Responses of Exports to the Regimes	185
7.2.1 Partial-Equilibrium Responses	185
7.2.2 General-Equilibrium Responses	190
Notes	193
Chapter 8: Other Components of the Balance of Payments	198
Summary and Conclusions	198
8.1 Services and Transfers	202
8.1.1 Mean Values for Phases	202
8.1.2 Within-Phase Patterns	203
8.1.3 Partial-Equilibrium Responses of Services	204
8.1.4 General-Equilibrium Responses of Services	208
8.2 Capital and Gold Flows	208
8.2.1 Net Capital Flows to the Nonmonetary Sectors	209
8.2.2 Net Capital and Gold Flows to the Monetary Sectors	213
Notes	215

Chapter 9: Short-Run Stability in Nominal and Real Terms	218
Summary and Conclusions	218
9.1 Nominal Stability	219
9.1.1 Relation of Inflation to Exchange Control Phases	220
9.1.2 Contribution of International Price Increases to Chilean Inflation	220
9.1.3 Price Impact of Liberalizations	220
9.2 Real Fluctuations	231
9.2.1 Associations of Capacity-Utilization Rates with Exchange Control Phases	231
9.2.2 Partial-Equilibrium Determinants of Capacity Utilization	231
9.2.3 Impact of Foreign-Sector Policies on Capacity Utilization Within a General-Equilibrium Framework	234
Notes	236
Chapter 10: Resource Allocation and Structural Change	240
Summary and Conclusions	241
10.1 Long-Run Trends and Phase-related Patterns in Resource Allocation	242
10.1.1 Industrial Production by Sector	242
10.1.2 Manufacturing Subsectors	247
10.2 Relations Between Resource Allocation and Price Ratios of Final to Intermediate Product	250
10.3 Costs of Attempts to Alter Resource Allocation Through Differential Incentives Created by the International Economic Regimes	251
Notes	252
Chapter 11: The Distribution of Control over Income and Resources	254
11.1 Distribution by Income Class	256
11.1.1 Import Premiums and Distribution	256
11.1.2 Real Wages and the International Economic Regime	257
11.1.3 Employment and the International Economic Regime	259
11.2 Private Versus Government Control over Output	261
11.3 Domestic Versus Foreign Shares	262
11.4 Sectoral and Regional Distribution of Income and Resources	263
Notes	264

Chapter 12: Economic Growth	268
12.1 Over-All Growth Rates	269
12.1.1 Time-Series Evidence	269
12.1.2 Cross-Sectional Evidence	270
12.1.3 General-Equilibrium Analysis	271
12.2 An Aggregate Production Function	272
12.2.1 Quantity of Labor	273
12.2.2 Quality of Labor	273
12.2.3 Quantity of Capital	275
12.2.4 Quality of Capital	286
12.2.5 Quantity of Natural Resources	287
12.2.6 Quantity of Foreign Factors	288
12.2.7 Miscellaneous Sources of Growth	288
Notes	288
Part IV: Three Liberalization Episodes	
Chapter 13: Recent Liberalization Episodes	295
13.1 Motivations for Liberalization Efforts	296
13.1.1 External Factors	296
13.1.2 Internal Factors	300
13.2 What Was Done	301
13.2.1 Net Devaluations	301
13.2.2 Changes in Import Premiums and in Discrepancies in Effective Exchange Rates	302
13.2.3 Related Fiscal and Monetary Policies	303
13.2.4 Size and Impact of Official Foreign Credits	304
13.3 Short-Run Effects of Liberalization	305
13.3.1 Foreign-Exchange Position	305
13.3.2 Cyclical Fluctuations in Nominal and Real Terms	306
13.3.3 Resource Allocation and Structural Change	307
13.3.4 Distribution of Control over Income and Resources	307
13.3.5 Economic Growth	308
13.4 Why Liberalization Failed	308
Notes	311
Appendix A: Statistical Tables	313
Appendix B: Definition of Measures of Protection and Costs in Table 5.3	371

CONTENTS

xv

Appendix C: Impact of Devaluation in a Simple Keynesian Model	379
Appendix D: Definition of Concepts and Delineation of Phases	386
Appendix E: List of Abbreviations Used in the Study	389
<i>Bibliography</i>	391
<i>Index</i>	403

Tables

1.1	Exchange Rate and Selected Series on Exports, Imports, and Government Income and Expenditures of Chile, 1820-1930	6
3.1	Sources and Uses of Foreign Exchange in Chile in February 1942	62
3.2	Major Average Annual Price-Level-Deflated Nominal Exchange Rates of Chile, 1931-72	66
5.1	Chilean Price-Level-Deflated Effective Exchange Rates for Imported Goods and for Nongoods Transactions and Import Premium Rates, 1946-70	128
5.2	Chilean Ratios of Disaggregate Price-Level-Deflated Effective Exchange Rates, Premiums Included, 1946-70	134
5.3	Implicit Tariff Rates, Effective Protection Rates, and Domestic Resource Costs in Chile, 28 Sectors, 1961, 1967, and 1968	138
6.1	Mean Percentage Distribution of Chilean Imports by Country of Origin for Phases and Subphases of 1948-70	156
6.2	Percentage Composition of Chilean Consumption, Investment, and Intermediate Imports, 1960-61, 1962-64, and 1965-68	161
6.3	Chilean Real Import Functions for Major Uses of Goods, 1947-65	163
7.1	Mean Percentage Distribution of Chilean Exports by Destination for Phases and Subphases of 1948-70	177
7.2	Sectoral Real Export Functions for Chile, 1947-65	186
8.1	Chilean Balance of International Payments, Annual Averages for Phases and Subphases, 1947-71	200

9.1	Determinants of the Rates of Change of Chilean Sectoral Prices, 1945-65	222
9.2	Determinants of Chilean Sectoral Capacity Utilization, 1947-65	232
10.1	Pattern of Chilean Industrial Production, by Subsectors, 1957, 1962, and 1967	243
10.2	Chilean Mean Percentage Growth Rates of Manufacturing Subsectors for Selected Years, 1914-65, and for First Year of Three Periods of Liberalization	247
10.3	Chilean Import-Substitution Coefficients, by Manufacturing Subsectors, 1914-64	249
12.1	Sectoral Investment Functions for Chilean Real Physical Capital, 1945-65	278
12.2	Real Consumption-Savings Functions for Chilean Households and Nonprofit Institutions, Business, and the Government, 1945-65	282
13.1	Selected Indicators of External and Internal Chilean Economic Conditions in Years Preceding Liberalization Attempts and in First and Last Years of Liberalization Episodes, 1955-70	297
A.1	Arithmetic Means for Major Economic Variables During Phases and Subphases of the Chilean Exchange Control Regime, 1908-71	314
A.2	Exponential Growth Rates and Phase-Coincident Deviations from Growth for Real Values of Exports, Imports, Gross Domestic Product, and Capacity, 1940-65	321
A.3	Implicit Tariff Rates and Effective Protection Rates for 92 Products, 1967	325
A.4	Correlation Coefficients Among Alternative Sets of Estimates of Implicit Tariff Rates, Effective Protection Rates, and Domestic Resource Costs, 1961, 1967, and 1968	328
A.5	Correlation Coefficients Between Implicit Tariff Rates, Effective Protection Rates, and Domestic Resource Costs and Selected Sectoral Economic Variables, 1961, 1967, and 1968	329
A.6	Correlations Between Selected Sectoral Economic Variables and 1967-to-1961 Ratios for Implicit Tariff Rates and Effective Protection Rates	333
A.7	Chilean Average Annual Nominal and Effective Exchange Rates, 1931-72	334
A.8	Price-Level-Deflated Effective Exchange Rates, Premiums Included, for Major Production Sectors and Subsectors and Demand Components, 1946-70	340
A.9	Correlation Coefficients Among Price-Level-Deflated Effective Exchange Rates, Premiums Included, for Major Production	

	Sectors and Subsectors and Demand Components, 1946-70	348
A.10	Percentage Changes in Ratios of Effective Exchange Rates, Premiums Included, to National Accounts Nominal Exchange Rate for Major Production Sectors and Subsectors and Demand Components, 1947-70	350
A.11	Ex Post General-Equilibrium Elasticities of Important Economic Variables in Chile with Respect to Changes in Foreign-Sector Factors	356
B.1	Ratios of Domestic Prices to c.i.f. Prices by Sectoral Destination and End Use, 1962	373

Charts

1.1	Selected Macroeconomic Variables During Phases and Sub-phases of the Chilean Exchange Control Regime, 1908-71	23
1.2	Major Components of Chile's Balance of Payments During Phases and Subphases of Her Exchange Control Regime, 1947-71	26

Co-Directors' Foreword

This volume is one of a series resulting from the research project on Exchange Control, Liberalization, and Economic Development sponsored by the National Bureau of Economic Research, the name of the project having been subsequently broadened to Foreign Trade Regimes and Economic Development. Underlying the project was the belief by all participants that the phenomena of exchange control and liberalization in less developed countries require careful and detailed analysis within a sound theoretical framework, and that the effects of individual policies and restrictions cannot be analyzed without consideration of both the nature of their administration and the economic environment within which they are adopted as determined by the domestic economic policy and structure of the particular country.

The research has thus had three aspects: (1) development of an analytical framework for handling exchange control and liberalization; (2) within that framework, research on individual countries, undertaken independently by senior scholars; and (3) analysis of the results of these independent efforts with a view to identifying those empirical generalizations that appear to emerge from the experience of the countries studied.

The analytical framework developed in the first stage was extensively commented upon by those responsible for the research on individual countries, and was then revised to the satisfaction of all participants. That framework, serving as the common basis upon which the country studies were undertaken, is further reflected in the syntheses reporting on the third aspect of the research.

The analytical framework pinpointed these three principal areas of research which all participants undertook to analyze for their own countries.

Subject to a common focus on these three areas, each participant enjoyed maximum latitude to develop the analysis of his country's experience in the way he deemed appropriate. Comparison of the country volumes will indicate that this freedom was indeed utilized, and we believe that it has paid handsome dividends. The three areas singled out for in-depth analysis in the country studies are:

1. *The anatomy of exchange control*: The economic efficiency and distributional implications of alternative methods of exchange control in each country were to be examined and analyzed. Every method of exchange control differs analytically in its effects from every other. In each country study care has been taken to bring out the implications of the particular methods of control used. We consider it to be one of the major results of the project that these effects have been brought out systematically and clearly in analysis of the individual countries' experience.

2. *The liberalization episode*: Another major area for research was to be a detailed analysis of attempts to liberalize the payments regime. In the analytical framework, devaluation and liberalization were carefully distinguished, and concepts for quantifying the extent of devaluation and of liberalization were developed. It was hoped that careful analysis of individual devaluation and liberalization attempts, both successful and unsuccessful, would permit identification of the political and economic ingredients of an effective effort in that direction.

3. *Growth relationships*: Finally, the relationship of the exchange control regime to growth via static-efficiency and other factors was to be investigated. In this regard, the possible effects on savings, investment allocation, research and development, and entrepreneurship were to be highlighted.

In addition to identifying the three principal areas to be investigated, the analytical framework provided a common set of concepts to be used in the studies and distinguished various phases regarded as useful in tracing the experience of the individual countries and in assuring comparability of the analyses. The concepts are defined and the phases delineated in Appendix A.

The country studies undertaken within this project and their authors are as follows:

Brazil	Albert Fishlow, University of California, Berkeley
Chile	Jere R. Behrman, University of Pennsylvania
Colombia	Carlos F. Díaz-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

The principal results of the different country studies are brought together in our overall syntheses. Each of the country studies, however, has been made self-contained, so that readers interested in only certain of these studies will not be handicapped.

In undertaking this project and bringing it to successful completion, the authors of the individual country studies have contributed substantially to the progress of the whole endeavor, over and above their individual research. Each has commented upon the research findings of other participants, and has made numerous suggestions which have improved the overall design and execution of the project. The country authors who have collaborated with us constitute an exceptionally able group of development economists, and we wish to thank all of them for their cooperation and participation in the project.

We must also thank the National Bureau of Economic Research for its sponsorship of the project and its assistance with many of the arrangements necessary in an undertaking of this magnitude. Hal B. Lary, Vice President-Research (retired), most energetically and efficiently provided both intellectual and administrative input into the project over a three-year period. We would also like to express our gratitude to the Agency for International Development for having financed the National Bureau in undertaking this project. Michael Roemer and Constantine Michalopoulos particularly deserve our sincere thanks.

JAGDISH N. BHAGWATI
Massachusetts Institute of Technology

ANNE O. KRUEGER
University of Minnesota

Acknowledgments

I have been involved in this and related studies of the Chilean economy for over five years. Not surprisingly, the list of contributing individuals and organizations to which I am indebted is a long one. Among individuals special thanks are due to Ricardo Lira, who worked with me as a research assistant both in Santiago and in Philadelphia, and to Nancy Blossom, who contributed substantially to the computer programming and data processing. Considerable thanks also are due to a large group of economists with whom I worked or who provided suggestions while I was in Chile: Edmar Bacha, Juan de la Barra, Hollis Chenery, Peter Clark, Richard Eckaus, Alejandro Foxley, Eduardo García, Jorge García, Everett Hagen, Arnold Harberger, Ana Marie Jul, Cristian Ossa, Paul N. Rosenstein-Rodan, and Lance Taylor, all of whom were associated with the Oficina de Planificación Nacional (ODEPLAN)—Center for International Studies of the Massachusetts Institute of Technology—Ford Foundation project in 1967–70; Jorge Cauas, Ricardo Ffrench-Davis, and Carlos Massad of the Central Bank; Teresa Jeanneret, Joseph Ramos, and John Strasma of the University of Chile; and Sergio de la Cuadra of the Catholic University. A number of the same individuals provided assistance in the United States, as did F. Gerard Adams, Lawrence Klein, Joze Mencinger, James McCabe, Almarin Phillips, Robert Pollak, Robert Rasche, and Oskar Rufatt at the University of Pennsylvania; Markos Mamalakis of the Latin American Studies Center at the University of Wisconsin—Milwaukee; and Hans Bergendorf of the Development Research Center of the International Bank for Reconstruction and Development. All the members of the National Bureau of Economic Research project of which this study is a part provided

insights directly or indirectly, but I owe special thanks to Jagdish Bhagwati, Carlos Díaz-Alejandro, Charles Frank, Anne Krueger, and Hal Lary. I also wish to thank Bela Balassa for his permission to reproduce the 1961 ITR and EPR estimates in Table 5.3. Ester Moskowitz of the NBER staff provided extraordinary editing services. H. Irving Forman skillfully drew the charts and figures. Finally, Sara Nunn, Andia Brown, Margo Richardson, Florence Barrow, and the Wharton Duplication Center under the guidance of Anna-May Busch provided essential bibliographical, secretarial, and organizational services.

Among organizations, I owe special thanks to the National Bureau of Economic Research Project on Foreign Trade Regimes and Economic Development, financed by the Agency for International Development, under whose auspices this study was conducted. I also wish to acknowledge with gratitude the financial support for this and related work that was provided by the Ford Foundation in Santiago, a Ford Faculty Fellowship in Economics in 1971-72, the Center for International Studies of the Massachusetts Institute of Technology, the University of Pennsylvania, the Development Research Center of the International Bank for Reconstruction and Development, and the National Science Foundation under Grant GS-36459. However, responsibility for the contents of this volume is entirely mine, and the aid rendered to me by the individuals and organizations mentioned above should not be construed as constituting endorsement of my findings, presentation, or point of view.

JERE R. BEHRMAN

Principal Dates and Historical Events in Chile

- 1536 Spanish discovery of Chile by Diego de Almagro.
- 1810–18 Wars of independence from Spain.
- 1865–66 War with Spain.
- 1879–83 War of the Pacific; Chile defeats Peru and Bolivia and becomes owner of rich nitrate and copper deposits.
- 1891 Civil War; President José Manuel Balmaceda killed.
- 1920–24 Presidency of Arturo Alessandri; initiation of substantial social legislation; creation of Central Bank; resignation of Alessandri.
- 1925 Revolution; reinstatement of Alessandri, approval of new constitution; abdication of Alessandri; election of Emiliano Figueroa Larraín as president.
- 1927 Resignation of Figueroa Larraín; election of Carlos Ibañez del Campo as president.
- 1931 Catastrophic impact of Great Depression; abandonment of convertibility; resignation of Ibañez; establishment of restrictive foreign economic regimes; succession of governments and great political instability.
- 1932–38 Re-establishment of political and economic order under President Arturo Alessandri (now more conservative than in 1920s).
- 1939 First year of Popular Front government under President Pedro Aguirre Cerda; major earthquake; creation of CORFO.
- 1941 President Aguirre dies.
- 1942 Juan Antonio Ríos elected president; copper price fixed at 12 cents per pound by agreement with United States government as part of war effort.

- 1946 President Ríos dies; Gabriel González Videla elected president with considerable support from leftist parties; copper price-fixing agreement terminated.
- 1947 Government moves toward right; Communist Party outlawed, diplomatic relations with Union of Soviet Socialist Republics broken.
- 1950 United States unilaterally fixes copper price because of Korean conflict.
- 1951 Washington Treaty signed after strong Chilean outrage.
- 1952 Chilean copper-sales monopoly started; Ibañez elected again to presidency.
- 1955 *Nuevo Trato* (new deal) legislated for large-scale copper mining, political and economic situation disintegrates considerably; Felipe Herrera made minister of finance; Klein-Saks consulting firm contracted for aid in stabilization program.
- 1956 Ibañez-Klein-Saks program of stabilization plus liberalization initiated.
- 1958 Jorge Alessandri Rodríguez elected president.
- 1959 Alessandri program of stabilization plus liberalization commences.
- 1960 Major earthquake in south.
- 1962 Stabilization-liberalization effort abandoned.
- 1964 Eduardo Frei Montalva elected president.
- 1965 Frei stabilization-liberalization effort begun; sliding-peg exchange rate policy adopted; foreign debt renegotiated.
- 1966 Chileanization of Kennecott's copper holdings.
- 1967 Collapse of stabilization attempt.
- 1969 Nationalization of Anaconda's copper holdings.
- 1970 Abandonment of sliding-peg exchange rate policy; Salvador Allende Gossens elected president as head of Popular Unity Coalition.
- 1971 Complete nationalization of large-scale copper mining; intensified quantitative restrictions.
- 1972 Foreign-debt renegotiation.
- 1973 Military coup in which President Allende killed.

