From Right to Reality

INCENTIVES, LABOR MARKETS, AND THE CHALLENGE OF UNIVERSAL SOCIAL PROTECTION IN LATIN AMERICA AND THE CARIBBEAN

Helena Ribe
David A. Robalino
Ian Walker

THE WORLD BANK
From Right to Reality
Latin American Development Forum Series

This series was created in 2003 to promote debate, disseminate information and analysis, and convey the excitement and complexity of the most topical issues in economic and social development in Latin America and the Caribbean. It is sponsored by the Inter-American Development Bank, the United Nations Economic Commission for Latin America and the Caribbean, the Brookings Institution, and the World Bank. The manuscripts chosen for publication represent the highest quality in each institution’s research and activity output and have been selected for their relevance to the academic community, policy makers, researchers, and interested readers.

Advisory Committee Members

Alicia Bárcena Ibarra, Executive Secretary, Economic Commission for Latin America and the Caribbean, United Nations

Inés Bustillo, Director, Washington Office, Economic Commission for Latin America and the Caribbean, United Nations

Augusto de la Torre, Chief Economist, Latin America and the Caribbean Region, World Bank

Tito Cordella, Deputy Chief Economist, Latin America and the Caribbean Region, World Bank

Santiago Levy, Vice President for Sectors and Knowledge, Inter-American Development Bank

Eduardo Lora, Chief Economist (a.i.) and General Manager, Research Department, Inter-American Development Bank

Luis Servén, Senior Adviser, Development Economics Vice Presidency, World Bank
Titles in the Latin American Development Forum Series


The Quality of Life in Latin American Cities: Markets and Perception (2010) by Eduardo Lora, Andrew Powell, Bernard M. S. van Praag, and Pablo Sanguinetti, editors

Discrimination in Latin America: An Economic Perspective (2010) by Hugo Ñopo, Alberto Chong, and Andrea Moro, editors

The Promise of Early Childhood Development in Latin America and the Caribbean (2010) by Emiliana Vegas and Lucrecia Santibáñez


China’s and India’s Challenge to Latin America: Opportunity or Threat? (2009) by Daniel Lederman, Marcelo Olarreaga, and Guillermo E. Perry, editors

Does the Investment Climate Matter? Microeconomic Foundations of Growth in Latin America (2009) by Pablo Fajnzylber, José Luis Guasch, and J. Humberto López, editors

Measuring Inequality of Opportunities in Latin America and the Caribbean (2009) by Ricardo de Paes Barros, Francisco H. G. Ferreira, José R. Molinas Vega, and Jaime Saavedra Chanduvi

The Impact of Private Sector Participation in Infrastructure: Lights, Shadows, and the Road Ahead (2008) by Luis Andres, José Luis Guasch, Thomas Haven, and Vivien Foster
Remittances and Development: Lessons from Latin America (2008) by Pablo Fajnzylber and J. Humberto López, editors

Fiscal Policy, Stabilization, and Growth: Prudence or Abstinence? (2007) by Guillermo Perry, Luis Servén, and Rodrigo Suescún, editors

Raising Student Learning in Latin America: Challenges for the 21st Century (2007) by Emiliana Vegas and Jenny Petrow

Investor Protection and Corporate Governance: Firm-level Evidence across Latin America (2007) by Alberto Chong and Florencio López-de-Silanes, editors

The State of State Reform in Latin America (2006) by Eduardo Lora, editor


Natural Resources: Neither Curse nor Destiny (2006) by Daniel Lederman and William F. Maloney, editors

Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability (2005) by José Antonio Ocampo, editor

Privatization in Latin America: Myths and Reality (2005) by Alberto Chong and Florencio López-de-Silanes, editors

Keeping the Promise of Social Security in Latin America (2004) by Indermit S. Gill, Truman G. Packard, and Juan Yermo


Globalization and Development: A Latin American and Caribbean Perspective (2003) by José Antonio Ocampo and Juan Martín, editors

About the Authors

Helena Ribe was the sector manager for Social Protection in the World Bank’s Latin America and the Caribbean Region. She managed the Bank’s program of loans, technical assistance, and analytical studies for the region, including support to social insurance, employment, active labor market, and conditional cash transfer (CCT) programs. She also directed the Bank’s knowledge-sharing International CCT Community of Practice. During her career of three decades at the World Bank, Ms. Ribe also held the positions of sector manager, lead economist, and sector leader in the Sub-Saharan Africa and Latin America and the Caribbean Regions and was recognized as one of the Bank’s leading experts on social protection and labor market policies and programs. Ms. Ribe retired from the World Bank in the fall of 2011 and is now engaged as director in several nonprofit organizations. She holds a PhD in economics from Yale University and a BA from Universidad de los Andes in Colombia, her country of origin.

David A. Robalino is a lead economist at the World Bank and leader of the Social Protection sector’s labor team. He also serves as co-director of the Employment and Development program at the Institute for the Study of Labor (IZA). Since joining the Bank, Mr. Robalino has been working on issues related to social security, labor markets, and fiscal policy. He has worked in several countries in the Latin America and the Caribbean, Middle East and North Africa, Sub-Saharan Africa, and East Asia and Pacific Regions. Mr. Robalino has published extensively on issues related to macroeconomics and labor markets, social insurance and pensions, health financing, the economics of HIV/AIDS, and the economics of climate change. Prior to joining the Bank, Mr. Robalino was a researcher at the RAND Corporation. He was also a member of Ecuador’s Presidential Committee for Social Security Reform. He holds a PhD in public economics from the Pardee RAND Graduate School (Santa Monica, California) as well as degrees from the Université Paris 1 Panthéon-Sorbonne (Paris) and the Universidad Central del Ecuador (Quito).

Ian Walker is the resident representative of the Inter-American Development Bank in Tegucigalpa, Honduras. From 2005 to 2011, he was
lead economist on the Social Protection team in the World Bank’s Latin America and the Caribbean Region. Before joining the World Bank, Mr. Walker was director of ESA Consultores in Honduras. He served as chief economic advisor to the Maduro administration, led the technical team developing Honduras’s Millennium Challenge Corporation program, and completed studies on a wide range of development issues in Central and South America, North Africa, and the Middle East and Central Asia. Mr. Walker is the author of studies on social protection, nutrition, and the demand for public services, and has led development policy lending focused on strengthening human development outcomes through better accountability in the Andean region. He holds a master’s degree in economics and modern history from Oxford University (U.K.).
Contents

Foreword xix
Acknowledgments xxi
Abbreviations xxiii

INTRODUCTION 1
References 4

PART I 7
1 A Framework for Social Protection Systems and Policy Implications for Latin America and the Caribbean 9
   Recent Developments and Challenges in SP Systems 10
   A Policy Framework for Social Protection in Latin America and the Caribbean 38
   Conclusion 59
   Notes 60
   References 63

2 Labor Markets in Latin America and the Caribbean: Structure, Dynamics, and Implications for the Design of Social Protection Policies 67
   The Structure of Labor Markets 68
   Unemployment Risks 79
   Labor Market Dynamics 92
   Conclusions 105
   Annex 2.1. The Contribution of Different Sectors to Employment Growth and Labor Productivity 107
   Annex 2.2 The Decomposition of Unemployment Rates 110
Annex 2.3 Data and Methods for Calculating Unemployment Risks
   Notes
   References

PART II

3 Financing for Universal Health Coverage in Latin America and the Caribbean
   Organizational and Institutional Arrangements
   Health Systems’ Performance in Latin America and the Caribbean
   The Way Forward
   Conclusion: Three Paradigm Shifts
   Notes
   References

4 Old-Age Income Protection Programs
   Taking Stock of Current Systems
   A Framework for Expanding Coverage
   Integration and Coordination
   Conclusions
   Notes
   References

5 Managing Labor Market Risks
   Income Protection Policies
   Active Labor Market Programs
   Implementation and Coordination of IPPs and ALMPs
   Conclusions
   Notes
   References

6 Income Support: Increasing Its Effectiveness and Coherence
   The Emergence of Income Support as Central to Social Protection in Latin America and the Caribbean
   Patterns of Social Assistance and Income Support
   Toward Greater Coherence and Effectiveness
   Future Challenges
CONTENTS

Notes
References

PART III

7 ADDRESSING CROSS-CUTTING CHALLENGES

The Challenge of Expanding Social Insurance
Human Capital Promotion and Access to Good Jobs
Exploiting Synergies across Risks and Programs
The Way Forward

Notes
References

GLOSSARY

Boxes

1.1 The Effect of Setting Workfare Wages Too High: The Case of PLANE in Bolivia
1.2 The Limitations of Funding SI Entirely from General Taxation
3.1 Health System Fragmentation: The Example of Peru
3.2 The Impact of Noncontributory Health Insurance on Service Use and Out-of-Pocket Expenditures in Latin America and the Caribbean
3.3 The Evolution of Chile’s Policy of Universal Access to Explicit Entitlements
3.4 Innovative Approaches to Collecting Social Health Insurance Contributions: The Case of Hungary
3.5 Using Tax Subsidies to Promote Health Insurance Coverage and Formality: The U.S. Experience
4.1 The Financial Crisis and Pension Systems
5.1 Unemployment Benefits in Chile: Savings with Explicit Redistributive Arrangements
5.2 ALMP Responses in a Time of Crisis: The Case of Mexico
5.3 An Integrated System of Employment Services in the Republic of Korea
6.1 Making Food Programs More Effective and Developing a Large-Scale CCT in Peru
6.2 The Recent Evolution of El Salvador’s Social Safety Net
## Contents

6.3 Graduation from Income Transfer Programs: Is It an Issue? 338  
6.4 The Transition from Emergency Workfare to Sustainable Safety Net Programs: Argentina and Bolivia 342  
6.5 The Pitfalls of Urban CCTs 356  
7.1 The Right and Wrong Way to Redistribute 374

### Figures

1.1 Contributory Pension Coverage, 1990s versus 2000s 12  
1.2 Contributory Pension Coverage Rates in the 2000s, by Quintile of Per Capita Income 13  
1.3 Contributory Health Insurance Coverage in the mid-2000s 14  
1.4 Contributory Health Insurance Coverage in the mid-2000s, by Decile of Per Capita Income 15  
1.5 Unemployment Individual Savings Accounts per Employed Worker 16  
1.6 Contributory and Noncontributory Pension Coverage among the Elderly in the 2000s, by Income Quintile and Source 17  
1.7 Contributory, Noncontributory, and Combined Health Insurance Coverage in the mid-2000s, by Income Decile and Source 18  
1.8 Mandates of Unemployment Benefit Systems 22  
1.9 Implicit Taxes and Subsidies in the Brazilian Pension System 25  
1.10 Coverage of All Households by Income Transfer Programs 29  
1.11 Cost of CCT Programs 30  
1.12 A Conceptual Framework for Social Protection 39  
1.13 Examples of Different Mandates for Pensions 48  
1.14 The Obligatory Mandate and Optional Additional Plans of a Hypothetical Social Health Insurance System 50  
2.1 Demographic Transition in Latin America and the Caribbean 69  
2.2 Growth Rate of the Labor Force and Its Decomposition 70  
2.3 Past and Expected Future Changes in Participation Rates 72  
2.4 Labor Force by Education Level 74
2.5 Per Capita GDP, Labor Productivity, and Employment Growth 76
2.6 Distribution of Employment by Economic Sector 77
2.7 Labor Force by Formal and Informal Occupation 78
2.8 Dynamic of Unemployment Rates 80
2.9 Unemployment Risks by Region, Argentina and Brazil 83
2.10 Unemployment Inflow Rates and Unemployment Duration 85
2.11 Job Creation and Destruction Rates in Manufacturing 87
2.12 Unemployment Risk by Sector in Argentina, Brazil, and Mexico 88
2.13 Determinants of the Probability of Unemployment in Argentina, Brazil, and Mexico 91
2.14 Determinants of the Probability ofExiting Unemployment in Argentina, Brazil, and Mexico 91
2.15 Formal and Informal Employment over the Life Cycle in Argentina, Brazil, and Mexico 93
2.16 Distribution of Occupational States over the Life Cycle in Urban Brazil 100
2.17 Mexican Workers’ Number of Years in the Formal Sector, 1997–2006 103
2.18 Entries and Exits for Mexican Workers with Five Years in the Formal Sector 104
2A3.1 The Probability of Becoming Unemployed 126
3.1 Proportion of Pooled Health Expenditures by Per Capita GDP, Global Distribution, 2006 150
3.2 Formal Labor Market Workers in Mexico with Contributory Social Health Insurance and Pension Coverage 156
3.3 Total Health Insurance Coverage versus Noncontributory Coverage, 2006 159
3.4 Contributions to the IMSS and Seguro Popular, 2008 162
3.5 Global Per Capita Health Expenditures and Infant Mortality Rates 167
3.6 Health Inflation Rates versus Nominal GDP Growth and General Inflation Rates in Selected Countries 171
3.7 Projection of Dependency Ratios in Selected Countries 173
4.1 Old-Age Coverage and Public Expenditures on Pensions 201
4.2 Gross Replacement Rates at Age 60 202
4.3 Old-Age Coverage and Poverty 203
4.4 Internal Rates of Return as a Function of Wage Growth and Life Expectancy 207
4.5 Old-Age Coverage and Labor Force Participation 208
4.6 Change in Internal Rates of Return between the Ages of 60 and 70 210
4.7 Internal Rates of Contributions Relative to Sustainable Levels 215
4.8 Typology of Retirement Income Transfers 218
4.9 Chile’s Contributory and Noncontributory Benefits, 1990–2009 220
4.10 Bolivia’s Contributory and Noncontributory Benefits, 1990–2009 221
4.11 Argentina’s Contributory and Noncontributory Benefits, 1990–2008 223
5.1 Coverage of Severance Pay in Argentina 242
5.2 Mandates of the Income Protection Systems 243
5.3 Financial Situation of the Unemployment Insurance System in Brazil 258
5.4 Replacement Rates and Benefit Duration in Selected Countries 261
5.5 An Integrated Labor Market Risk Management System 292
6.1 Worldwide Comparison of Social Assistance and Social Insurance Spending 316
6.2 Correlation of Social Protection Spending and Per Capita GNI 316
6.3 Social Assistance Expenditures as a Percentage of GDP 317
6.4 Correlation between Social Insurance and Social Assistance as a Percentage of GDP 317
6.5 Increase in Concentration of Brazil’s Social Assistance Spending 327
7.1 Informal Sector Productivity, Payroll Taxes, EMTRs, and Incentives for Informality 385
7.2 Minimum Wages in Selected Countries, 2008 390
7.3 Tax Wedges around the World 392
7.4 The Share of the Contribution Rate Allocated to Nonessential Benefits 400
7.5 The Predicted Effect of Removing Unemployment Insurance on the Contribution Densities and Retirement Ages of Average Earners in Brazil 401
7.6 Correlation of Disability Claims and Unemployment in Argentina 403
7.7 Policy Innovations and Per Capita Income 408

Tables
1.1 Institutional Integration of Publicly Mandated SI Systems 21
2.1 Transition Intensities and Propensities between Sectors in Argentina, Brazil, and Mexico 95
2.2 Contribution Densities of the Social Security System in Argentina, Chile, and Uruguay 98
2A2.1 The Structure of Unemployment 111
2A2.2 Estimated Unemployment Inflow Rates 113
2A2.3 Average Duration of the Unemployment Spell 115
2A3.1 Surveys and Their Main Characteristics 118
2A3.2 Mean and Standard Deviations for Explanatory Variables—Unemployment Risk and Exit 121
2A3.3 Average Unemployment Risk 127
2A3.4 Logit Coefficients and Standard Errors for Full Model—Unemployment Risk 129
2A3.5 Logit Coefficients and Standard Errors for No Economic Sector Model—Unemployment Risk 132
2A3.6 Logit Coefficients and Standard Errors for Unemployment Exit 134
3.1 Integrated versus Fragmented Health Systems: Key Financing Characteristics, 2005–06 149
4.1 Distribution of Risks between the State and Individuals in Pension Systems 193
4.2 Financing Mechanisms in the Main Pension Systems 198
4.3 Institutional Organization of National Pension Systems 199
5.1 Income Protection Systems 241
5.2 General Procedures for the Firing of Redundant Workers 255
5.3 Labor Costs Related to Income Protection 256
5.4 Employment Barriers and Ways to Overcome Them 272
5.5 ALMPs in Latin America and the Caribbean, Selected Countries 273
5.6 Impact and Cost-Benefit Analyses of the Jóvenes Programs 276
5.7 Public Employment Services Offices, Selected Countries 278
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Distribution of Subsidies to Social Insurance and Social Assistance</td>
<td>313</td>
</tr>
<tr>
<td>6.3</td>
<td>Patterns of Social Insurance and Social Assistance Spending</td>
<td>318</td>
</tr>
<tr>
<td>6.4</td>
<td>Time Trends in Social Assistance Spending</td>
<td>319</td>
</tr>
<tr>
<td>6.5</td>
<td>Household Coverage of Cash and In-Kind Income Transfer Programs</td>
<td>320</td>
</tr>
<tr>
<td>6.6</td>
<td>Budget, Population Coverage, Cost per Beneficiary, and Targeting of CCT Programs</td>
<td>330</td>
</tr>
<tr>
<td>6.7</td>
<td>CCT Benefit Amounts Compared with Pretransfer Income or Expenditure</td>
<td>332</td>
</tr>
<tr>
<td>6.8</td>
<td>Impact of CCT Programs on National Poverty Indexes</td>
<td>333</td>
</tr>
<tr>
<td>6.9</td>
<td>Effect of CCTs on Health Demand and Outcomes</td>
<td>336</td>
</tr>
<tr>
<td>6.10</td>
<td>Temporary Employment Programs in Latin America and the Caribbean Since 2000</td>
<td>347</td>
</tr>
<tr>
<td>7.1</td>
<td>Typology of Young People and Labor Market Programs to Meet Their Needs</td>
<td>394</td>
</tr>
<tr>
<td>7.2</td>
<td>Initial Conditions Shaping Policy Options in the Social Protection System</td>
<td>407</td>
</tr>
</tbody>
</table>
Latin America remains the world’s most unequal region, and one where poverty is greater than it should be, given its level of economic development. In the past decade, however, inequality fell in 12 of the 17 Latin American nations for which comparable data were available, and a number of studies have attributed a nontrivial part of that decline to an expansion in the region’s social protection systems. In some countries, an important share of the reduction in absolute poverty appears to have been driven by large-scale social protection innovations, such as conditional cash transfers and noncontributory “social” pensions.

Nevertheless, the very process of experimentation and organic growth by which social assistance and social insurance programs have developed in many countries has spawned incomplete and fragmented systems, which pose a number of challenges to the region’s policy makers. Contributory social insurance coverage remains too low and is restricted to formal sector workers. Redistribution within the social insurance system is usually opaque and often regressive. Fragmentation and ill-designed redistribution also create unintended disincentives for work and savings. At the same time, improvements in the effectiveness with which social insurance instruments promote investment in human capital and facilitate transitions into good jobs remain both necessary and possible.

Building on careful, detailed analysis of a wealth of data on social protection programs across Latin America and the Caribbean, this book addresses these challenges in a thorough yet accessible manner. Although the analysis is comprehensive, the authors focus primarily on three fundamental questions that must be faced by any effort to strengthen social protection in the region: How can programs protect the most vulnerable without promoting informality and dampening incentives to work and save? How can programs ensure that scarce public resources are used for subsidies that are transparent, fair, and effective—and not for badly targeted and regressive benefits for formal sector workers? Finally, how can programs reinforce human capital development so that the more mobile workers that the region needs are able to insure themselves through savings or risk-pooling arrangements, thus reducing vulnerability and the need for subsidies?
In providing thoughtful, evidence-based answers to these questions, the volume makes an important contribution to a growing debate among policy makers and social actors in Latin America and the Caribbean about the costs and inefficiencies of what are at present dualistic systems of social insurance for formal workers and social assistance for others. By necessity, that contribution is informed by a deep understanding of how the region’s labor markets work, and especially of the challenge posed by the prevalence of informality.

The authors develop a compelling, parsimonious conceptual framework for the general principles of social protection reform, highlighting the importance of the behavioral reactions of workers, firms, and service providers to the rules and incentives embedded in social protection policies and programs. But their proposals are also rooted in an in-depth knowledge of the complex realities of the region. They recognize that the starting points, constraints, and social choices will vary by country, and they avoid the trap of recommending a simple blueprint. Rather, the book invites policy makers everywhere to step up to the challenge of building an integrated social protection system that treats the population equitably; provides an inclusive safety net; promotes efficiency in service provision; and strengthens incentives to build more-flexible human capital, to work, and to save. If that invitation is taken up, the results could combine greater equity with a boost to the region’s economic performance.

Augusto de la Torre
Chief Economist
Latin America and the Caribbean Region
The World Bank
Acknowledgments

This volume presents the findings of a body of work commissioned by the Chief Economist’s Office and prepared by the Social Protection Unit in the Latin America and the Caribbean Region of the World Bank, under the supervision of Augusto de la Torre and Helena Ribe. A summary version of the study’s findings, written by Helena Ribe, David A. Robalino, and Ian Walker, was published by the World Bank in 2010 under the title Achieving Effective Social Protection for All in Latin America and the Caribbean: From Right to Reality. This volume presents the detailed analysis of each area of social protection policy and of cross-cutting challenges.

Helena Ribe, David A. Robalino, and Ian Walker coauthored chapter 1 with Javier Baez and Andrew Mason; David A. Robalino coauthored chapter 2 with Eduardo Zylberstajn; Christoph Kurowski and Ian Walker coauthored chapter 3; David A. Robalino and Rafel Rofman coauthored chapter 4; David A. Robalino coauthored chapter 5 with Maria Laura Sanchez Puerta; Helena Ribe and Ian Walker coauthored chapter 6 with Francesca Lamanna; and David A. Robalino and Ian Walker coauthored chapter 7.

Background papers and other valuable input came from Pablo Acosta, Rodolfo Beazley, Fabio Bertranou, Ramon Castano-Yepes, Aline Coudouel, Wendy Cunningham, Vanessa da Silva Moreira, Mario di Filippo, Alvaro Forteza, Ariela Goldschmit, Jason Hobbs, Theresa Jones, Ricardo Charles Manzano, Edmundo Murrugarra, Christina Novinskey, Francisco Ochoa, Susan Parker, Jose Luis Salas, Manuel Salazar, John Scott, Veronica Silva, Maria Concepcion Steta, Sarah Thomson, Elio Valladares, Manuela Villar, Alejandro Yepes, and Eduardo Zylberstajn. The team gratefully acknowledges the advice and comments of Veronica Alaimo, Caridad Araujo, Laura Chioda, Tito Cordella, Augusto de la Torre, Pablo Fajnzylber, Francisco Ferreira, Margaret Grosh, Marcelo Giugale, Keith Hansen, Richard Hinz, Robert Holzmann, Dorothy Kronick, William Maloney, John Nash, Ana Revenga, Jamele Rigolini, Jaime Saavedra, Ilias Skamnelos, Andras Uthoff, Salvador Valdés-Prieto, Milan Vodopivec, and Hélio Zylberstajn. Fiona Mackintosh edited the initial draft. Special thanks to Lerick Kebeck, who coordinated the complex
process of production of the report and book in different phases during 2010 and 2011 and managed authors’ responses to the editors’ queries. Sandra Leon Bolourian and Julie Nannucci also contributed to the production of the document at critical phases of the process.
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFDC</td>
<td>Aid to Families with Dependent Children</td>
</tr>
<tr>
<td>ALMPs</td>
<td>active labor market programs</td>
</tr>
<tr>
<td>APS</td>
<td>Pension Solidarity Complement</td>
</tr>
<tr>
<td>BDH</td>
<td>Bono de Desarrollo Humano (Human Development Bonus)</td>
</tr>
<tr>
<td>BPC</td>
<td>Bono de Prestacioao Continua</td>
</tr>
<tr>
<td>CARICOM</td>
<td>Caribbean Community</td>
</tr>
<tr>
<td>CASEN</td>
<td>Encuesta de Caracterización Socioeconomica Nacional (National Socioeconomic Characterization Survey, Chile)</td>
</tr>
<tr>
<td>CCT</td>
<td>conditional cash transfer</td>
</tr>
<tr>
<td>CONAFE</td>
<td>Consejo Nacional de Fomento Educativo (Mexico)</td>
</tr>
<tr>
<td>CONSAR</td>
<td>Comisión Nacional del Sistema de Ahorro para el Retiro (National Commission for the Pension System, Mexico)</td>
</tr>
<tr>
<td>DB</td>
<td>defined benefit</td>
</tr>
<tr>
<td>DB-PAYG</td>
<td>defined benefit pay-as-you-go</td>
</tr>
<tr>
<td>DC</td>
<td>defined contribution</td>
</tr>
<tr>
<td>DC-FF</td>
<td>defined contribution fully funded</td>
</tr>
<tr>
<td>EAP</td>
<td>economically active population</td>
</tr>
<tr>
<td>EIS</td>
<td>Employment Insurance System</td>
</tr>
<tr>
<td>EMTR</td>
<td>effective marginal tax rate</td>
</tr>
<tr>
<td>ENIGH</td>
<td>Encuesta Nacional de Ingreso y Gasto de los Hogares (Household Expenditure Survey, Mexico)</td>
</tr>
<tr>
<td>ENOE</td>
<td>Encuesta Nacional de Ocupación y Empleo</td>
</tr>
<tr>
<td>EPB</td>
<td>Employment Promotion Benefits</td>
</tr>
<tr>
<td>EPH</td>
<td>Encuesta Permanente de Hogares</td>
</tr>
<tr>
<td>ESP</td>
<td>Employment Stabilization Program</td>
</tr>
<tr>
<td>FGTS</td>
<td>Fondo de Garantia por Tempo de Serviço (Guaranteed Fund for Time of Service [unemployment compensation], Brazil)</td>
</tr>
<tr>
<td>FHIS</td>
<td>Fondo Hondureño de Inversión Social</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>IBGE</td>
<td>Instituto Brasileiro de Geografía e Estatística</td>
</tr>
<tr>
<td>IMSS</td>
<td>Instituto Mexicano de Seguro Social (Mexican Institute for Social Security)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>INDEC</td>
<td>Instituto Nacional de Estadística y Censos (National Statistics and Censuses Institute, Argentina)</td>
</tr>
<tr>
<td>INEGI</td>
<td>Instituto Nacional de Estadística, Geografía y Informática (Mexico)</td>
</tr>
<tr>
<td>IPP</td>
<td>income protection policy</td>
</tr>
<tr>
<td>IPU</td>
<td>Income Protection Unit</td>
</tr>
<tr>
<td>IRR</td>
<td>internal rate of return</td>
</tr>
<tr>
<td>ISAPRE</td>
<td>Instituciones de Salud Previsional</td>
</tr>
<tr>
<td>ISSSTE</td>
<td>Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (Institute for Social Security and Services for State Workers, Mexico)</td>
</tr>
<tr>
<td>JIA</td>
<td>job intermediation agency</td>
</tr>
<tr>
<td>JSA</td>
<td>job-seeker’s allowance</td>
</tr>
<tr>
<td>JSAIU</td>
<td>Job Search Assistance and Intermediation Unit</td>
</tr>
<tr>
<td>JSDP</td>
<td>Job Skill Development Program</td>
</tr>
<tr>
<td>LAC</td>
<td>Latin America and the Caribbean</td>
</tr>
<tr>
<td>LMRM</td>
<td>Labor Market Risks Management</td>
</tr>
<tr>
<td>MAC</td>
<td>Make a Connection</td>
</tr>
<tr>
<td>MPG</td>
<td>minimum pension guarantee</td>
</tr>
<tr>
<td>NDC</td>
<td>notional defined contribution</td>
</tr>
<tr>
<td>NHS</td>
<td>national health service</td>
</tr>
<tr>
<td>NQF</td>
<td>national qualifications framework</td>
</tr>
<tr>
<td>NUSA</td>
<td>notional unemployment savings account</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-Operation and Development</td>
</tr>
<tr>
<td>PACFO</td>
<td>Programa de Alimentación Complementaria para Grupos en Mayor Riesgo (Complementary feeding program for high-risk groups, Peru)</td>
</tr>
<tr>
<td>PANES</td>
<td>Plan de Atención Nacional a la Emergencia Social (Uruguay)</td>
</tr>
<tr>
<td>PANFAR</td>
<td>Programa de alimentación y nutrición para familias en alto riesgo, Peru (Food and nutrition program for high-risk families, Peru)</td>
</tr>
<tr>
<td>PASIS</td>
<td>Programa de Asistencia Social de Pensiones (Social Assistance Pensions Program)</td>
</tr>
<tr>
<td>PATH</td>
<td>Programme of Advancement Through Health and Education</td>
</tr>
<tr>
<td>PATI</td>
<td>Programa de Apoyo Temporal al Ingreso (El Salvador)</td>
</tr>
<tr>
<td>PAYG</td>
<td>pay-as-you-go</td>
</tr>
<tr>
<td>PBS</td>
<td>Basic Solidarity Pension</td>
</tr>
<tr>
<td>PET</td>
<td>Programa de Empleo Temporal (Temporary Employment Program, Mexico)</td>
</tr>
<tr>
<td>PETI</td>
<td>Programa de Eradicacao de Trabalho Infantil (Brazil)</td>
</tr>
<tr>
<td>PLANE</td>
<td>Plan Nacional de Empleo de Emergencia (National Plan for Emergency Employment (Bolivia))</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>PLANFOR</td>
<td>Plano Nacional de Formação Profissional (National Vocational Training Plan, Brazil)</td>
</tr>
<tr>
<td>PME</td>
<td>Pesquisa Mensal de Emprego (Brazil)</td>
</tr>
<tr>
<td>PMT</td>
<td>proxy means test</td>
</tr>
<tr>
<td>PPP</td>
<td>purchasing power parity</td>
</tr>
<tr>
<td>PRAF</td>
<td>Programa de Asignación Familiar (Family Assistance Program, Honduras)</td>
</tr>
<tr>
<td>RESU</td>
<td>Retraining and Employment Support Unit</td>
</tr>
<tr>
<td>RPS</td>
<td>Red de Protección Social (Nicaragua)</td>
</tr>
<tr>
<td>SA</td>
<td>social assistance</td>
</tr>
<tr>
<td>SEDESOL</td>
<td>Secretaría de Desarrollo Social (Social Development Ministry, Mexico)</td>
</tr>
<tr>
<td>SEDLAC</td>
<td>Socio-Economic Database for Latin America and the Caribbean</td>
</tr>
<tr>
<td>SHI</td>
<td>social health insurance</td>
</tr>
<tr>
<td>SI</td>
<td>social insurance</td>
</tr>
<tr>
<td>SIF</td>
<td>social investment fund</td>
</tr>
<tr>
<td>SISBEN</td>
<td>Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales (Beneficiary Identification System, Colombia)</td>
</tr>
<tr>
<td>SP</td>
<td>social protection</td>
</tr>
<tr>
<td>SPSU</td>
<td>Sistema de Protección Social Universal (Universal Social Protection System, El Salvador)</td>
</tr>
<tr>
<td>SUF</td>
<td>Subsidio Unico Familiar (Family Subsidy Program, Chile)</td>
</tr>
<tr>
<td>TANF</td>
<td>Temporary Program for Needy Families</td>
</tr>
<tr>
<td>UI</td>
<td>unemployment insurance</td>
</tr>
<tr>
<td>UIUSA</td>
<td>unemployment individual savings account</td>
</tr>
<tr>
<td>VAT</td>
<td>value added tax</td>
</tr>
</tbody>
</table>
Introduction

Latin America and the Caribbean (LAC) are known internationally as the home of some of the world’s most innovative social protection (SP) programs and policies. In the last two decades, many LAC SP systems have been transformed; SP policies have increased in importance, and SP spending has grown. Many countries have reformed their pension systems to make benefits commensurate with savings and to reduce their fiscal exposure to future deficits. Many countries have expanded or introduced targeted social health insurance systems that provide free or subsidized health care to the poorest families. Perhaps most noteworthy has been the introduction of well-targeted conditional cash transfer systems that have brought millions of poor families within the scope of SP for the first time and have been adopted as a model by developing countries worldwide.

Notwithstanding this recent progress, much remains to be done to turn the right to social protection—which is enshrined in the constitutions and laws of most LAC countries—into a reality for the majority of LAC residents. At the heart of this challenge is the very low coverage of contributory social insurance (SI), which recent reforms have not resolved. The main difficulty is that the region’s mandatory systems for providing pensions, health insurance, and unemployment benefits are not apt to cover workers in the informal sector, who constitute a majority of the labor force in most countries.

Another problem is that the SI systems in most LAC countries are fragmented, meaning that parallel schemes exist that offer different benefits to different segments of the labor force, even when they make similar contributions. This arrangement restrains labor mobility, creates inequalities, and increases costs. To close the coverage gap, several countries have introduced noncontributory SI programs (such as social pensions), but in some cases this step has created dual systems—worsening fragmentation—and may have created incentives for informality.

In many countries, the SI system redistributes income between plan members through the implicit effect of rules about contributions and benefits.
Although the original intention was to favor lower-income plan members, in practice, the resulting redistribution is often regressive. In addition, the resulting implicit taxes and subsidies distort incentives and can induce evasion and other unintended behaviors, such as early retirement or reduced job search efforts. Implicit subsidies have caused serious problems of overall fiscal sustainability, because in practice, they are not always fully financed by the contributions of plan members and their employers. The result is that pensions, unemployment benefits, and health insurance systems run deficits, which must be financed from general taxes on current and future generations.

Similarly, the region’s social assistance programs, which provide targeted transfers to the poorest households, have yet to achieve their full potential in preventing poverty and promoting human capital development. This failure is, in part, because of the poor quality of health and education services provided to beneficiaries of conditional cash transfer programs. In addition, challenges related to the implementation of social assistance programs in urban areas might undermine targeting outcomes and hamper the effectiveness of their enrollment and exit mechanisms. For some types of income transfer program, the potential for labor market disincentive effects, similar to those arising from subsidized SI programs, is an issue.

Other challenges are associated with active labor market programs. Many of these programs are not designed to overcome the constraints that impede workers’ access to good jobs. Training—the main form of support offered in these programs—is often supply driven, and it benefits mostly formal sector workers. Job search intermediation services and interventions to increase the labor market opportunities of low-skilled workers, particularly young people, are underdeveloped. The 2008–09 financial crisis has shown that LAC’s SP systems remain ill equipped to provide most workers with adequate protection against shocks. Many who lose their jobs will receive no compensation to tide them over until their next job and will not have access to employment services to help them find work.

The current socioeconomic environment in LAC counties is conducive to addressing these challenges by reforming SP systems. Social consensus is growing on the need for a more equitable distribution of income and for social inclusion, and there is a general recognition that better social protection policies can contribute to achieving those goals.

This volume takes stock of recent SP reforms in LAC and charts a way forward to improve outcomes, specifically program coverage and the adequacy of benefits. It contributes to policy discussions about the design of SI, social assistance, and labor market programs.

The study builds on an extensive literature about the reform of SP systems in LAC (Baeza and Packard 2006; De Ferranti et al. 2000; ECLAC 2006; Gill, Packard, and Yermo 2004; Grosh et al. 2008; Levy 2008; Mesa-Lago 2008). A central theme is that a well-functioning SP system
must take into account the realities of the region’s labor markets, especially the persistence of high levels of employment in the informal sector, where it is difficult for governments to impose mandates such as compulsory SI. It also should take into account the likely effects of policies and programs on the behavior of beneficiaries and service providers—that is, the incentives and disincentives that they provide to work, to save, to insure, and to operate programs efficiently.

These themes have figured in different ways in the recent literature. Levy (2008), for instance, showed that some subsidized SP systems might be encouraging informality and undermining productivity growth. Baeza and Packard (2006) argued for financing health insurance from general taxation to overcome exclusion problems. Gill, Packard, and Yermo (2004) analyzed the failure of many of LAC’s funded, defined contribution pension systems to increase coverage or efficiency. Grosh et al. (2008) highlighted the importance of strong, well-designed, and well-implemented social safety nets to help families invest in their futures and manage risk, as well as alleviating their present poverty.

This volume aims to move the debate forward by (1) developing a common policy framework for the region’s SP system as a whole, including health insurance; (2) providing guidelines on ways to extend coverage through rationalizing financing mechanisms and the design of redistributive arrangements; and (3) making the case for improved coordination of policies and programs. The last point is important. To date, the design of SP reforms has not paid enough attention to the impact that one program can have on the performance of others.

The volume is organized in three parts. Part I provides an overview of the key challenges faced by policy makers in reforming SP systems in LAC and presents a vision for their future development. Chapter 1 highlights the major challenges and outlines a conceptual and policy framework for addressing them. It shows that the region’s systems have made important advances, but that there is still much to do to ensure that all citizens are protected from risks, are supported in saving for their old age, and are given the opportunity to lift themselves out of poverty. It outlines a policy framework that highlights the three SP objectives of smoothing consumption, preventing poverty, and promoting human capital to reduce the vulnerability of the population—for instance, by improving labor market opportunities and expanding options to self-insure. The framework shows how different types of SP instruments (such as savings, risk-pooling, and transfer programs) help to achieve those objectives; it also looks at the institutional arrangements and financing mechanisms (such as workers’ and firms’ contributions and transfers from the general taxation fund) that SP systems can employ. Finally, the framework highlights how SP instruments can indirectly affect the behavior of individuals and firms, the behavior of SP service providers, and fiscal outcomes. This conceptual framework is then used to define a set of principles for how LAC’s SP systems might
address the challenges of increasing the coverage and adequacy of benefits in an economy characterized by persistent large-scale informality, without at the same time reinforcing incentives to informality. Chapter 2 focuses in greater detail on the nature of labor markets across the region and provides the empirical backdrop for the challenges addressed in the rest of the volume. It shows that, in contrast with the assumptions underlying the Bismarckian model of social security, labor markets in Latin America and the Caribbean are characterized by high and persistent levels of informality and by high job turnover and significant worker mobility across jobs and sectors. These characteristics have important implications for the design of effective and inclusive social protection systems.

Part II explores in detail the implications of this framework for the reform of LAC’s SP programs. It deals, in turn, with protection against health shocks (chapter 3); pensions (chapter 4); protection against labor market risks (chapter 5); and income support for poor families (chapter 6). Each chapter presents a detailed appraisal of current coverage, adequacy, program design, and incentives effects in relation to the type of risk it addresses, and summarizes options and policy choices for future development. Each chapter focuses on the institutional and economic challenges of adapting programs to labor market realities and identifies possible program models to minimize unintended effects on workers’ labor market and savings behavior, on firms’ attitudes to informality, and on the performance of SP providers.

Finally, part III (chapter 7) highlights the interaction effects between SP subsystems and makes the case for a reform strategy informed by a coherent overall vision for the future of social protection in Latin America and the Caribbean. It focuses on issues and lessons that cut across the traditional risk and intervention areas. The aim is to get beyond limited strategies for pensions, health insurance, unemployment protection, and antipoverty safety nets, first to consider how each of these affects the others and then to identify opportunities for synergy in the design of savings and risk-pooling systems that jointly cover more than one of the risks traditionally addressed by SP systems. It also discusses the political economy of reform, highlighting the way in which initial conditions (for example, the reforms that are already in place) can affect the path that each country takes toward implementing a more effective and inclusive SP system.

References


Part I
A Framework for Social Protection Systems and Policy Implications for Latin America and the Caribbean

This chapter details recent progress in extending social protection (SP) coverage in Latin America and the Caribbean (LAC), highlights future challenges, and presents a conceptual and policy framework for understanding the opportunities and pitfalls that policy makers face as they address these challenges. The discussion covers (1) social insurance (SI) for pensions, health, and unemployment risks (consumption smoothing); (2) poverty prevention and social safety net programs; and (3) labor market programs to increase access to good jobs by reducing job search constraints and fostering human capital investment and skills development, especially for the most vulnerable.

The chapter starts with a review of recent developments, highlighting five challenges facing SP policy makers in LAC:

• **To overcome the stagnation of SI coverage.** New cross-country data on the scope of contributory and noncontributory programs for old-age income support, health, and unemployment protection show that coverage has hardly changed for over a decade in most countries.

• **To reduce the institutional fragmentation of SI systems.** Fragmentation leads to inequitable differences in benefits between insurers and between population groups and has been worsened recently by the ad hoc development of subsidized programs.

• **To continue to move away from opaque and regressive financing and subsidy arrangements for SI.** These arrangements create perverse incentive effects for work and savings efforts and interfere with further strengthening of SI systems’ financial sustainability.
• **To reinforce the poverty reduction and human capital accumulation outcomes of income transfer programs.** This challenge involves further strengthening programs’ targeting, improving their crisis response capacity, and avoiding labor market disincentive effects.

• **To increase access to good jobs.** This challenge involves strengthening active labor market programs (ALMPs) by improving the relevance of training programs and increasing the efficiency of the job search and matching process.

The second section of the chapter outlines a conceptual and policy framework that will help policy makers to address these challenges. The framework maps the potential roles of SP policy instruments in pursuit of the high-level goals of consumption smoothing, poverty prevention, and human capital development. It highlights actual and potential interactions between risk areas and policies, and it underlines the importance of considering behavioral responses from workers, households, employers, and service providers when designing the rules for SP systems. This framework is then used to develop recommendations that policy makers might bear in mind as they work to strengthen the region’s SP systems.

**Recent Developments and Challenges in SP Systems**

Many LAC countries have redesigned their contributory social insurance programs to make them more financially sustainable and to create stronger incentives to work and to save. This redesign has led to major advances toward equitable, more sustainable pension systems, in which retirement benefits (beyond a minimum floor) are proportional to the amount that each worker saves during his or her working life. In health, the development of stronger national health service (NHS) systems and of targeted, subsidized health insurance schemes has improved access to good-quality health services and enhanced the financial protection of poor families. Some countries have strengthened unemployment insurance (UI) and reformed severance pay by developing unemployment individual savings accounts (UISAs). These savings accounts provide workers with income protection against job loss, without undermining the incentive to work, and they can be combined with targeted redistributive arrangements to protect low-income workers from unemployment risks. These are considerable achievements, since the reform of pensions, health systems, transfers, or subsidies is always politically difficult.

Many countries have also rationalized and expanded their noncontributory social safety nets, moving away from ad hoc assistance programs and price subsidies toward well-targeted cash transfers. Conditional cash transfer (CCT) programs have now been adopted by most countries in the region, benefiting millions of the poorest households that previously were
excluded from SP. The CCT model, which was first adopted in LAC, is now being used around the world. The model introduced the requirement that recipients of transfers should make use of basic health, nutrition, and education services. In doing so, the CCT approach has led to a sea change in the attitudes of policy makers in many developing countries toward the rationale for providing income support to the poorest households. Previously, many policy makers had been concerned that recipients might become dependent on benefits and that programs might be unsustainable over the long term. Such concerns had blocked the development of safety nets in many countries.

Progress has also been made in making labor market programs more effective, through interventions that simultaneously address problems related to a lack of skills (technical or soft) and those related to job search constraints, especially for low-income young people and unskilled workers. The Jóvenes programs, which have been established to support young people in the school-to-work transition in several Latin American countries, are a good example. These programs have been successful in increasing the number of job opportunities and the level of wages. Their success can be attributed to several factors: (1) they provide training that is driven by labor market demand, (2) they use a competitive bidding process in choosing training providers, and (3) they offer consistent financial incentives to both employers and employees.

These advances are important, but they have not resolved all the problems. This study argues that policy makers now need to address the five major challenges facing LAC’s SP systems. These are discussed in the following sections.

Challenge I: Contributory Social Insurance Coverage Remains Low and Limited to the Formal Sector

A key SP challenge facing LAC countries is the need to expand the coverage of contributory SI to a much larger share of the workforce. There is no single, unified indicator of SI coverage, but program coverage data derived from household surveys for this study tell a common story—in most LAC countries, only a minority of workers has access to pensions or to contributory health insurance and UI. In general, low-income workers, those working in small firms, and those living in rural areas are less likely than others to be covered by insurance. Formal sector employees often enjoy a multidimensional package of social benefits, whereas informal sector workers and the unemployed have only limited access to the SP system.

In the 1990s, in most countries in the region, pension coverage rates were below 40 percent of the economically active population (EAP). Of the region’s 18 countries, 13 had coverage rates below 40 percent. In the 2000s, only Chile, Costa Rica, and Uruguay were providing pension protection to more than half of their EAP, while Argentina, Brazil, and Panama
covered between 40 and 50 percent. Despite structural reforms that aimed to give workers more incentives to enroll, coverage has increased only slightly. Among 15 countries for which comparable data exist for the 1990s and 2000s, coverage rates declined in 4 countries, remained almost unchanged in 5 countries, and showed a modest increase in 6 countries (see figure 1.1).

Moreover, pension coverage is skewed against people at the bottom of the income distribution. In the mid-2000s, coverage in the lowest quintile was below 10 percent in 10 of the 18 countries in the sample (ranging from 0.2 percent in Bolivia to 8.0 percent in Colombia). In contrast, at the other end of the income distribution, coverage was on average nearly 60 percent (see figure 1.2). Chile and Costa Rica are the exceptions, with their coverage being more evenly spread across income groups. In most countries, inequality remained roughly constant between the 1990s and the mid-2000s.

Differences in coverage also are evident by region and type of firm. Coverage in rural areas is only one-third the level in urban areas. Coverage in the primary sector is lower than in manufacturing and services. Coverage in the private sector is lower than in the public sector. Coverage is lower among employees of small firms, among independent (self-employed) workers, and among the unemployed.

---

**Figure 1.1 Contributory Pension Coverage, 1990s versus 2000s**

% of the economically active population contributing to pension systems

Source: Rofman, Lucchetti, and Ourens 2008.

Note: Data are for the year that comes closest to 1995 (for the 1990s) and 2009 (for the 2000s).
Figure 1.2 Contributory Pension Coverage Rates in the 2000s, by Quintile of Per Capita Income

% of economically active population contributing to pension systems

Source: Adapted from Rofman, Lucchetti, and Ourens 2008.
In the great majority of countries in the region, access to health services is a constitutional right. All citizens have open access to public provider networks or to national health services. In parallel, most countries operate contributory health insurance systems, which commonly have superior benefits to those provided under the NHS. Coverage of the more generous contributory systems is relatively low. Only four countries have coverage between 70 and 90 percent; all others have coverage below 50 percent and, therefore, rely primarily on the NHS (see figure 1.3). As a result, a relatively low proportion of LAC’s health costs are covered by pooled, prepaid financing, and in consequence, out-of-pocket health expenditures are relatively high. This arrangement particularly affects poor people because—as in the case of pensions—they are less likely to be part of the contributory social health insurance (SHI) system. However, access for middle- and low-income workers in Argentina, Chile, Costa Rica, and Uruguay is markedly better than in most other countries in LAC (figure 1.4).

No household data are available on the coverage of unemployment benefits, but the available evidence suggests that a low percentage of the unemployed receive some form of benefit. Most countries rely on severance pay as the main income protection system. Severance pay is unreliable, however, because employers do not provision funds to finance their liabilities with the program, and it is difficult to force them to pay. For instance, in Argentina, less than 3 percent of unemployed workers receive severance pay. Conversely, in those countries that have developed UI or UISAs, coverage rates are extremely low. Only Brazil has as many

![Figure 1.3 Contributory Health Insurance Coverage in the mid-2000s](image)

**Source:** World Bank staff calculations based on household survey data, most recent available year.

**Note:** A household is classified as insured if at least one household member is covered by contributory health insurance.
unemployment accounts as it has employed workers—in other countries, less than a quarter of the workforce is covered (figure 1.5).

The continuing low coverage of LAC’s SI systems is not surprising. LAC governments designed the systems based on the Bismarck model, in which SI entitlements are proportional to the mandatory contributions made by workers and their employers. Policy makers assumed that, as the region’s economies developed, the majority of the labor force would come to be working in formal salaried jobs so that SI contributions could be enforced. However, a sizable share of the labor force continues to work in the informal and agricultural sector, in which it is difficult to enforce social security. It was overly optimistic to expect that productivity in small
from right to reality

and medium-sized enterprises, which are important sources of jobs, would always be high enough to cover the costs of social security contributions. To make matters worse, the region’s SI systems failed to incorporate incentives to comply with regulations (including paying taxes). Poor governance, regulatory uncertainty, and corruption have reduced the expected benefits from formality for the workforce and thus have encouraged the evasion of social security.

In the 21st century, more than half of LAC’s workforce is employed in the informal sector and is not covered by social security. In many countries, far from declining, informality has risen in recent decades. The lowest level of informality is in Chile, at around 40 percent; the highest is in Bolivia, at close to 75 percent. The situation is further complicated by the fact that, for any worker, informality is not necessarily a stable state. Many move in and out of the informal sector (and the social security system) multiple times during their working lives. In Argentina, Chile, and Uruguay, for instance, a worker with median earnings spends only half of his or her working life contributing to social security. For low-income workers and young people in these countries, pension contribution densities are generally less than 40 percent, and the turnover of SI membership is correspondingly higher.

In response to the problem of the low coverage of contributory SI, many LAC governments have introduced noncontributory pensions and health insurance systems. These systems have been important means of closing the coverage gap and extending access to low-income individuals and the poor (see figures 1.6 and 1.7). Generally, however, these programs

Figure 1.5 Unemployment Individual Savings Accounts per Employed Worker

Source: Ferrer and Riddell 2008.
Note: 1 = 100 percent.
Figure 1.6 Contributory and Noncontributory Pension Coverage among the Elderly in the 2000s, by Income Quintile and Source

% of population over age 65

Source: World Bank staff calculations adapted from Rofman, Lucchetti, and Ourens 2008.
Figure 1.7 Contributory, Noncontributory, and Combined Health Insurance Coverage in the mid-2000s, by Income Decile and Source

% of population covered

- **a. Peru**
- **b. Mexico**
- **c. Colombia**

Legend:
- Noncontributory health insurance
- Both contributory and noncontributory health insurance
- Contributory health insurance
Figure 1.7 (continued)

Source: World Bank staff estimates based on household survey data for 2006 or closest available year.

Note: A person is classified as insured if at least one member of the household is covered by contributory, noncontributory, or both contributory and noncontributory health insurance.
are not well integrated with contributory programs and have problems of financial sustainability and incentives, which are discussed under challenge III.

In the case of health, noncontributory programs vary greatly in design, with differences in target populations, benefits, and administrative arrangements. Two major types can be distinguished: (1) targeted schemes with benefits that are comprehensive but inferior to those of contributory SHI, and (2) schemes with limited benefits for health priority groups (such as mothers and children). Both types of scheme may be administered by the NHS (providing additional subsidy for some users of NHS systems, as in Mexico, for example), by the SHI (creating a noncontributory window for people in the informal sector, as in Colombia, for example), or by independent insurance agencies (as in Chile and the Dominican Republic, for example).

**Challenge II: The Region’s Social Insurance Systems Are Fragmented and Uncoordinated**

In addition to having continuing low overall coverage rates, LAC’s contributory SI systems have evolved in an ad hoc manner, often producing multiple programs and institutions whose mandates regarding benefits and beneficiaries are unclear. In many cases, it is not clear how the system’s parameters, rules, and benefit entitlements are related. Many countries have multiple income protection (such as UI), pensions, and health insurance systems operating in parallel, often with no coordination. For example, eight countries have fragmented income protection systems. Nine countries have fully integrated pension systems and four have partially integrated systems, but four countries still have multiple, uncoordinated systems (Brazil, Mexico, Paraguay, and Peru). As discussed below, fragmentation is especially common in the case of health systems. Within mainland Latin America, only Brazil has an integrated system; all other countries have two or more separate systems (table 1.1).

The region has a large variation in the benefits offered by SI programs. For instance, in pensions, replacement rates for the average worker range from 120 percent in Uruguay to as low as 33 percent in Mexico. Similarly, unemployment benefits can be claimed for as short a time as two weeks (in Paraguay) to more than nine months (in Argentina.) It is not surprising that differences in countries’ social preferences and economic and political conditions should lead to differences in SI mandates. However, the observed variations do not necessarily reflect deliberate choices made by policy makers about the objectives of the programs. Rather, the pattern of benefits and contributions tends to be the cumulative result of ad hoc decisions made throughout the history of the program in response to specific problems—such as the need for financial sustainability—or to political demands to increase benefits. Moreover, for both unemployment
insurance (see figure 1.8) and pensions, large variations exist among SI schemes within the same country. For instance, schemes for civil servants and the military normally are more generous than schemes for private sector workers.

In the case of health, the region’s governments have addressed challenges in different ways, leaving LAC with a complex legacy of systems and subsystems. LAC has two basic configurations of publicly mandated systems for health SP: (1) stand-alone NHS systems, which are funded from general taxation and provide both financial protection and health services to the population at large (as in Brazil and several Caribbean countries); and (2) SHI systems combined with NHS. SHI systems are

### Table 1.1 Institutional Integration of Publicly Mandated SI Systems

<table>
<thead>
<tr>
<th></th>
<th>Income protection</th>
<th>Pensions</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>No</td>
<td>Partly</td>
<td>No</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Brazil</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Chile</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Colombia</td>
<td>No</td>
<td>Partly</td>
<td>No</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>n.a.</td>
<td>Partly</td>
<td>No</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>n.a.</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Ecuador</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Yes</td>
<td>Partly</td>
<td>No</td>
</tr>
<tr>
<td>Honduras</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Mexico</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Panama</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Peru</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Uruguay</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

*Source: World Bank country data.*

*Note: n.a. = not applicable. The table indicates whether the social insurance systems within each of the three sectors are integrated. Yes means the sector has only one system, no means the sector has more than one system, and partly means the sector has more than one system, but the systems are partially integrated.*
funded from payroll taxes and user contributions. They often operate separate schemes for employees in the public and private sector and combine health insurance with other forms of SI, such as pension systems (as in Ecuador, Honduras, and Mexico, for example). In some countries, the SHI or NHS systems operate additional targeted noncontributory programs.

This fragmentation of LAC’s health systems is reflected in differentiated mandates, revenue collection arrangements (payroll taxes and user contributions versus general revenues), and (often) separate provider networks. Two-tier health systems provide different coverage for the users of contributory and noncontributory systems (SHI and NHS). Due to budgetary constraints, the mandate (service bundle) of noncontributory systems is limited, with emphasis normally placed on primary and secondary care. Because of decades of regulatory problems and underinvestment in delivery systems, service quality tends to remain low. In general, health financing and service production remain integrated. Health ministries that administer the budget run NHS systems and, as a general rule, operate the hospitals and clinics. The budget is transferred, almost as an entitlement, to providers, to cover the salaries and benefits of their employees, with no link to results, productivity, or quality. Similarly, most SHI systems combine insurance and service production. As a result, NHS and SHI provider networks operate in parallel, duplicating service delivery infrastructure. The absence of links between financing
and productivity or quality and the duplication of service delivery infrastructure both have negative implications for efficiency.

The heterogeneity of the plans and mandates of LAC’s SI programs is inequitable and inefficient. It is inequitable because workers are treated differently by the public system depending on where they work. It is inefficient for four reasons. First, multiple systems fragment the labor market and constrain labor mobility. In Ecuador and Uruguay, for instance, workers who switch jobs can lose their pension rights. This risk reduces their incentives to move between jobs and can negatively affect labor productivity growth. Second, fragmentation makes insurance risk pools smaller and raises the costs associated with reserve requirements. Third, administrative costs can increase because having multiple systems reduces economies of scale (because a large share of administrative costs is fixed). Fourth, in the case of health, mutual exclusivity across health programs and a lack of consumer choice among programs and care providers lead to significant inefficiencies in the production of health care (for example, low use of capacity in health facilities and suboptimal allocation of care) and may lead to distortions in the labor market (since job choice can be influenced by nonportable benefits). The Mexican health system is a classic example.

A related problem, and one that diminishes the overall coherence of the SP system, is the lack of coordination both in the design of different types of SI programs and among social assistance and labor market programs and policies. Old-age income support, health, and antipoverty reforms have been implemented in a piecemeal way, with policy makers giving little attention to the interactions among these reforms. Few countries coordinate ALMPs with income protection programs. Similarly, policies on disability pensions are seldom coordinated with policies on unemployment benefits. This lack of coordination can be seen in Chile and Argentina, where disability benefits sometimes substitute for unemployment benefits. Better coordination would lower costs (helping to reduce the level of social security contributions needed for a given level of coverage), improve incentives (resulting in less fraud and evasion), and lead to better outcomes.

**Challenge III: Redistribution within the Social Insurance Systems Is Opaque and often Regressive, and Can Distort Incentives to Work and Save**

SI coverage for low-income people in LAC is limited. For the extreme poor, enrolling in full-cost contributory SI programs is difficult and often impossible. Even the moderately poor—who do have some savings capacity—usually are excluded from these programs because many work in small firms where productivity is too low to cover the full cost of mandatory SI. In addition, low-income people in LAC often have relatively high personal
discount rates and preferences for liquidity and a correspondingly low demand for long-term savings and insurance.

LAC’s policy makers have introduced two types of intervention to extend the reach of SP systems to low-income workers. The first type consists of pure antipoverty programs, which are discussed in the following section (challenge IV). The second type, discussed in this section, consists of subsidies to SI.

There are two kinds of SI subsidies. Implicit subsidies operate when plan members within the contributory systems receive benefits whose (actuarially weighted) value exceeds the value of their contributions. These benefits are often financed through payroll taxes and social security contributions levied on other plan members (those whose benefits are below the value of their contributions). In some cases, implicit subsidies are also financed by fiscal transfers made from general taxation to cover deficits in the insurance fund. Explicit subsidies finance noncontributory pensions, unemployment programs, or health insurance programs, and usually come out of general tax revenues. In terms of redistribution, the first type of subsidy is often regressive, whereas the second is, in most cases, progressive. If they are not designed carefully, both can have negative incentive effects on labor supply and savings and reduce participation in contributory SI.

Implicit and nontransparent subsidies and taxes. LAC’s contributory SI systems are plagued by implicit and nontransparent subsidies and taxes. Complex cross-subsidies within programs result in wide variations in the ratio of contributions paid to benefits received. Some plan members systematically receive more than they put in (a subsidy), while others systematically receive less (a tax). Figure 1.9 illustrates this tendency using the case of the pension system in Brazil. Depending on earnings and on when individuals enroll and retire, they receive a subsidy or pay a tax to the system—and the level of both the subsidy and the tax can be high.

Figure 1.9 also illustrates the considerable variation in the level of subsidy (tax) received (paid) depending on when individuals enroll, when they retire, and what they earn. In the Brazil example illustrated here, the formal rules suggest that low-income workers receive implicit subsidies, as do those who delay enrollment or whose wages grow more slowly. But when all such effects are combined, the most common outcome across the region is to have implicit taxes or subsidies that are regressive. This happens, in part, because high-income workers are more likely to remain in the system long enough to qualify for benefits. In contrast, low-paid workers tend to experience more job instability, and they are less likely to complete the vesting periods required to become entitled to benefits (see Forteza, Lucchetti, and Pallares 2009). In the case of pensions, defined benefit formulas tend to pay higher rates of return to workers with steep
Similarly, many health insurance systems base users’ contributions on their incomes, rather than the cost of the package of health services. This practice is intended to induce transfers from richer to poorer insured workers. It is also possible that young, low-risk, low-income individuals subsidize the coverage of high-risk, high-income individuals. But, in practice, such rules can undermine the insurer’s incentives to expand coverage to low-income workers, because their contributions would not cover their costs. To the extent that low-income workers are outside the system, the hoped-for progressive redistribution fails to materialize.

Regressive redistribution can take place between plan members and other individuals who currently are not covered by the SI system, including future generations. In many LAC SI systems, the imbalance between contributions and benefits generates large, systemwide cash flow deficits that must be covered by fiscal transfers. A recent study of eight LAC SI systems found an average annual subsidy of PPP (purchasing power parity) $62 per person (Lindert, Skoufias, and Shapiro 2006). The estimated
subsidies (as a percentage of total benefits transferred and taking into account only the costs of current deficits in the SI system) were as follows: Argentina’s was 57 percent subsidy, Brazil’s 40 percent, Chile’s 56 percent, Colombia’s 77 percent, the Dominican Republic’s 0 percent, Guatemala’s 25 percent, Mexico’s 84 percent, and Peru’s 89 percent. Because the beneficiaries of most SI systems are toward the top of the income distribution, fiscal subsidies to cover such deficits are regressive. The same report used household survey data to analyze the distribution of these subsidies and confirmed that their incidence is highly regressive. On average, 58 percent of SI subsidies benefit those in the top quintile of the income distribution, whereas only 3 percent benefit those in the bottom quintile. In contrast, noncontributory social assistance channels 26 percent of benefits to those in the bottom quintile and only 14 percent to those in the top quintile. Although the value of the average benefit from social assistance is only a quarter of that from insurance programs, it has a much bigger relative impact on the incomes of poor households, increasing incomes of beneficiaries in the bottom quintile by 13 percent, on average, compared with 2 percent for SI (Lindert, Skoufias, and Shapiro 2006).

The numbers cited in the previous paragraph take into account only the cost of current deficits in the SI system. The situation would be even worse if the actuarial deficits of pay-as-you-go (PAYG) and UI systems were taken into account. One way to measure the size of this problem is to estimate the liabilities of the system (in other words, the present value of future pension payments resulting from acquired rights to date) and compare them with the so-called PAYG asset (the present value of future revenues from contributions, net of the additional pension rights that will accrue from them under present rules). In several LAC countries, the resulting difference (the so-called unfunded liabilities of the system) runs in excess of 100 percent of gross domestic product (GDP) (Holzmann, Palacios, and Zevine 2004).

Implicit taxes and subsidies also affect individuals’ labor market behavior. For example, under existing rules, the ratio of pension entitlements to contributions can be affected by the timing of workers’ enrollment and retirement, by their career histories, and by the frequency (density) of their contributions. The rules of most defined benefit pension systems in LAC penalize workers who choose to retire later by giving them lower rates of return, thus creating an incentive to retire early (see chapter 4). This incentive is the result of benefit formulas based on final salaries, which also create incentives to inflate salaries close to retirement. Similarly, the amount of subsidy that workers receive from UI often depends on the frequency and duration of their periods of unemployment.

Both forms of financing of the implicit redistribution in contributory systems (payroll taxes levied on employers and the tax element in employee contributions that surpass benefit values) have the additional drawback that they increase the tax wedge. Considerable international
evidence indicates that this increase can reduce employment levels and promote informality. In the Europe and Central Asia region, a 10 percentage point increase in the tax wedge is estimated to have led to a reduction of between 3 and 6 percentage points in the employment-to-population ratio (Rutkowski 2007). A recent study of Turkey found that the pass-through of social security contributions to wages is low for low-income workers, so increased contributions lead directly to increased total wage costs and to reduced employment (Betcherman and Pagés 2008). Colombia experienced a rise in payroll taxes of more than 10 percentage points (from 41.0 to 51.5 percent) between 1989 and 1996, which is estimated to have caused a decline in formal employment of 4 to 5 percent (Kugler and Kugler 2003).

Financing SI benefits by mandatory contributions from workers and their employers is justified by the fact that, in the absence of a legal mandate, many workers might save and insure themselves too little, thus creating the negative externality of the need for publicly funded safety nets. However, when additional contributions are levied to finance redistribution (in other words, to pay for other peoples’ benefits), these contributions increase the tax wedge for the workers who pay them and are likely to have a negative effect on formal employment. Alternative options for funding the solidarity element of the SP system are discussed in part III.16

Explicitly subsidized noncontributory programs. As discussed under challenge II, many countries have established noncontributory SI programs funded from general taxation for workers in the rural or urban informal sectors. These programs have closed the coverage gap but have caused problems of their own, particularly when the benefits they offer are reduced because a worker is receiving benefits from a contributory program. Noncontributory programs often are designed under the assumption that workers are employed either completely in the formal sector (and thus covered by social security) or completely outside it (thus needing to be covered by noncontributory programs). As discussed, however, many individuals move in and out of the social security system during their working lives, sometimes as a result of their preferences (see Perry et al. 2007).

Whenever workers who take formal sector jobs lose the benefit of a noncontributory transfer, the lost benefits act as an implicit tax on formal sector work. Similarly, if noncontributory benefits are reduced when a person receives contributory benefits, the result is to increase the effective marginal tax rate (EMTR) on formal sector earnings. The minimum pension guarantee in Brazil and the minimum pension in Chile (prior to the 2008 reform) illustrate this point. In each case, the amount of subsidy depends (inversely) on the value of the contributory pension to which the person is entitled. The EMTR is 100 percent: for each unit increase in the contributory pension, the minimum pension transfer is
from right to reality

reduced by one unit. As a result, low-income workers find that contributing more does not increase their total pension.17

A high EMTR can reduce contribution densities by increasing the amount of time that individuals spend in the informal sector. The outcome in terms of additional informality will depend on the relative productivity of the formal and informal sectors. If productivity (and, therefore, wages) in the formal sector are much higher than in the informal sector, even high social security contributions and high EMTRs on transfers will not lead many people to prefer informal sector jobs, because net earnings in the formal sector would still be higher. If, however, the difference in productivity (and wages) were too small to offset the cost of social security contributions and the EMTRs on transfers, then workers might prefer jobs in the informal sector. The more generous a program, the more likely it is to affect workers’ behavior.18

In the case of noncontributory health insurance programs, there is a need for more evidence about their effects on informal work. In 2010, Mexico’s subsidized health regime, Seguro Popular, was offering net benefits19 that were higher than those of the formal health insurance regime operated by the Mexican Institute for Social Security (IMSS). This practice might be expected to increase the likelihood that individuals will take informal sector jobs and reduce IMSS affiliation. The available studies, however, find no significant decrease, thus far, in affiliations to IMSS health insurance in urban areas as a result of Seguro Popular. In rural areas, IMSS coverage has been slightly reduced (from 14.0 percent to 11.2 percent). Overall it is estimated that nationwide, the displacement effect of Seguro Popular has reduced IMSS coverage by 0.7 percent of the population. This reduction must be set against the increase of 7.1 percent coverage provided by Seguro Popular, giving an overall net gain in coverage of 6.4 percent of the population (Parker and Scott 2008). However, the balance might change in the medium and long term, when the displacement effects of Seguro Popular might be greater. In Colombia, some employers reportedly have begun to require workers to obtain health insurance through the noncontributory scheme before they will hire them, but there is no clear evidence about the size of such effects. Overall, the evidence base for understanding this sort of interaction effect in LAC remains limited. Further research is needed to improve our understanding of the negative effects of noncontributory health insurance options on informality, and of the design features that could help minimize them.

These issues are relevant because available evidence suggests that informality involves significant economic costs. Informal production units tend to have low productivity because they are unable to benefit from economies of scale and have difficulty accessing both markets and credit. Therefore, any policy that creates incentives to informality may undermine growth. Levy (2008) has argued that the recent development of
Mexico’s SP system unintentionally has promoted the growth of small-scale, informal firms, which are intrinsically uncompetitive and whose growth potential is limited.

Redistribution arrangements and economic incentives are two sides of the same coin. Badly designed redistributive arrangements not only are likely to be regressive but can also change workers’ and firms’ behavior, reducing formal sector employment and increasing program costs. The less transparent a redistribution system, the more prone it is to gaming, fraud, and abuse.

Challenge IV: The Effectiveness and Human Capital Impact of Income Support Programs Need to Be Enhanced

Large-scale, poverty-targeted income support programs, which provide a minimum income floor for the extreme poor, are now a significant part of the SP architecture in LAC (see figure 1.10). Eligibility for these programs normally is based on poverty levels, using geographic targeting, household means testing, or self-selection. Targeted transfers have gradually replaced untargeted consumption subsidies (for example, on food or fuel).

**Figure 1.10 Coverage of All Households by Income Transfer Programs

% of households with at least one program**

Costa Rica    
Argentina     
Mexico       
Uruguay       
Guatemala   
Nicaragua  
Ecuador       
Chile        
Peru         
Honduras     
Paraguay     
Brazil

*Source:* World Bank staff calculations based on household data sets for 2008 or nearest available year.

*Note:* Includes both cash and food-based programs.
For example, in Mexico, Progresa (now Oportunidades) replaced subsidies on maize and fuel (Hanlon, Barrientos, and Hulme 2010). Income support includes both cash and in-kind (food-based) programs, but cash-based programs are increasingly prevalent and have tended to replace in-kind transfers.

The main types of cash transfer in LAC are CCTs, workfare programs, and unconditional cash transfers targeted on specific groups (such as families, children, or older people). CCTs exist in 16 LAC countries, with budgets ranging from 0.1 percent of GDP in Chile, Costa Rica, and Peru to 0.6 percent of GDP in Ecuador (see figure 1.11). In many countries, including Argentina, Bolivia, Colombia, Mexico, Peru, and Uruguay, workfare programs have been implemented—often in crisis situations—with the goal of ameliorating the effects of unemployment. The main targeting mechanism in this case is the self-selection of those willing to work for the offered wage, but many programs have additional qualifying rules. For example, beneficiaries of Argentina’s Jefes workfare program must have dependents; for Colombia’s Empleo en Acción, they must be qualified as poor by a proxy means test, and for Mexico’s Programa de Empleo Temporal (PET) they must live in a poor rural area. Another emerging model—especially prevalent in the Southern Cone—is

![Figure 1.11 Cost of CCT Programs as % of GDP](source: World Bank staff estimates based on country data for 2008 or nearest available year.)
unconditional cash transfers targeted on poverty and demographic status, such as child benefits, disability pensions, and family allowances. One example is Asignación Familiar, the family allowance system introduced as part of Uruguay’s Plan de Equidad, which grew out of the Plan de Atención Nacional a la Emergencia Social (PANES) program. Other examples include the old-age and disability pension (Beneficio de Prestación Continuada) in Brazil, the Universal Child Allowance in Argentina, and the family subsidy (Subsidio Único Familiar) in Chile.

LAC’s income transfer programs cannot always be placed neatly into one of these categories, and some countries are developing new models. For instance, PANES in Uruguay combined its Ingreso Ciudadano (citizen’s income) program for extremely poor households with a workfare component called Trabajo por Uruguay. The Jefes workfare program in Argentina evolved into both an employment benefit and training program called Seguro de Capacitación y Empleo and a CCT program called Familias, which is now being replaced by poverty-targeted family allowances.

Now that income support programs have been consolidated as an important element of LAC’s SP system, several issues need to be addressed to improve the future impact of targeted income support programs. Four pending challenges for this class of SP programs are discussed below: (1) reinforcing targeting, (2) ensuring the quality of complementary health and education programs, (3) improving crisis response capacity, and (4) avoiding perverse labor market incentive effects.

Reinforcing targeting. The targeting and poverty reduction outcomes of LAC’s income transfer programs are positive, but they also are uneven, and urban expansion might dilute them. Over the last decade, Gini coefficient trends in LAC have begun to improve, and income transfer programs such as CCTs have played an important part in the turnaround (Ferreira, Leite, and Ravallion 2009; Lopez-Calva and Lustig 2010; Paes de Barros, Foguel, and Ulyssea 2006). In many cases, significant gains have been produced at a modest fiscal cost. CCTs account on average for 0.25 percent of GDP, cover 16.90 percent of the population, and spend the equivalent of 3.10 percent of average per capita income per beneficiary household. Although they are not expensive, tight targeting on the extreme poor means that most CCTs are able to provide relatively generous benefits, compared with pretransfer income. As a result, their impact on the spending capacity and poverty level of beneficiaries is significant. Oportunidades in Mexico has reduced the poverty gap by 19 percent. In Brazil, Bolsa Família has reduced the poverty gap by 10 percent.20 In Ecuador, the reduction has been 14 percent (Fiszbein and Schady 2009).

But not all cash transfer programs have such a clear and cost-effective impact on poverty. Evaluation evidence suggests that the targeting of many workfare programs has not been strong—especially compared with CCT programs. Workfare programs normally reach around 2 percent of the EAP,
so their distributional impact is necessarily limited. Their benefit amounts generally are much larger than CCTs. For example, Construyendo Peru has a benefit of US$153 a month, which is 10 times the benefit of the Peruvian CCT program Juntos (US$15 a month). These comparatively large benefit amounts make workfare an expensive option and also make the programs attractive to less-poor workers. Most countries limit spending on workfare to around 0.2 percent of GDP. Exceptions are Jefes in Argentina, which had a modest benefit of US$45 a month and 2 million beneficiaries, and reached 13.0 percent of the EAP at a cost of 0.8 percent of GDP during the peak of the economic crisis; and PANES in Uruguay, which reached 7.2 percent of the population at a cost of 0.5 percent of GDP.

Whichever program type is chosen to channel income support to the poorest families, maintaining tight targeting will be a continuing challenge. Pressure is growing to further expand these programs into urban areas, where a large proportion of the region’s poor and extremely poor households now reside. Among the major CCT programs that recently have expanded urban coverage are Bolsa Família (Brazil), Familias en Acción (Colombia), and Oportunidades (Mexico). The considerable variations in poverty among households in urban marginal areas, coupled with political economy factors, can make it difficult to target poverty effectively in urban areas. This calls for strengthening governance arrangements through the definition of clear eligibility rules, robust beneficiary registers, and transparent financial administration. Another interesting approach to strengthening targeting is to use survey-based estimates of poverty levels to “shadow” the distribution of claimants that arises from the system, as is done by Bolsa Família in Brazil.

CCTs and similar programs need to improve procedures for enrolling and graduating beneficiaries in a timely fashion. Doing so will encourage exit of families who are no longer poor, and will open space to incorporate new beneficiaries. In early 2010, Brazil’s Bolsa Família removed 6 percent of beneficiaries who had not updated their registers, opening the way to incorporate families who qualified for the program more recently. CCTs need to ensure that the practice of verifying conditionalities (or coresponsibilities) is adapted to urban settings.

Ensuring the quality of complementary health and education programs. Poor-quality health, nutrition, and education services often limit the human development impacts of CCTs. Income support programs have the potential to increase beneficiaries’ long-term earnings capacity by increasing the human capital accumulation through income effects and (in the case of CCTs) through the nutrition, health, and education conditionality attached to program membership. Evaluations show that CCTs in LAC have increased school enrollment and attendance rates and reduced school dropout rates (Behrman, Sengupta, and Todd 2000; Britto 2004, 2007; Gertler 2004; Rawlings 2005; Schultz 2004). They have
also increased the take-up of vaccinations and visits to health centers for growth and development consultations (Bouillon and Tejerina 2006; Britto 2007; Rawlings 2005).

Thus far, however, CCTs have produced only modest improvements in education, health, and nutrition outcomes. This situation indicates that ensuring attendance, alone, is not enough. Governments also need to improve the quality of health and education services, which in many places remain deficient, and to ensure access to these services. Poor quality, linked to inadequate funding and weak accountability systems, is a problem in both poor rural and marginal urban areas.

Ensuring access of the poorest families to all the programs to which they are entitled, with good quality, is emerging as a major challenge for social policy in LAC. The region has many remote rural communities without decent physical access to health services—and fast-growing urban settings often have a problem of overstretched capacity. Tackling such issues will require a stronger liaison between cash transfer programs and the health and education authorities.

Colombia’s Juntos program and Chile’s Chile Solidario are developing interesting models that build beyond cash transfers to strengthen overall SP for the most vulnerable. This approach implies a complex pattern of cross-sectoral management, which requires the following: (1) identification of all available benefits in the SP network, (2) formal agreements among the institutions involved to provide services to the same beneficiaries, and (3) sharing the process of targeting and selection of beneficiaries. In this model, CCTs are temporary, and the social intervention prioritizes permanent links between beneficiaries and the stable SP network in the country, ensuring that at the end of the program, families learn about and make effective use of that network.

Improving crisis response capacity. The crisis response capacity of targeted programs remains limited. Although their main focus is to address structural poverty, income support programs can help when shocks affect their beneficiaries. But the “triple F” (food, fuel, and financial) crisis of 2008–09 and the 2009 global economic slowdown have shown that this potential is still underdeveloped. During these crises, some LAC countries were able to adjust benefit values or eligibility thresholds for CCTs to offset inflationary effects and protect consumption for the poorest.22 But only 6 CCT programs (out of the 16 in the region) were able to do this.23 Other programs had insufficient budgetary and administrative flexibility to respond in an agile way to the crisis. Crisis response capacity thus remains a challenge for the future.

Another challenge is that crises do not affect only the extreme poor who are targeted by the CCTs. Governments also need tools to support other, less-poor families hit by covariate shocks. As mentioned, the most common response to unemployment spikes among uninsured workers is to
use workfare programs. Such programs in LAC include Trabajar and Jefes in Argentina, the Trabajo por Uruguay component of PANES in Uruguay, Plan Nacional de Empleo de Emergencia (PLANE) in Bolivia, Empleo en Acción in Colombia, Construyendo Peru in Peru, and PET in Mexico. These programs generally have had a positive impact on the employment and poverty status of their beneficiaries. Jefes in Argentina reduced overall unemployment by 2.5 percentage points, reduced the national poverty rate by 2.0 percentage points, and reduced extreme poverty among its beneficiaries by 10 percent (Galasso and Ravallion 2003). Evaluations of Bolivia’s PLANE indicated that the program had positive effects on the income of its beneficiaries, especially women (Landa and Lizárraga 2007). In Colombia, Empleo en Acción increased the consumption of beneficiary families by 9 percent (DNP 2004).

Interest in workfare was revived in the context of the global financial and economic crisis as a viable way to protect uninsured individuals against unemployment shocks, and especially to provide a safety net for workers during downturns and crises. However, workfare programs usually have modest impact on unemployment at quite high costs, so there is still considerable scope to improve their design and strengthen their impact. Wages should be kept as low as is legally feasible to allow the programs to assist the largest possible number of beneficiaries and to provide incentives for workers to accept jobs elsewhere. Also, as a general rule, the programs should be scaled back when unemployment levels recover. In some instances, public works programs can also be implemented in conjunction with training opportunities and active labor market programs to help beneficiaries find permanent employment.

Avoiding perverse labor market incentive effects. Some income transfer programs may discourage labor supply and create incentives to informality. Despite the positive effects of recent developments in LAC’s income support programs, there are concerns that the programs could undermine incentives to work, displace people from the formal sector, and lead to welfare dependency. As with noncontributory SI programs, when eligibility depends on having an income below a stated threshold, the benefit from targeted income transfers becomes a marginal tax on any formal sector income above the threshold for program membership. This tax can cause beneficiaries to stop looking for work or to bend the rules by working in the informal sector while also claiming the transfer. Good design can prevent this problem from arising in either of the main classes of transfer programs that exist in LAC—workfare and CCTs—but good design is not a feature of every program.

In the case of workfare, beneficiaries normally must work or participate in training, so they cannot claim the benefit and remain idle. This design is similar to the design of unemployment assistance under the welfare-to-work reforms in member countries of the Organisation for Economic Co-operation and Development (OECD), and it should reduce the problem
of moral hazard. Nevertheless, the evidence suggests that design factors such as program rules and benefit levels in LAC’s workfare programs can affect the interplay between formality, informality, and labor force participation rates in several ways.

One obvious problem is that, when workfare programs have loose work requirements, the effect is likely to be a boost in demand for informal work among beneficiaries. The second common problem is that wages often are set too high. Ideally, workfare programs should pay wages that are lower than the market wage, to ensure self-selection of poor beneficiaries and to avoid distorting labor market incentives. But because of legal requirements or political economy factors, workfare wages sometimes are set above the (informal sector) market wage for unskilled labor, which is normally below the legal minimum wage. In these cases, workfare becomes expensive, and the relatively high wages may discourage people from finding other employment. The third common problem is that it may be difficult to eliminate workfare programs if clear exit rules are not defined at the outset. The experience of PLANE in Bolivia illustrates the impact of setting relatively high wages and not having exit rules established at the outset (see box 1.1).

Box 1.1 The Effect of Setting Workfare Wages Too High: The Case of PLANE in Bolivia

PLANE (Plan Nacional de Empleo de Emergencia) was a temporary workfare program that operated in Bolivia between 2002 and 2005. It was set up in response to a rapid rise in open unemployment (from 6 percent to 9 percent of the working-age population between 1999 and 2002) and in underemployment (up from 16 percent to 21 percent in the same period). During those three years, it financed around 800,000 job-months. Eighty percent of funding for PLANE came from bilateral donors. The target population was poor people aged 25 to 55. Employees worked for 7 hours per day for up to 10 weeks. The monthly salary for unskilled workers was Bs 480 (slightly above the minimum wage), while skilled workers received Bs 1,600 per month. Resources were allocated using geographic targeting based on an index of municipalities’ unmet basic needs. PLANE was extended well beyond the crisis and became difficult to close down due to a perception by the beneficiaries that they were entitled to ongoing employment. In 2006, the incoming Morales administration decided to close PLANE but encountered strong opposition from a union of PLANE employees. Eventually, PLANE was fused with a social fund project, Pro País, and PLANE beneficiaries were given the option of working temporarily on a Pro País project.

The effect of high wages in a workfare program was evaluated rigorously for the case of the Jefes workfare program in Argentina. During 2003–04, when the benefit under Jefes was 75 percent of the formal sector minimum wage, membership in the Jefes program reduced the likelihood that workers would move into formal employment by 3.5 percentage points. However, during 2004–05, formal sector earnings rose considerably, whereas Jefes’s benefit remained fixed in nominal terms. As a result, the disincentive effect disappeared (Gasparini, Haimovich, and Olivieri 2006). One option to facilitate setting workfare wages at an appropriate level is to designate workfare programs as training programs.

CCT programs are generally well designed and have avoided creating such problems. The evidence confirms that, thus far, no important work disincentive effects have resulted from CCT programs in LAC. On the contrary, these programs may have resulted in positive impacts on work and income because of their improved capitalization of poor households. This result is not surprising. Because of the way CCTs are designed, a priori it is much less likely that they will cause negative labor market incentive effects. In most countries, eligibility is based on a proxy means test that is updated infrequently. Thus, it is unlikely to create an implicit marginal income tax that might discourage work. In addition, the benefit levels of CCT programs normally are too small to encourage people to forgo other earnings opportunities to retain their CCT benefit.

Developing new behavioral conditions for CCTs in urban labor markets that focus more on requirements to participate in training and work search—similar to the requirements of welfare-to-work programs in OECD countries—is another option to reduce labor market disincentive effects. Challenge V explores options to strengthen access to jobs for low-income workers.

**Challenge V: Access to Good Jobs Needs to Be Increased**

Many of the jobs that have been created in LAC in recent years are low-quality, informal sector jobs, characterized by low productivity and earnings and by insecurity. These jobs employ mainly unskilled workers and young people. In many countries, GDP per capita has been growing mainly as a result of an increase in the employment rate and not because of an increase in the average productivity of workers.

Many of the causes of these poor labor market outcomes are outside the sphere of SP. They include problems in the business environment, which undermine incentives to invest, to adopt new technologies, and to enter new product markets. Nevertheless, SP policies can make a difference in the labor market. They can facilitate employment creation and labor mobility by reducing tax wedges (which remain high in many LAC
countries), by easing regulations on labor contracts, and by ensuring that workers have access to adequate income protection programs. In addition, well-designed ALMPs can address skills mismatches arising from a lack of information among labor market participants or from structural imbalances between the supply and demand of skills. Regrettably, however, few of LAC’s income protection systems and ALMPs are yet up to this task.

Most of LAC’s income protection systems still rely on severance pay, which is an ineffective option, to smooth the consumption of workers who lose their jobs. The coverage of UI programs or UISAs, which are more effective options, is very low. At the same time, ALMPs in LAC have evolved in an ad hoc manner rather than as an informed response to the market failures that need to be addressed. The systems are fragmented, in that many diverse institutions are involved in designing and implementing programs, often with no coordination. The main focus of ALMPs has been on training programs, which tend to be supply driven and often fail to align the incentives of program managers, job seekers, and employers. Intermediation and job search assistance programs are not sufficiently developed, and monitoring and evaluation systems are generally weak.

ALMPs also tend to focus on providing services to those in the formal sector, thus neglecting informal workers and the poor. Most programs operate in partnership with formal employers and fail to address the needs of small producers in the informal sector. The programs mainly serve workers who have completed their secondary education, so that poor and unskilled workers are less likely to benefit. As noted under challenge IV, some countries have created workfare programs to help poor workers get through fluctuations in labor demand and to provide short-term support to smooth the consumption of uninsured workers; however, these programs are costly, have limited coverage, and rarely are coordinated with ALMP training and job search services.

Unnecessarily high tax wedges are another factor that constrains access to good jobs in many LAC countries. As discussed above, high tax wedges can depress the demand for labor from the formal sector and encourage informality. Estimates of the size of tax wedges in the region vary between 15 percent (Chile) and 55 percent (Colombia). Often, the tax wedge reflects the proliferation of nonessential benefits, such as recreational facilities, child care, or family allowances. In some pay-as-you-go pension systems (such as in Brazil, Nicaragua, or Uruguay), the risk arises that the tax wedge will need to increase further, either through higher contributions and payroll taxes to align system revenues with costs, or through income tax increases to fund the deficit. Population aging also puts pressure on health expenditures and on the required contribution rate in SHI systems.
A Policy Framework for Social Protection in Latin America and the Caribbean

This section lays out a conceptual and policy framework for understanding the objectives and elements of an SP system, the interactions between instruments and programs within the system, and their impact on the economy as a whole. This framework is then used in the remainder of chapter 1 to develop five policy implications, which respond to the five challenges for increasing the coverage and adequacy of SP in LAC. It will then be used in parts II and III of this volume to address in detail the challenges in each major area of SP policy (pensions, health insurance, unemployment and active labor market programs, and antipoverty income support programs).

Conceptual Framework: Understanding the SP System

The framework developed here distinguishes three different levels—objectives, instruments, and financing mechanisms—and puts particular emphasis on the behavioral responses of workers, households, firms, and SP service providers to the systems’ rules and incentives.

Objectives. Smoothing consumption and preventing poverty are widely recognized as objectives of any SP system. When a shock materializes that reduces incomes, policies need to be in place to enable all individuals and households to replace part of their income and, thus, smooth their consumption. To prevent poverty, the SP system must not only protect low-income individuals from shocks but also provide additional transfers to raise their long-run consumption capacity to a socially acceptable minimum.

The framework developed in this study also makes explicit the objective of promoting human capital to increase individuals’ earnings capacity, reduce their exposure to risk, and help them to manage idiosyncratic risks. The goal is to give low-income individuals an incentive to invest in their own human capital and promote the productive use of this human capital, for instance, by facilitating their access to jobs. This increase in human capital helps to reduce their exposure to risks such as disease or unemployment, because better-educated and healthier individuals are less likely to become unemployed or sick. Easier access to jobs or credit also reduces the risk of remaining unemployed. Having access to more productive activities with higher incomes gives people more options to devise risk prevention strategies.

These three objectives have clear trade-offs. If the SP system fails to promote human capital as a way to reduce risks and encourage private and individual protection, then the system will be forced to spend more on public consumption smoothing and poverty prevention programs. Putting
too little focus on consumption smoothing, on the other hand, will create the need for larger assistance programs for the poor, as some people will fall into poverty because they lack access to social insurance programs.

To achieve these three objectives, the framework distinguishes three types of policy choices: (1) the choice of instruments and programs, (2) the choice of financing mechanisms, and (3) the choice of implementation arrangements. Several combinations of these three kinds of policies are possible, which explains the diversity of SP systems across the region. It is clear that each policy choice will affect the behavior of individuals, employers, and providers and the efficiency of public spending (see figure 1.12).

**Instruments.** The available instruments to deal with the first two objectives are SI programs, which promote savings and risk-pooling (insurance), and targeted transfers (redistribution). Savings and risk-pooling

---

**Figure 1.12 A Conceptual Framework for Social Protection**

- **Social protection objectives**
  - Consumption smoothing
  - Poverty prevention
  - Human capital development

- **Instruments**
  - Savings/risk-pooling
  - Transfers/redistribution
  - Active policies

- **Financing arrangements**
  - Payroll taxes
  - General revenues
  - Earmarked taxes

- **Institutions**
  - Governance
  - Monitoring and evaluation
  - Public/private sector

- **Individuals’ behavior**
  - Formal/informal
  - Job search effort
  - Retirement
  - Job switching

- **Firms’ behavior**
  - Formal/informal
  - Job creation
  - Job destruction

- **Providers’ behavior**
  - Service quality
  - Service costs
  - Service coordination

- **Public spending**
  - Fiscal sustainability
  - Allocative efficiency

**Source:** Authors.
are alternative forms of consumption smoothing. Targeted transfers are the main poverty prevention instrument, but they also may form part of a well-designed SI system to ensure that low-income households have access to coverage. The savings arrangements discussed in this report include defined contribution mandatory pensions, UISAs, and health insurance savings accounts. In all of these cases, individuals save money in individual accounts to finance their consumption if their income falls as a result of unemployment, disability, or retirement, or if their expenditures increase as a result of sickness. Risk-pooling arrangements include pension annuities (which insure against the unpredictability of an individual’s life span after retirement), UI or severance pay, and health insurance. In these arrangements, individuals and employers each pay a premium or contribution (usually based on each worker’s earnings). These accumulate in a collective fund to finance the benefits paid to those members affected by unemployment, sickness, or other risks or life events.

Redistribution through transfers is another important tool for protecting individuals with limited savings capacity and the long-term poor. This tool operates through programs such as minimum pension guarantees, subsidized health insurance, and various forms of social assistance or income support programs.

The framework distinguishes between systematic and nonsystematic redistribution and between explicit and implicit redistribution. In pure savings arrangements, there is no redistribution, since each person’s savings are his or her own. In a pure risk-pooling arrangement, the redistribution of income is nonsystematic, in other words, all members of the risk pool face the same risks so they have the same probability of receiving a transfer. However, in the typical LAC SI system, where all individuals do not face the same balance between contribution rates and risks, some rules (such as minimum benefit levels) can make income redistribution systematic; thus, some plan members will systematically receive more than they put in, which implies that other members will systematically receive less.

The resulting redistribution is normally implicit rather than explicit, in the sense that it is unclear ex ante which groups receive the transfers and which finance them. Nor is the real cost of the transfers clear. As a result, it is difficult to control negative incentive effects. Explicit redistribution, on the other hand, is targeted to specific groups, the level of the transfer is defined up front, the costs are known, and the most efficient financing mechanism can be adopted.

In terms of the third objective, human capital promotion, which aims to reduce individuals’ risks by improving their labor market outcomes, the instruments discussed in this report include health services, CCTs, and ALMPs. Health and nutrition services—especially those focused on pregnancy and the early years of life—can have a major impact on human capital outcomes (both physical growth and cognitive attainment). In addition to having a direct poverty prevention effect, CCTs also give
low-income households an incentive to invest in their children’s education and health. The main aim of ALMPs, on the other hand, is to improve the match between the supply of the skills possessed by potential workers and the labor market’s demands. These programs include training, retraining, and skill recertification programs (which aim to make individuals more employable) and programs that provide labor market intermediation, job search assistance, and relocation grants (which aim to overcome job search constraints).

**Financing mechanisms and institutional arrangements.** An SP system can have many different sources of revenue and levels of funding. The choices made can have labor market and fiscal implications and can also affect the coverage and adequacy of SP. Most SP systems in LAC are financed in three ways: (1) by payroll taxes (paid by employers) and social security contributions (paid by employees and collected in the workplace),\(^{34}\) (2) by general government revenues, and (3) by earmarked taxes. Payroll taxes and social security contributions mainly finance SI programs (such as pensions, unemployment benefits, and health services), although several countries also use the payroll to finance ALMPs.

General revenues are the most appropriate way to finance social assistance programs, such as CCTs and health expenditures for those not covered by social security. However, they also are used often in LAC countries to cover deficits in SI systems where the contributions of plan members are not enough to cover the promised benefits. In countries that have introduced funded pensions, general taxation also is used to finance the transition costs, that is, the cost of honoring the pension obligations already acquired by the old system at the time of the reform. Earmarked taxes have been introduced more recently in some countries to finance both social assistance and SI programs.\(^{35}\)

In addition, any SP program can be funded, PAYG, or a mixture of the two. In funded programs, the revenues from taxes, contributions, and transfers accumulate and are invested in financial assets. The program is regarded as solvent if the present value of its projected liabilities does not exceed the value of its financial assets. In PAYG systems, on the other hand, there is no accumulation of financial assets. The revenues from taxes and contributions are used directly to finance the benefits. As discussed, a PAYG system is well balanced if the present value of its projected liabilities does not exceed the present value of the future income stream (the so-called PAYG asset) plus its investment assets. In practice, few systems are pure PAYG systems. Most systems are partially, but not fully, funded.

In programs related to health, both solvency and short-term liquidity are essential. Indeed, health care often needs to be provided urgently. In extremis, delays in providing treatment can put lives at risk and can increase the risk of complications (including infection), leading to increased costs. Therefore, it is preferable that most of the cost of contributions and
subsidies should be prepaid and pooled to remove financial barriers to access at the moment when care is needed. It follows that health benefits in SI systems normally are provided not in cash (the reimbursement of expenditures) but in kind (the direct provision of services by an approved provider, free at the point of demand).

The effectiveness of any SP program depends on the arrangements chosen for its implementation. These include institutional organization, governance structures, management and administrative systems, information systems, and monitoring and evaluation systems. The choices made by policy makers regarding these arrangements will determine the program’s accountability to users and funders, the incentives it will create for managers and providers, and, ultimately, its operational costs and the quality of its services.

Indirect effects and behavioral responses. The framework used in this study highlights how SP design (instruments, financing mechanisms, and institutional arrangements) affects the behavior of individuals, firms, and providers and influences government budgets and the efficiency of public spending.

SP instruments and financing mechanisms influence the choices of the working-age population. These choices include the decision about whether to participate in the labor force, whether to take a formal or informal sector job, whether to declare wages to the tax authorities, how much time to invest in searching for a job, when to retire, and whether to attempt to “game the system” when applying for disability benefits. Workers make these decisions in response to the benefit formulas and eligibility conditions of SP programs, the required level of social security contributions, and the resulting implicit tax or subsidy to program participants. For instance, if social security contributions increase but benefits remain unchanged, the take-home pay of formal sector workers decreases and the “wedge” between the full cost of labor to the firm and the worker’s take-home pay increases; the result may be to discourage work effort and encourage informality.

In general, the less transparent the rules on benefits and taxes, the more prone the rules are to being abused, and the more likely it is that they will induce undesirable behavior. Abuse of rules and undesirable behavior, in turn, can increase the fiscal costs of programs, reduce firms’ productivity and output, and cause regressive redistribution (favoring the nonpoor).

The design of SP systems also influences the behavior of firms and employers, who act in response to regulations on hiring and dismissal and to the level of the payroll tax, which affects labor costs. These policies can influence employers’ decisions to invest, to operate in the formal or informal sector, to finance training for their employees, and to hire or fire workers (as reflected in job turnover rates and employment levels).

The third important set of actors whose behavior can be affected by the design of SP systems is the providers of SP benefits and services. The
institutional arrangements for SP programs can affect programs’ performance in various ways. For example, well-thought-out rules on how managers’ performance is rewarded (or penalized) provide an incentive to manage programs in the best interests of the members, to make them more efficient, and to improve their quality.

Another example is the way that institutional arrangements can affect a program’s funding. For instance, a monitoring and evaluation system might offer convincing evidence that a program is producing good outcomes, which might, in turn, persuade the government to increase the program’s funding and give its managers greater autonomy to design and implement their own action plans and human resources policies.

The performance of providers can also be affected by contracting and payment systems. In countries with privately managed pensions, the contracting system affects the program’s administrative costs, which, in turn, affects the price of annuities. In health systems, the way in which insurers or financing agents contract with service providers affects the cost and quality of services. As indicated above, in many health systems, financing and service provision are organizationally integrated. NHS systems receive budgets to operate clinics and hospitals. Similarly, SHI systems often combine insurance and service production functions. The efficiency of systems might be enhanced if these two functions were separated (see the discussion below).

Finally, SP policies affect the government budget, having consequences for current expenditures and for future government liabilities. Such liabilities need to be analyzed with caution. In a PAYG pension system, for example, a policy change that has no apparent short-term impact on the budget might still produce large unfunded liabilities for the future, which are analogous to a public debt. Similarly, the cost of a cash transfer program that is fiscally sustainable in the short term might appear unaffordable when population trends are taken into account. SP policies also affect the overall efficiency of public spending. The fiscal resources spent on SP, which normally represent a considerable share of the government budget, could potentially be spent on other programs. If the social rate of return of SP programs declines relative to that of other programs, the allocative efficiency of the fiscal system will be reduced. Evaluating opportunity costs is a difficult task, but it is important to recognize the potential trade-offs involved in funding SP programs.

Policy Implications of the Conceptual Framework

This section lays out key steps to enable LAC’s SP policy makers to turn the right to SP into a reality for millions of workers across the region. The central ideas are (1) that contributory SI should be opened up to informal sector workers on an optional basis with adequate financial and institutional incentives; (2) that SI benefits should be aligned with the value of
contributions; and (3) that subsidies should be transparent, targeted to workers with limited savings capacity, and financed out of general taxation. Wherever possible, SI programs covering different populations or risks should be consolidated and their benefits packages harmonized. At the same time, safety net programs aimed at reducing poverty should be targeted based on poverty criteria, and program rules should avoid creating disincentives to work or save. More emphasis should be placed on interventions that promote human capital and reduce vulnerability by strengthening links from SP programs to improved health, nutrition, and education outcomes. Policy makers need to improve the design of ALMPs to help the most vulnerable workers (especially young people entering the labor market and low-income unskilled workers) get better-quality jobs and avoid long-term unemployment. Finally, policy makers should coordinate policies across different types of programs to take advantage of potential synergies and cross-effects and to avoid adopting policies with conflicting aims.

The five key steps to implement this agenda—responding to the five challenges for increasing the coverage and adequacy of SP—are as follows:

- **Open up contributory SI programs to all workers, regardless of where they work.** This step means not only maintaining mandatory insurance in the formal sector but also promoting the inclusion of informal sector workers in contributory SI programs on an optional basis, with adequate financial and institutional incentives.

- **Review the mandates of SI programs.** The objective is to make explicit choices about the coverage and benefits to be offered to individuals with different levels of income. These choices need to be adequate, efficient, and affordable.

- **Make subsidies transparent and progressive.** The idea is to remove implicit taxes and subsidies within SI programs and move toward a unified system of subsidies that are targeted based on means. These subsidies would decline gradually as the beneficiary’s income rose and would be financed from general revenues. This arrangement would make redistribution more progressive and avoid distorting the incentives facing workers and employers.

- **Make SP systems more coherent.** The aim is to integrate or harmonize parallel programs and exploit opportunities to share savings and insurance pools between risks. Policy makers need to rationalize the interactions among SI programs, safety net programs, and ALMPs.

- **Deepen the antipoverty social safety net and develop programs to facilitate access to better jobs.** Cash or in-kind transfers are needed for workers and households in extreme poverty who have no capacity to participate in contributory SI, even with the help of subsidies. A key objective is to ensure that these social safety nets encourage poor households to invest in their education, health, and nutrition to avoid
the intergenerational transmission of poverty. In parallel, ALMPs are needed to help low-income and low-skilled workers increase their employability and to facilitate labor mobility and job search. More-employable workers increase their earnings and reduce their vulnerability, thus relieving pressure on other elements of the SP system.

**Opening Social Insurance Access to All**

The central goal is to give all citizens or residents access to the same SI system—under the same rules and conditions—regardless of where they work.

SI financed from beneficiaries’ contributions (and employers’ contributions, when available) would remain mandatory in the formal sector. This proposal, therefore, is distinct from those that would eliminate contribution-based SI systems and move to tax-based financing of SI systems. The drawbacks of moving to a fully taxed-based SI system in LAC are discussed in box 1.2. Under the proposal here, SI also would be opened up to informal sector workers, on a voluntary basis. The programs in question would not be special, second-class programs, but rather the same programs available for the formal sector, with the same basic packages of contributions and benefits.

Expanding the coverage of contributory systems to the informal sector and rural agricultural workers presents several challenges. These workers often are employed in small firms or are self-employed. They often are unskilled, with low incomes and limited savings capacity. They often are not permanently employed, and their incomes fluctuate seasonally. They also tend to have high personal discount rates and strong preferences for liquidity. Many have little contact with or access to financial sector institutions.

**Box 1.2 The Limitations of Funding SI Entirely from General Taxation**

Previous studies have argued that, where parallel noncontributory schemes exist, it is ineffective to finance SI through payroll taxes on employers and workers’ SI contributions, since problems may arise related to low employment levels and the prevalence of informality. These problems have led some experts to advocate systems with no beneficiary contributions, which would offer basic benefit packages (health, pensions, and unemployment benefits) to all citizens or residents, regardless of their income level or where they work. The costs would be financed entirely from

(continued next page)
general revenues and earmarked taxes. Those wanting extra protection or insurance would be free to enroll in voluntary, complementary plans that could be managed by the public or private sector.a

Although it is attractive in principle, this proposal has not yet gained much traction with policy makers in LAC. Many countries have significantly increased tax-funded expenditures in health and in income support, but apart from the Brazilian health reform, there are few cases of major SI systems shifting entirely to general taxation. This suggests that such a radical change in the structure and financing of SI may not be feasible in the short to medium term in many LAC countries, particularly given the fiscal, legal, and administration constraints to such a transformation.

In practice, the proposal to move entirely to a tax-based financing for SI faces several potential drawbacks in LAC. One is the existence of strong social security institutions that already offer health insurance, pensions, and, sometimes, unemployment benefits—benefits that are greater than the “basic” packages that could be tax funded. To be affordable, the proposal to move to basic packages for all would imply reductions in the mandates of current systems.

This problem is compounded by the low level of general tax revenues (such as income taxes or consumption taxes) in many LAC countries. Countries with a strong element of tax-based finance for SP (for example, in the European Union) normally have relatively strong, progressive tax bases, with low levels of evasion, which provide an adequate basis for financing substantial unemployment and health benefits and minimum pension guarantees. In LAC, where the tax base is narrow and the scope for tax reform is limited, finance ministers are likely to be reluctant to cut workers’ and employers’ contributions for SI and also are likely to be concerned about the opportunity cost of transfers that subsidize the entire population, regardless of income. If the budget and the taxes that finance it are taken as given, shifting to a system in which basic SI benefits were subsidized for all could induce a regressive redistribution of income.

At the same time, voluntary arrangements are exposed to the standard problems of myopia—which justify government intervention in the first place. From this point of view, it is important to bear in mind that the objective of the SI system is not only poverty prevention but also consumption smoothing.

Finally, if at least some workers value the mandate of the SI system and pay contributions related to the benefits they receive (which would not be considered a tax), then the required tax burden also is reduced by having an element of workers’ contributions in the financing of SI.

Source: Authors.

To offer services to these workers, SI programs need to adopt appropriate rules and systems for payment and contribution collection. First, programs need to be attractive—offering fiscal incentives or subsidies—to persuade people to join. Such mechanisms are often needed, since even when universal insurance mandates are created de jure, the reality is that it is very difficult de facto to enforce a mandate on the population that works in the informal sector. Consider Costa Rica’s pensions and health care programs and Chile’s reformed pensions system after 2008, all of which used state contributions to replace the absent employer’s contribution for self-employed workers (Mesa-Lago 2008a, 2008b). Second, since in many cases these workers are not wage earners, their contributions need to be set in the form of flat payments, not as a proportion of wages, and contribution scales need to accommodate individuals with different savings capacities. Hence, an individual’s benefits need to be directly proportional to his or her contributions plus any means-tested subsidies he or she has received. Third, a proactive mechanism is needed to market the insurance programs and collect contributions (for example, mobile agencies that could be set up in markets and travel to remote geographic areas). Fourth, transaction costs have to be reduced because the contributions of many of these workers are likely to be small. Fifth, restrictions should be relaxed on vesting periods for the payment of benefits, because many plan members may not be able to achieve high contribution densities.

Some of these problems can be addressed, in part, by subcontracting “aggregators” such as cooperatives or trade associations in the agricultural and services sectors to enroll workers and collect contributions. This practice would generate economies of scale and reduce transaction costs. Ideas like this are discussed in more detail in the next section.

**Reviewing the Mandates (Benefits Packages) of Social Insurance Programs**

For each SI program, the first step is to define its objectives in terms of the coverage and benefits to be offered to people with different levels of income. No one set of SP mandates (or benefits packages) is “correct.” The choices made will vary from country to country, reflecting social preferences about the appropriate balance between the responsibility of individuals and that of the government.

In general, the factors that must be taken into account when defining the mandates of SI programs include the adequacy of the benefits, the efficiency of the program, and its affordability and sustainability. Benefits need to be sufficient to guarantee that individuals can preserve a decent standard of living and do not fall into poverty after a shock or life event (adequacy). They should not, however, be set at such high levels that they discourage individuals from saving or distort their labor supply decisions (efficiency). Nor should the subsidized element of the...
benefits put an unsustainable burden on public finances (affordability and sustainability).

Clearly, these thresholds are difficult to define a priori. Stakeholders need to discuss the economic impact of alternative mandates, which will vary depending on the country’s level of economic development, demographic structure, labor productivity, income distribution, the availability of its natural resources, the efficiency of its tax system, and the extent of its informal SP arrangements. Richer countries can afford more generous SI systems than poor countries, because they have more fiscal resources and because a smaller proportion of households need subsidies.

The mandates of pensions and UI programs (whether funded or PAYG) can be characterized by three policy variables: (1) a targeted income replacement rate, (2) a minimum benefit level, and (3) a ceiling on covered earnings. These three variables determine the benefits that individuals will receive. The stipulation of a minimum benefit increases the replacement rate for low-income workers and is an important factor in preventing poverty. The creation of a ceiling, on the other hand, reduces the effective replacement rate for high-income workers. Those who desire a higher consumption level after their retirement would require additional savings above and beyond the mandatory system (see figure 1.13).

**Figure 1.13 Examples of Different Mandates for Pensions**

Source: Authors’ calculations.

Note: A flat line implies the absence of a minimum pension guarantee and absence of a ceiling on covered earnings (as in Costa Rica). The minimum pension increases the replacement rate for low-income workers. The ceiling on covered earnings reduces replacement rates for high-income workers. In Uruguay, for instance, the ceiling is close to 100 percent of average earnings.
Characterizing the mandate of the health insurance system is more complex, but similar principles apply. The challenge is to find a balance between the dual objectives of improving health outcomes and protecting people against the financial consequences of ill-health. The mandate is normally defined in terms of diseases or health interventions covered (positive lists) or not covered (negative lists) by the system. The rules also determine the share of the cost of the plan to be covered by the insured person (annual deductibles) and the share of the cost of specific treatments to be paid by the insured person (user fees or copayments). So explicit social choices need to be made about the health expenditures to be covered by the SI system and those to be covered by the individual (either out of pocket or through voluntary insurance arrangements). This ratio could vary with income level, for example, by giving higher deductibles to high-income individuals. In LAC countries, the mandate of SHI systems aims to ensure universal coverage of basic health services, because preventive, maternal, and child health services are important for improving human capital outcomes for the emerging generation of children and have “merit good” characteristics.

An illustration of these concepts in the case of health insurance is presented in figure 1.14. A basic package is mandatory for all, and means-tested subsidies are used to ensure that the poor can afford it. In this example, for those in the lowest quintile, the subsidy represents 100 percent of the cost of the mandatory package, whereas for those in the highest two quintiles, the subsidy drops to zero. In addition to the basic mandatory package, there might be optional packages such as an intermediate plan or a full plan, which could be purchased with additional voluntary contributions.

When defining the mandate of SI programs, it is important to reduce uncertainty about how benefits will evolve over time. A common mistake—often seen in pensions and income protection programs in LAC—is to define parameters in nominal terms and to be discretionary about adjusting benefits to compensate for inflation. Even with modest inflation, the real value of benefits that are fixed in nominal terms can change radically over time. Similarly, in an inflationary climate, a ceiling on covered earnings that is fixed in nominal terms will gradually exclude most wages from insurance coverage. Such practices create uncertainty about the real effective replacement or reimbursement rates. For this reason, it is normally preferable to link parameters to specific macro variables—for example, minimum pensions and contribution ceilings can be defined as a share of average earnings, while benefits can be automatically indexed to inflation during the payout period.

Making Social Insurance Subsidy Systems Transparent and Progressive

Expanding social security coverage to all necessarily involves public subsidies, because many people, such as low-skilled workers in low-productivity
jobs, do not have enough savings capacity to cover the full cost of the risks against which they need to be insured. The way these subsidies are designed and financed matters a great deal. Implicit transfers that are financed from payroll taxes and from excessive social security contributions, which are currently the prevalent form of subsidy in many LAC SI systems, can be regressive and costly and can distort incentives. Removing implicit redistribution from the contributory systems is important for three reasons: (1) to target the available subsidies to those who need them most; (2) to reduce unintended behavioral consequences (targeted transfers affect fewer workers, usually those with lower productivity, thus reducing the
risk of production losses); and (3) to make financing more efficient, for instance, by reducing the tax wedge.

The alternative is to move to a system of explicit, targeted subsidies that, to the extent possible, are financed out of general revenues. Thus, all citizens (or residents), regardless of where they work, would have the same rights to social security coverage—but they would contribute to the financing of the benefits in proportion to their income. High-income workers would pay in full the contributions or premiums that correspond to the risks for which they are covered, while low-income individuals would pay only a portion of these amounts. Subsidies would then be used to top up the benefits or contributions of these low-income workers to reach the target minimum level. The subsidies would constitute a financial incentive to enroll in social security.

Additionally, a safety net of separate, fully subsidized social assistance or income support programs would continue to be used to create a consumption floor for the long-term poor. The essential characteristics of a well-functioning system of transfers and subsidies include clear eligibility conditions for subsidy, well-functioning targeting systems to identify subsidy beneficiaries, and removal of implicit redistribution. The system will also need to define the source of financing for the subsidies.

Removing implicit redistribution. The removal of implicit redistribution simply means that in the core SI system, whether it is funded or PAYG, everyone’s contributions would be set at a level that will pay for the expected cost of the benefits received. This policy does not imply that redistribution would disappear or that reformed systems would lack all forms of solidarity. Redistribution is important for equity and efficiency reasons (externalities), but, wherever feasible, it should be pursued separately from the insurance function of the SP system.

The implication of this change, in practice, is that SI would be based either on savings arrangements (so benefits are determined by the savings that individuals accumulate) or on nonredistributive risk-pooling (so individuals would pay premiums that reflect the cost of the benefit and the risk that the insured event will materialize). In the case of pensions, the natural instrument to use during the accumulation phase is savings; during the payout phase it is risk-pooling. Savings are likely to be the preferred option for unemployment benefits, given the difficulty of achieving actuarially fair risk-pooling and the problems related to moral hazard. For health, on the other hand, risk-pooling is the key instrument, because health care costs can far exceed savings capacity. Chapter III will discuss how these general concepts could be applied to pensions, unemployment, and health insurance.

This approach also would help to increase the financial sustainability of SI programs. Savings arrangements are sustainable by definition—they pay back whatever workers have accumulated in their savings accounts (whether funded or notional). Risk-pooling arrangements can
be sustainable, so long as the insurance premiums cover the expected costs of the benefits provided. Clearly, governments also would have occasion to deal with existing unfunded liabilities, as in the case of most pension systems with PAYG financing. Changing benefit formulas can prevent the accumulation of new unfunded liabilities but will not erase the current debt.38

Eligibility conditions and benefit levels for explicit transfers. Eligibility for subsidies should ideally be based on earnings and savings capacity and not on workers’ occupation, economic sector, or employment in the formal or informal sector. A subsidy that is limited to the informal sector is the economic equivalent of a tax on formal work and can increase the share of informal work in the economy. Similarly, a subsidy limited to formal sector workers would exclude unskilled and low-income workers and would be likely to be regressive.

The subsidy amount is important in determining behavioral responses. Transfers that are low relative to earnings are unlikely to change behavior. However, minimum pension guarantees that are large relative to earnings can encourage early retirement or reduce contribution densities. Similarly, large unemployment subsidies (or long-lasting eligibility for benefits) are likely to create moral hazard and lengthen periods of unemployment, thus increasing costs and compromising the program’s sustainability (see Robalino et al. 2008).

It is difficult to define exactly when a transfer becomes too large, but average earnings, minimum wages, and the poverty line can provide useful points of reference. Minimum pensions or unemployment benefits equal to or greater than the minimum wage would be likely to reduce incentives for work. In general, the recommended approach is to start with modest benefits, since it is politically easier to scale programs up than to scale them down.

In all cases, when eligibility conditions are being designed, policy makers should take into account behavioral responses and cost implications. For example, the retirement age is an important factor in the design of pension transfers. It needs to be set high enough not to produce incentives for workers to retire early or reduce the amount of time that they work. Indexing the retirement age to life expectancy—so that as people live longer, they also work for longer—can considerably reduce the long-run costs of social pensions (see Piggot, Robalino, and Jimenez-Martin 2009). Vesting periods are a less effective tool for controlling costs because compensatory old-age poverty benefits would need to be paid to those who do not contribute for enough years to qualify for their pension. In the case of unemployment benefits, in contrast, the best way to avoid moral hazard and to control costs is to have a vesting period for benefit eligibility and to limit the duration of the benefit.

Targeting mechanisms. Where possible, means tests should be used to allocate subsidies. For a given level of benefits, means tests can reduce the
costs of the program; and, for a given budget, means tests make it possible to give higher benefits to those who need them most. A recent study of the Kyrgyz Republic, Niger, Panama, and the Republic of Yemen showed that, given the budget constraints faced by those countries, universal pensions would be spread too thin and would fail to have much of an impact in terms of reducing poverty (see Grosh and Leite 2009).

As discussed earlier, however, the use of means tests automatically creates an incentive effect. Means tests coupled with a high EMTR can affect the income of individuals close to the eligibility line, which might affect their work incentives. Workers trying to avoid the tax (or to preserve the subsidy) might decide to work less or take informal sector jobs. The magnitude of this problem will depend on the amount of the transfer and the specification of the income cutoff point. The greater the transfer amount and the higher the income cutoff point (so that more people are potentially eligible), the bigger the likely effect.

For a given benefit level, however, the lower the EMTR, the higher the cost of the program. Thus, policy makers must assess the trade-off between the need to protect work incentives (which argues for setting a lower EMTR) and the need to contain fiscal costs (which argues for a higher EMTR) (see Piggot, Robalino, and Jimenez-Martin 2009). One solution to this problem is to reduce subsidies gradually as the beneficiary’s income increases using a gradual “claw-back” or taper. This approach would create a lower EMTR spread over a range of incomes instead of a high EMTR affecting only one specific point in the income scale. Calculations for Chile suggest that optimal claw-back rates should be set at less than 50 percent of marginal income. However, in designing such schemes, policy makers also need to take into account the costs of the targeting system and the possible credibility problems for the system that can be created by targeting errors.

**Ex ante versus ex post transfers.** Transfers that are targeted to workers with limited savings capacity to subsidize their access to SI for pensions, unemployment benefits, and health care can take the form of ex ante matching contributions (to top up the required premiums to attain the targeted benefit level) or of additional ex post noncontributory benefits (to top up purchased or earned benefits to the targeted minimum level of income). Social pensions are an example of an ex post benefit. For unemployment benefits, governments might consider matching workers’ contributions to UISAs (ex ante) or might pay them subsidized unemployment benefits when their savings in the UISAs run out (ex post). However, in health, as argued above, there is a strong rationale for ex ante subsidies. To ensure that liquidity constraints do not prevent timely access, the costs of services should be prepaid, rather than reimbursed to the user.

In principle, ex ante transfers tend to produce better incentives to contribute and may cost less than ex post transfers, at least in the case of pensions and unemployment benefits. The offer to match contributions
to pension funds might persuade workers in the informal and agricultural sectors to enroll and save, thus reducing the costs of social pensions in the future.

Simulations done with nonbehavioral models suggest that (depending on the elasticity of the take-up rate to the availability of matching contributions) the use of matching contributions could cost up to 20 percent less (in present value) than ex post–funded social pensions (see Palacios and Robalino 2009). Behavioral models suggest that moving from a minimum pension guarantee to matching contributions could increase contribution densities while reducing fiscal costs considerably (for a discussion of the case of Brazil, see Robalino et al. 2008.) For unemployment transfers, the main advantage of the matching contributions approach is that it gives workers an incentive to work. If workers can keep the subsidies to their UISA account regardless of whether they become unemployed, periods of unemployment might be shorter, and a system based on matching contributions therefore might cost less.

Unfortunately, there has been only limited international experience with ex ante transfers. Some countries, such as China and India, have implemented matching contributions for pensions, but these initiatives have not been evaluated, and little is known about the key parameter—the elasticity between the level of matching and the take-up rate. The only rigorous evidence comes from 401(k) plans in the United States, where matching contributions have been shown to increase contributions to voluntary pension plans. These results, however, cannot be extrapolated plausibly to the informal and agricultural sectors in middle-income and low-income countries. No country has yet implemented ex ante UI transfers. The closest system is the Republic of Korea’s UI system, in which workers who find jobs before their unemployment benefit entitlement ends can reclaim part of the balance, but the impact of this policy on the length of periods of unemployment has not been studied.

Nevertheless, there are potentially significant fiscal and efficiency gains from using ex ante subsidies to help low-income workers complete the cost of SI premiums, so the experiences of the countries implementing such programs should be monitored and evaluated. Governments in LAC should consider implementing pilot programs of ex ante subsidies, and donors should consider financing impact evaluations of these pilots, given the externality associated with having reliable information about their performance.

Financing mechanisms. The two main options for financing redistributive programs are payroll taxes and the general budget. The general budget is financed by taxes (including value added tax [VAT] as well as consumption, income, and trade taxes) or income from the exploitation of natural resources. Some countries (such as France) use earmarked taxes to finance social security. Such earmarks, however, create rigidities in the budget that can reduce the efficiency of public expenditures. So the basic financing
choice is between payroll taxes and social security contributions, on the one hand, and general revenues on the other.

The problem with using payroll taxes to fund subsidies is that they increase the tax wedge above the amount needed to cover the SI of the worker in whose name they are being levied. Tax wedges are high in several LAC countries and can reduce employment and encourage informality. For this reason, a better option would be to finance transfers through general revenues. It is also important to understand the opportunity cost of the resources involved. Given the macroeconomic constraint on total fiscal expenditure, implementing a large income transfer program, for example, might require the government to spend less on education, health, or infrastructure. Such opportunity costs merit careful attention from policy makers.

**Making Social Protection Programs More Coherent**

The third challenge is to make SI more coherent by integrating or at least harmonizing parallel programs, exploiting opportunities to share savings and insurance pools between risks, and coordinating policies between distinct SI programs and among insurance, social assistance, and labor market programs. This section makes some suggestions about how to advance this agenda. It looks first at measures to increase the internal coherence of SI by harmonizing benefits packages and simplifying and unifying institutions and programs. It then discusses opportunities to develop links between different types of SI (such as pensions and UI) and opportunities to improve the interactions among SI programs, safety net programs, and ALMPs. This second level of integration would have the following advantages: (1) it would reduce costs by sharing an individual’s savings pools across risks (such as unemployment and old-age income security), (2) it would avoid adverse interaction effects between SI programs, and (3) it would exploit positive spillover effects between programs.

**Integrating or harmonizing parallel programs.** In terms of institutional organization, the recommendation of this report is that countries should seek ways to rationalize multiple programs and move toward integrated pension, unemployment benefit, and health insurance systems. This integration could take place as part of the exercise of redefining the mandates of the various systems. Even when full institutional integration is not possible, more limited harmonization can go a long way toward improving equity, increasing efficiency, and reducing costs. Regardless of which institution manages the programs, similar benefits packages should be offered to everyone, similar financing mechanisms should be used, and the same integrated system of subsidies should operate. In essence, subsidies financed out of general revenues should be allocated to top up the contributions or benefits of individuals with limited savings capacity regardless of what program they are enrolled in.
If the goal is limited to *horizontal integration* (that is, the integration of schemes that cover the same risk), one possible strategy to achieve this in the long term is to require new generations of workers to enroll in a common insurance system to cover the basic, mandatory programs, while allowing complementary occupational plans to exist on top of them. Meanwhile, policy makers could harmonize benefit formulas and eligibility conditions across programs. Developing arrangements to make benefits *portable* across schemes would be a sensible short-term measure that would be unlikely to encounter resistance from stakeholders. One such arrangement is the 1996 Caribbean Community social security portability agreement, which facilitated labor mobility both within countries and across countries in the Caribbean regional labor market.

*Sharing savings across risks.* The economic and welfare benefits that can result from integrating SI programs are important. The integration of the self-insurance (savings) component of programs can reduce the total amount of savings needed to provide a given level of insurance, compared with having separate programs. Therefore, common savings funds can increase welfare (Orszag and Stiglitz 1999).

One example of pooled savings is the integration of unemployment benefits and pensions. The rules of most UISAs allow any unused balance in a worker’s individual account to be applied to help finance his or her pension on retirement; this is a natural feature of their design. The inverse transaction, however, in which during a person’s working life surplus pension wealth can be used to finance unemployment benefits, normally is not allowed. Yet using pension wealth to cover short-term risks can help workers better manage risk throughout their lives and reduce their contribution rates. If the rules allow surplus pension wealth to finance benefits, then for any given level of unemployment benefits, employees and employers can contribute less and the government can subsidize less.

This idea could be operationalized in countries with UISAs (funded or notional) if they were to allow workers to continue to receive unemployment benefits (up to a limit) after the balance in their unemployment savings account becomes negative and government subsidies run out; benefits would be funded at this point by “borrowing” from their pension account balance. Workers would have two options when they return to work: (1) not to repay the funds, which would imply receiving a lower pension; and (2) to repay the funds through additional pension contributions while still active in the labor market. Clearly, to ensure that enough long-term savings would be preserved to finance an adequate pension, limits would be needed on how much pension wealth could be used (for a discussion of the optimal level of borrowing, see Robalino et al. 2008).

*Cross-effects between insurance programs.* The performance of any SI program can be affected by the design of other SI programs. An individual’s behavior (such as the decision to work or not, the choice between a formal and an informal sector job, and savings decisions) is influenced
by the entire bundle of social security benefits and not just the features of a particular program. So it is natural that the design of one insurance program may enhance or diminish the impact of another. Assessing these interactions is not easy, but they should not be ignored.

The main issue is to specify the bundle of benefits provided by the SI system as a whole. In many countries, this bundle goes beyond core benefits (such as pensions for old age, disability, survivorship and health insurance, and UI), to include family allowances, maternity leave, sick leave, funeral expenses, child care, housing, and ad hoc programs, such as skills training and sports and recreation benefits (as in Mexico and Colombia). The problem is that individuals place different (subjective) values on the benefits included in the bundle. Childless people, for instance, are not interested in family allowances and child-care benefits. Many people are not interested in sports facilities.

When the (subjective) perceived benefit for any contributor of any element in the bundle is zero, the social security contribution that finances it becomes a pure tax on labor income for that person, thus increasing their personal tax wedge. A possible option might be to limit the mandatory bundle to programs that cover social risks for which private arrangements would be likely to fail. This approach would limit the mandate of the social security system to health insurance, pensions (the three types), and unemployment benefits. In doing so, it would improve incentives and reduce the contribution rate and the tax wedge.

Policy makers should be mindful of cross-effects between programs. For instance, a recent study in Brazil shows that the design of the income protection system affects pension contribution densities and retirement ages (Robalino et al. 2008). The reverse is also true: Changes in the pension system can affect contribution densities in the income protection system, take-up of benefits, and, ultimately, fiscal expenditures. The cases of disability and unemployment benefits in Argentina and Chile are also telling. If each system is not designed with the other in mind, then leakages can occur, with individuals returning to disability benefits when labor demand falls. The weaker the institutional capacity to control eligibility for disability pensions, the more prone the system will be to abuse (see chapter 7).

Cross-effects between insurance and other programs. Potential gains can be made by coordinating SI and ALMPs and SI and social assistance programs.

Income protection benefits can give people an incentive to participate in ALMPs and labor market intermediation (job and worker search) services. This participation, in turn, helps intermediation programs to reach the critical mass of participants that they need to be viable. Employers will participate only if the pool of potential candidates is large, and job seekers will participate only if the pool of potential job offers is large. At the same time, the provision of job search assistance and training and
retraining can reduce moral hazard in the unemployment benefit system by ensuring that beneficiaries invest their time in activities that will help them to get a new job.

The main issue regarding the interface between social assistance and SI programs is to coordinate the design and implementation of transfers in the context of dual redistributive systems. The first layer would feature a general social assistance system acting as a safety net for all poor people. The second layer would include redistributive programs that would make the redistributive transfer conditional on beneficiaries participating in the social security system. For this dual system to work, policy makers would need to calibrate transfer amounts. If noncontributory antipoverty programs were too generous, incentives to participate in social security would be reduced. On the other hand, if SI subsidies were too high or were available to the nonpoor as well as the poor, they could be regressive.43

**Deepening Safety Nets and Facilitating Access to Better Jobs**

The objectives of any SP system include preventing poverty, promoting human capital investments, and increasing earnings opportunities, thus increasing the savings capacity and reducing the vulnerability of, in particular, low-income young people, unskilled workers, and the poor. Targeted antipoverty programs have a key role to play in this agenda. Many countries in LAC have strengthened safety net transfers in recent years, through instruments such as conditional and unconditional cash transfers and workfare programs. In addition to ensuring a minimum income level for the poorest households, CCTs seek to enhance human capital outcomes. They will continue to play a key role in overcoming the liquidity constraints faced by the poor while promoting investments in human capital. Problems of poverty can also be addressed through more employment opportunities, which could be created by improving labor laws, lowering labor costs (by reducing payroll taxes), and improving the quality of education (which is outside the scope of this report). Such changes, however, can take a long time to materialize. In the short and medium term, policies and programs should facilitate labor force mobility, increase the employability of unskilled workers who are already in the market, help new entrants acquire more and better skills, and reduce job search constraints to improve the match between the available supply of and demand for skills.

To facilitate labor force mobility, policy makers should consider moving away from severance pay toward unemployment benefits and giving firms more flexibility in their human resources management. Workers need better income protection in the face of involuntary unemployment and more support in switching jobs or learning new skills and adapting when technological progress makes their current jobs redundant.
UI systems that include retraining and job intermediation programs can help these goals. These systems can also help to control the inevitable moral hazard implications involved in the option to receive income while not working. As is already done in many OECD countries, benefit claimants should be required to be proactive in seeking work or to participate in training to increase their employability as a condition for getting income support. International experiences suggest that employment services are among the most cost-effective ALMPs (OECD 2006; Betcherman, Olivas, and Dar 2004).

Evidence suggests that well-designed and targeted ALMPs can increase the employability of low-skilled workers, reduce their job search constraints, and protect them during downturns. Factors that can limit their employability include technical and nontechnical skills mismatches. Job search constraints, on the other hand, are related to factors that limit the exchange of information between workers and potential employers. They thus involve information and access as well as signaling problems and also can be related to an insufficiency of the human, social, or physical capital required for successful self-employment. In addition, transitory cyclical fluctuations in investment and output, along with shocks resulting from technological change or demographic transitions, can reduce labor demand and justify government interventions. This study recommends that income protection and ALMPs be integrated into a labor market risk management system, which would include standard horizontal interventions that serve all workers in all countries and economic environments, as well as vertical interventions that target particular groups at risk, such as low-income young people and the poor.

Conclusion

This chapter has highlighted the main challenges facing LAC’s SP systems, has developed a conceptual policy framework for SP, and, according to that framework, has laid out general principles for ways in which policy makers could reform SP systems to expand coverage and better realize SP’s three core functions: smoothing consumption, preventing poverty, and promoting human capital development. The following chapter provides a detailed analysis of the region’s labor markets, which further underlines the importance of the challenges posed by informality and incentives effects for the design of SP systems in LAC. Part II then explores the implications of the policy framework developed here for each main type of SP program, including pensions, health insurance, unemployment insurance and ALMPs, and antipoverty safety net programs. Part III then addresses interaction effects across program areas and closes with reflections on the political economy of the region’s SP reform process.
Notes

1. Pension coverage can be measured either at the contribution stage or at the payout stage, but regardless of which way it is measured, pension coverage in LAC is low, with significant inequalities across the income distribution. The data cited in the text are based on the coverage rate of the EAP, but Forteza, Lucchetti, and Pallares (2009) show that coverage at the payout stage resembles the trends and inequalities for the EAP.
3. This is documented in chapter 2, figure 2.7.
4. The data on Argentina, Chile, and Uruguay are documented in chapter 2, table 2.2. Turnover is measured by the transition rate, defined as the percentage of individuals in a given gender, age, or income category who leave the social security system in a given month (for reasons other than retirement).
5. Noncontributory insurance schemes in health also respond to the poor quality and limited scope of services offered by the universal, but fiscally constrained, NHS systems.
6. NHS systems often collect user fees (copayments) for some services. Since this practice can undermine effective universal access, special free windows for NHS services have been created, in the form of targeted integrated health insurance programs that reimburse NHS clinics for the variable cost of services provided to the poor.
7. Integration here refers in general to the integration of public or publicly mandated schemes. Even in the case of Brazil (where the main SHI system was fused with the public system to create the Unified Health System, SUS) there are elements of disintegration, since some federal agencies and state and municipal governments offer private health insurance to staff members and there are still separate schemes for the armed forces and police.
8. Many of the Caribbean island states not included in this table have stand-alone NHS systems.
9. See chapter 4, figure 4.2 for details.
10. Variations in pensions are shown in chapter 4, figure 4.2.
11. In some cases, the operation of hospitals and clinics has been decentralized to subnational governments. This is often so in federal republics (such as Brazil and Argentina) and has also happened in unitary states such as Peru.
12. Systematic redistribution is different from the nonsystematic redistribution of income that exists within any given risk-pooling arrangement. In a risk pool in which all insured individuals face the same risks (or, alternatively, one in which risks vary, but the members contribute premiums that reflect their differential risks), income would not be systematically redistributed. Any redistribution would be the result simply of the random incidence of the insured events. Sometimes individuals would “gain” (collect benefits), and sometimes they would “lose” (only pay premiums). In contrast, systematic redistribution occurs when individuals in the pool do not contribute as a function of their specific risks. The result is that their contributions do not reflect the expected (probability-weighted) costs of their benefit plan.
13. This point is illustrated graphically in chapter 4, figure 4.4.
14. For the detailed tabulation, see chapter 6, table 6.1. In some cases, subsidies reflect the transition costs of pension reform and thus exaggerate the long-term subsidy element of the social insurance system. However, these transition costs are themselves long term and mostly benefit nonpoor households at the expense of the general taxation fund.
15. The tax wedge can be defined as the difference between the total cost of labor paid by the employer (which includes payroll taxes) and take-home pay
(which is equal to the gross wage minus workers’ social security contributions and income taxes). In principle, social security contributions that are directly proportional to social security benefits are not considered a tax. Similarly, payroll taxes that are directly proportional to benefits can be considered part of the compensation package and, therefore, have less of a negative effect on employment.

16. Income taxes also contribute to the tax wedge, but they are normally at least as progressive as SI contributions. Also, there is little evidence that they are less acceptable to workers than SI contributions, so a shift from SI contributions to income tax as a source of funding would be unlikely to lead to negative reactions. Income taxes are likely to be more efficient than payroll taxes levied on employers. The general issue of the sociopolitical choices to be made in structuring the tax system between different types of instruments for raising revenue—such as sales tax, income tax, and property tax—goes beyond the scope of this study. For an excellent review, the reader is referred to Auerbach and Shaviro (2008).

17. In the case of some noncontributory programs such as the Bolivian social pension (Renta Dignidad), moving into the formal sector does not lead to a loss of benefits—there is no tax. The cost of a universal pension, however, is much higher (see Holzmann, Robalino, and Takayama 2009). In many national health services, moving into the formal sector does not lead to a loss of benefits from the subsidized program. The availability of a free health service of similar quality to the one provided through the contributory insurance system, however, renders the value of the contributory benefit null and thus converts the corresponding contribution into a tax.

18. This idea is illustrated in chapter 7, figure 7.1.

19. The net benefit of an insurance program is defined as the expected value of the benefit minus the cost of the contribution. In noncontributory programs, by definition, net benefits equal gross benefits.


21. It is expected that the increased demand for such services due to the CCT will lead to a corresponding supply-side response, where necessary—and this has occurred in some cases, but it does not always materialize.

22. The evidence is also clear that cash benefits that are conditional on the use of health, nutritional, and education services can make a big difference to how households reallocate their labor supply and income in response to crises, helping to reduce short-term coping responses that have negative long-term consequences. De Janvry and Sadoulet (2006) showed that the beneficiaries of Oportunidades were less likely to respond to systematic or idiosyncratic shocks by withdrawing their children from school than households not enrolled in the program.

23. Brazil, Chile, Colombia, El Salvador, Mexico, and Panama.

24. For a review of how welfare programs in OECD countries affect labor markets, see Grosh et al. (2008). Moffitt (1992, 2002) estimated that income support for single mothers in the United States (under the Aid to Families with Dependent Children program, or AFDC) reduced their work effort somewhere between 10 and 50 percent because the program’s rules converted the benefit amount into an implicit tax on any earned income. This led to the welfare-to-work reforms of the 1990s in the United States and Europe, the purpose of which was to eliminate incentives for recipients of income support to pursue unemployment or informality. In the United States, the Temporary Program for Needy Families (TANF) program incorporated many design elements that encouraged beneficiaries to work. As a result of these reforms, open unemployment and informal employment (moonlighting) were drastically reduced.

25. Skoufias and Di Maro (2006) found that Progresa had no significant effect on adult labor force participation in Mexico. Maluccio and Flores (2004) found that Red de Protección Social in Nicaragua had no effect on adult participation.
rates or on the hours worked by women. Leite (2006) simulated the effect of Brazil’s Bolsa Família on adult work effort and found that the program had little impact. On the other hand, two studies found that a considerable (and desirable) reduction in child labor was associated with CCT participation in Ecuador and other countries as a result of income effects and education conditionalities (Schady and Araujo 2008; Skoufias and Parker 2001).

26. In contrast, when CCT programs use self-declared income as the basis for program eligibility—as is done, for example, by Bolsa Família in Brazil—the risk is greater that (if the benefit is high enough) they might discourage work or displace workers into informal work. Various possible approaches can deal with this problem, including (1) allowing people to stay in the program for a significant amount of time before income is reevaluated; (2) having different income cutoff points for program entry and exit, which would allow beneficiaries’ incomes to grow without their having to leave the program; and (3) tapering the subsidy above a certain level of income instead of cutting it off all at once.

27. For detailed data on this point, see chapter 2, figure 2.5.
28. See chapter 7, figure 7.3 for detailed data on this point.
29. For earlier definitions of social protection, see Ehrlich and Becker (1972). See also Holzmann and Jørgensen (2000) for a discussion of the social risk management framework and De Ferranti et al. (2000) for a discussion of the comprehensive social insurance framework.

30. Idiosyncratic risks are those that might affect any individual or household in a given risk group but that materialize only for some of them. Illness and unemployment are cases in point.

31. This study deals with access to jobs but not to credit.
32. Voluntary savings and insurance that aim to complement the coverage in mandatory systems through private arrangements—the so-called third pillar—are not dealt with in this report.
33. As analyzed in the comprehensive social insurance framework developed by Ehrlich and Becker (1972), the optimal choice between savings and risk-pooling depends on the size and probability of the risk. In general, the higher the probability of an event and the lower its expected cost, the greater the inclination toward savings and vice versa. Thus, individuals could save to finance pensions and unemployment benefits, but the high cost and low probability of some extreme health events argues for risk-pooling.
34. When social security contributions finance redistributive SP programs, at least part of the contribution can be considered a tax.
35. It can be argued that earmarked taxes are part of general government revenues.
36. See Sluchinsky (2009) for a discussion of new systems that can facilitate registration and the collection of contributions.
37. In a funded system, the savings amount should be chosen taking account of these factors. In the case of a PAYG system, given the targeted replacement rate, policy makers must set the contribution rate accordingly.
38. They could eliminate accumulated imbalances only if contributions were set above the value of benefits for the present-day contributors, an approach that is not recommended here. If “acquired rights” are preserved when a reform is implemented to rebalance contributions and benefits, the government should acknowledge this (for instance, by issuing nontradable bonds to the pension institution to be gradually repaid from general revenues). Unfunded liabilities of employers also can be included in severance pay systems. A government-mandated switch to unemployment savings accounts that included these historical liabilities could be costly for employers (Kugler 2005). Such acquired rights could be “grandfathered,” however, so that only new benefits would accrue in the savings accounts.
39. Behavioral models are those that take into account the predicted responses of workers to the incentives in the insurance system.

40. An exception is Mexico, where unemployed workers can withdraw from their individual pension accounts either 10 percent of the balance or 75 days’ worth of salary, whichever is the lower amount, but the pension account is not connected to the unemployment savings accounts. Moreover, this type of withdrawal can take place only once every five years.

41. Benefits such as family allowances, which are pure transfers and do not involve risks, would be removed from the bundle. Such transfers might have a role in assisting large low-income families, but they should be integrated with other targeted transfers in the social assistance system and financed out of general revenues.

42. This is illustrated in chapter 7, figure 7.4.

43. This point relates to dual systems where social insurance coverage is not universal and financing is from a combination of user contributions and tax-funded subsidies. In contrast, universal, tax-funded insurance systems can be progressive from a distributional point of view, though—as argued in box 1.2—they may face difficulty in establishing adequate mandates.

References


The main goal of this chapter is to identify features of labor markets in Latin America and the Caribbean (LAC) that need to be taken into account when designing social protection (SP) policies. The motivation is not only that these policies need to be responsive to labor market dynamics but, equally important, that some of these dynamics may be determined by the design of SP programs.

This chapter builds upon the various analytical studies of labor markets that have been done in recent years, in particular, the World Bank’s report on informality in LAC (Perry et al. 2007); the Bank’s report on youth in LAC (Cunningham et al. 2008), which covers issues related to labor markets; and the report on employment and growth (Pagés, Pierre, and Scarpetta 2008). The aim of this chapter is not to extend this analytical work but to draw from it some of the policy implications for SP.

An important theme throughout is that, in normal times, the main problem facing most Latin American countries has not been the lack of jobs but the quality and productivity of the jobs created. Overall, since the early 1990s, most countries have had a positive record in employment creation. The main problem instead has been stagnant or falling labor productivity. Real wages, on average, have been growing by less than 1 percent per year, the share of those employed in the informal sector has increased, and the coverage of the social security system has been stagnant. These trends reflect the fact that economies have not allocated enough
resources to high-value-added and high-productivity activities. Indeed, for the most part, new firms entering the product market—which tend to be those introducing new technologies and products—have been small firms in low-tech sectors, which have a low survival rate and which have had little impact on the productivity of incumbents.

The reasons for this lack of investment in productive activities can be traced back, in part, to macroeconomic and regulatory policies that affect relative rates of return to investments in various sectors and the business environment (for example, access to finance and infrastructure, enforcement of contracts, the tax system, and competition). However, SP policies may also have played a role by encouraging workers to enter the informal sector, constraining the mobility of the labor force, keeping the tax wedge high, and failing to address issues related to skills-jobs mismatch. This chapter discusses how SP policies in the LAC region may need to adapt to labor market dynamics and contribute to the creation of more and better quality jobs.

The chapter is organized in three sections. The first section compares the structure of labor markets in different countries, paying particular attention to the size of the labor force, its composition by skill level, and its allocation across economic sectors and occupations, given current growth patterns. The second section focuses on unemployment, discussing in broad terms the structure of unemployment, the risks and duration of unemployment, and issues related to job search and matching. The final section discusses labor mobility and, in particular, the transitions between formal and informal jobs.

The Structure of Labor Markets

Labor markets in Latin America are heterogeneous. Relatively small markets such as those in Costa Rica or Honduras coexist with large markets such as those in Brazil. While the labor market in Chile is mainly urban, around half of the labor force in República Bolivariana de Venezuela lives in rural areas. In Bolivia, the labor force has an almost equal number of men and women, yet in Honduras only 30 percent of working-age women participate. In Guatemala, around 80 percent of those who participate in the labor market have a low level of education, whereas in Argentina and Uruguay, low-skilled workers represent less than 30 percent of the workforce. And while in Mexico less than 15 percent of the labor force is employed in primary activities, in Brazil, El Salvador, and Uruguay, this share is above 40 percent.

The overview below presents some broad common trends and characteristics, but the reader should bear in mind that it bypasses some important idiosyncrasies at the country level because of its brevity.
Labor Force

A first feature of labor markets in LAC is that, due to favorable demographics (a large inflow of young people), the labor force will continue to expand. Indeed, all countries in the region are completing the second phase of the demographic transition. Although youth and old-age dependency ratios vary considerably (see figure 2.1), the populations of all LAC countries are younger than those of the rest of the world and, in particular, of Organisation for Economic Co-operation and Development (OECD) countries. As a result, LAC countries have continued to experience high population growth rates, and the share of working-age population has continued to increase. These two factors have fueled labor force growth. Between 1996 and 2006, in half of the countries of the region, the labor force grew by more than 3.0 percent per year (see figure 2.2), with the rate in Honduras averaging 5.5 percent per year. Only in Chile and El Salvador were growth rates below 2 percent. Looking forward, as the demographic transition is completed and both the population growth rate and the share of those of working age slow down due to aging, labor force growth rates will fall. Nevertheless, the current trend is for the region’s labor forces to grow by an average of more than 2 percent per year between now and 2020. Population growth will continue to explain around half of this

Figure 2.1 Demographic Transition in Latin America and the Caribbean

Source: Authors’ calculations based on data provided by the pensions team at the World Bank Social Protection and Labor Unit.
growth, followed by growth in the share of working-age population (see the panels c and d of figure 2.2).

Another feature of LAC labor markets is the growing participation of women in the labor force, which is explained only in part by better education and the expansion of traditionally feminine sectors. Although growing participation rates have not been the main reason behind the growth

![Figure 2.2 Growth Rate of the Labor Force and Its Decomposition](image-url)

(continued next page)
in the labor force, nevertheless, the increase in participation rates has been spectacular, and women have been the driver. In general, participation rate growth has explained less than 25 percent of the labor force growth rate over the past decade. However, in most countries, participation rates have increased considerably since the early 1980s (see figure 2.3, panel a)
Figure 2.3 Past and Expected Future Changes in Participation Rates

Source: Authors’ calculations based on data from SEDLAC.

Note: The labeled points (diamonds) refer to the 15- to 34-age group. The points without labels (squares) refer to the 35- to 54-age group.
Labor markets in Latin America and the Caribbean

Despite the falling participation rates of males, particularly in the 15- to 34-year-old age group, partly as a result of higher enrollment rates in higher education (see figure 2.3, panel a). Therefore, it is the increase in the participation rates of women in the labor market, both in the 15- to 34-year-old and the 35- to 54-year-old age groups, that explains the higher aggregate participation rates (see figure 2.3, panel b).

The reasons for these trends are diverse and, surprisingly, education is not the main factor. From the supply side, the most recent studies suggest that (1) greater educational attainment among women explains only 30 percent of the increase in participation rates, with the rest coming from increases in participation rates from women at each education level; and (2) falling fertility rates have had a mixed effect. Participation rates are higher for women with children, but as the number of children increases, participation rates fall. Similarly, from the demand side, the expansion of traditionally feminine sectors accounts for only 30 percent of the increase in participation rates.

A third feature of labor markets is that despite marked improvements, the level of education of large segments of the labor force is low. Over the past 15 years, the share in the labor force of workers with a medium level of education (defined as having a secondary education) has increased in all LAC countries. The average increase per year in this share since the early 1990s has fluctuated between 0.25 and 2.00 percentage points per year. The most rapid increases have been observed in Mexico, followed by Brazil and Venezuela, while the lowest increases have been in Argentina, Colombia, and Honduras (see figure 2.4, panel a). Similarly, all countries but Bolivia and Guatemala increased the share of those with a high level of education (defined as a university education). Even so, between 27 percent (Chile) and 79 percent (Guatemala) of the labor force have a low (primary) level of education (see figure 2.4, panel b). In 10 of the 18 countries analyzed, the share of those with low education levels is higher than 50 percent, including in Brazil. The share of those with a high level of education ranges between 3 percent (Guatemala) and 28 percent (Argentina). Only in three more countries (Chile, Panama, and Uruguay) is the share of workers with a high level of education in the labor force above 20 percent.

At the same time, there is mixed evidence about rates of return to education. During the 1990s, despite the increase in the number of workers with high and medium levels of education, the wages of these workers increased or remained constant relative to the wages of low-skilled workers; the wages of those with a higher education have increased faster than the wages of those with a secondary education, and the wages for those with a secondary education have grown at similar rates as those of low-skilled workers. As a result, several studies have documented an increase in the returns to education during that period. Interestingly, the increase in the demand for skilled labor did not seem to reflect a reallocation of
employment across sectors but rather an increase in the demand for skilled labor within sectors, most probably as a result of technological change. More recently, however, trends seem to have reverted and rates of return to education in many countries have fallen, suggesting either a slowdown
in the demand for skilled labor (regardless of specialization) or problems related to skills mismatch.\textsuperscript{10}

\textit{Employment Creation}

During the past decade, most countries have been able to create enough jobs to match the growth rate of the labor force, albeit at the cost of low labor productivity growth. In fact, Latin American countries have outperformed other regions in employment creation. The growth rate of the employed population as a share of working-age population has been the main contributor to per capita growth in gross domestic product (GDP), followed by the growth of the working-age population itself. The contribution of labor productivity growth has been very small. As a result, countries such as Argentina, Colombia, Nicaragua, and Panama have created jobs faster than the labor force has grown, which implies a reduction in unemployment rates. Countries like Chile and the Dominican Republic have also come close to being in this situation. Only Peru, Venezuela, and, to some extent, Brazil have expanded employment at a rate that is lower than the growth rate of the labor force (see figure 2.5).

Most new jobs, however, have been created in low-productivity activities in the service sector. The major contributors to the growth rate of employment have been the wholesale and retail sectors, restaurants, and hotels, followed by community social and personal services. These activities account for more than half of the growth in employment in most countries and close to 70 percent in the Dominican Republic, El Salvador, and Peru (see annex 2.1). This reallocation of jobs toward the service sector is consistent with international experience, which has shown that, as economies develop, jobs decline in agriculture and grow in manufacturing and, later, in services. The problem in most LAC countries is that, within the service sector, jobs have been concentrated in low-productivity activities (as measured by valued added per worker). The productivity of the wholesale, retail, restaurants, and hotels sector is, on average, 54 percent that of the manufacturing sector, while the productivity of the mining and utility sector represents more than eight times the productivity of the manufacturing sector (see annex 2.1).\textsuperscript{11}

Overall, there appears to be a trend of jobs declining in more productive firms and increasing in less productive firms. This can be seen when the growth rate of aggregate labor productivity is decomposed into the part that comes from higher productivity growth within sectors, the \textit{net shift} of labor from low- to high-productivity sectors, and a \textit{cross-term} capturing the joint changes in sectoral productivity and employment shares. In the case of Latin America, this analysis shows that, in all countries, the effect from within sectors and the net shift are both positive, although the latter is very small. The joint effect, however, is negative in all countries,
Figure 2.5 Per Capita GDP, Labor Productivity, and Employment Growth

a. Contribution of productivity and employment to the growth of per capita GDP

b. Labor force growth and employment growth

Source: Authors’ calculations based on data from SEDLAC.

Note: Employ/Pop = employment to population ratio. The decomposition is based on the following identity: GDP pc = αE/Pop = α * s where α is average productivity per employed individual and s is the share of the employee population (which itself depends on the share of working-age population and employment rates). The growth rate of GDP per capita is thus equal to the sum of the growth rate of productivity and the growth rate of the share of employed population. Clearly, as defined here, “productivity” can change for factors not related to technological progress such as an increase in the number of hours that employed individuals work.
suggesting that labor is moving away from the industries where labor productivity is growing more rapidly.\textsuperscript{12}

Today, across countries, the majority of the labor force continues to be employed in low-productivity sectors, mainly primary activities and commerce. These two sectors account for between 25 and 57 percent of all jobs. In Ecuador, El Salvador, Honduras, Nicaragua, and Peru, more than half of all jobs are in these two sectors. Only in Argentina and Uruguay do these sectors provide less than 30 percent of all jobs. A third group of sectors includes public administration, education, and health-related services, which together provide between 13 percent (El Salvador) and 37 percent (Venezuela) of all jobs. The most productive sectors (low- and high-tech industries, high-skilled services, and transport and utilities) in most countries account for less than 20 percent of all jobs (see figure 2.6).

The other common feature across countries is that, at any point in time, a large share of the labor force is employed in the informal sector with a high prevalence of nonsalaried labor (see figure 2.7).\textsuperscript{13} It is estimated that

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure26.png}
\caption{Distribution of Employment by Economic Sector}
\end{figure}

\textit{Source:} Authors’ calculations based on statistics from SEDLAC.

\textit{Note:} PRIM = primary activities; C&C = construction and commerce; PAHE = public administration, health, and education; ILT = low-tech industries; IHT = high-tech industries; HSS = high-skilled services; U&T = utility and transportation. IHT, HSS, and U&T are high-productivity sectors.
in 2007 the share of informal employment in Latin America was close to 47 percent, up from around 43 percent in 1990. The country with the lowest level of informality is Chile (37 percent), and the country with the highest level is Bolivia (73 percent). In half of the countries, informality has increased since the early 1990s. Within the informal sector, a large share of jobs is accounted for by the nonskilled self-employed. Therefore, across countries, nonsalaried informal labor represents between 10 and 20 percent of the employed (see figure 2.7).

While informality does not necessarily have a negative connotation (as will be discussed later, many workers choose to take informal jobs), there are two main concerns about this trend. First, workers in the informal sector may not have access to adequate consumption smoothing systems. Second, informality can reduce overall economic productivity, as informal firms tend to be too small to develop economies of scale and are less likely than formal firms to have access to credit, training, and other productivity-enhancing inputs. This chapter will argue that the challenge for SP policy today is not only to extend consumption smoothing systems to informal

---

**Figure 2.7 Labor Force by Formal and Informal Occupation**

Source: Authors’ calculations based on statistics from SEDLAC.

Note: SSE = skilled self-employed; USE = unskilled self-employed. Informal salaried refers to salaried workers in small firms. The informal sector includes these salaried workers and the unskilled self-employed.
workers—many of whom do not earn wages—but also to eliminate any incentives that may encourage informality in the first place.

Unemployment Risks

One of the objectives of social protection policy is to help workers to manage the risks associated with the loss of a job. This objective requires interventions to enable workers to smooth their consumption during periods of unemployment, as well as other interventions to address market failures that increase the chances of workers’ losing their jobs (for example, factors that increase the probability that new firms will fail) or that make it more difficult for them to find a new one (for example, factors that constrain the creation of new firms and jobs or make it difficult to fill vacancies). These policies are the topic of chapter 5. This section discusses the main characteristics of unemployment in Latin American countries. It starts with a general overview of unemployment rates, inflows into unemployment, and the duration of unemployment spells across the region. It then provides a more detailed analysis of the microdeterminants of unemployment risks and unemployment duration in the cases of Argentina, Brazil, and Mexico.\(^{16}\)

The Structure of Unemployment

Before the current financial crisis, unemployment rates in LAC varied widely, from 2.1 percent in Guatemala and Honduras to 12.9 percent in Colombia.\(^{17}\) The dynamics over the past 15 years have differed considerably among the countries of the region, which can be categorized in three groups—those that have maintained stable and relatively low (< 5 percent) unemployment rates (Bolivia, Guatemala, Honduras, Mexico, and Peru); those that have maintained stable but high (> 5 percent) unemployment rates (Colombia, Costa Rica, El Salvador, and Panama); and those that have experienced wide fluctuation unemployment rates (Argentina, Brazil, Chile, the Dominican Republic, Ecuador, Nicaragua, Paraguay, Uruguay, and Venezuela), with high rates reaching two-digit figures (see figure 2.8).

A common feature of unemployment rates across countries and continents is that they vary by age, gender, skills, occupation, and region. The question is, why do these differences exist? Differences by age and gender can be understood fairly easily, since the allocation of the labor force between ages and gender is exogenous (in other words, it cannot be affected by policy at least in the short and medium term). However, differences by skills, occupation, and region are more difficult to explain. Why is it that the labor force does not move away from skills, occupations, and regions with high unemployment rates to those with low unemployment rates?
Figure 2.8 Dynamic of Unemployment Rates

Source: SEDLAC.
Unemployment rates in all Latin American countries are unequivocally higher among the young and among women. In all cases, the unemployment rate for the 15- to 24-year-old group is higher than for the 25- to 64-year-old group, which, in turn, is higher than for the over-65 group. The simple averages across countries are, respectively, 14.4 percent, 5.1 percent, and 2.9 percent. This phenomenon is not unique to the region; in the majority of countries in the world, this pattern holds regardless of the individuals’ levels of income. The gender effect is also consistent. Unemployment rates for females are higher than for men in most countries, averaging 6.2 and 4.2 percent, respectively, across the LAC region. The exceptions are El Salvador, Honduras, and Mexico, where unemployment rates are significantly lower for women, and Guatemala, where the female rate is equal to that of men. Among the 15- to 24-year-old group, however, only in El Salvador is the unemployment rate for females lower than that for males (see annex 2.2).

These differences in unemployment rates can be explained by the growing share of young people and women in the labor force, as discussed in the previous section. Indeed, if the labor force is allocated exogenously by age and gender, the three factors that can affect unemployment rates by age and gender are (1) labor productivity, which has a negative effect; (2) wage push factors, which have a positive effect; and (3) the share of a given age and gender in the total labor force, which also has a positive effect. Wage push factors are unlikely to vary dramatically by age and gender and, if anything, are likely to be higher among older workers and among men. Labor productivity can explain differences in unemployment rates, but relative labor productivities across ages and gender are unlikely to have changed dramatically over time. So the factor that remains most likely to explain the differences in unemployment rates by age and gender is the inflows of young people and women into the labor force.

Unemployment rates also vary by education level, which could reflect, in part, a mismatch between the supply and demand for skills. In all countries but five (Argentina, Costa Rica, El Salvador, Uruguay, and Venezuela), unemployment rates are higher for individuals with a medium education than for those with a low education. In half of the countries, people with a higher education have higher unemployment rates than unskilled workers. And although in the majority of countries those with a high level of education have lower unemployment rates than those with a medium level of education, the unemployment rates of the former have been increasing faster than those of the latter (Pagés, Pierre, and Scarpetta 2008, chap. 3). The only exceptions are Argentina, Costa Rica, and Mexico, where the unemployment rates of unskilled workers have increased faster. In essence, in several countries, skilled workers seem less likely than less-skilled or unskilled workers to find a job that matches their reservation wage.
Additional evidence of a skills mismatch among high-skilled workers is the growing dispersion in wages within this group. Indeed, the dispersion of wages among individuals with university diplomas seems to be increasing faster than among those with only a secondary or a primary education (Pagés, Pierre, and Scarpetta 2008, chap. 3). One interpretation of this trend is that, despite an increase in the demand for skilled labor, the employment prospects for graduates with certain diplomas are dim because their skills are not the skills that employers need. In other words, some graduates are acquiring skills (technical and/or soft) that are in high demand and thus receive higher wages, while others are not. This explanation remains speculative, and more research at the country level is necessary (though see Aedo and Walker, forthcoming). Nevertheless, studies of countries in other regions have shown that graduates in such subjects as general administration and management, economics, law, and the humanities face a considerable risk of unemployment. A further piece of evidence of possible skills mismatches is that in some countries in LAC, the average time it takes to fill a vacancy for a skilled job is longer than the international average. Investment climate surveys also suggest that skills shortages are more pronounced in new firms, large firms, firms in high-productivity sectors, and firms experiencing strong economic growth.

Several factors could explain why workers do not acquire the skills that are in demand in sectors where unemployment rates are lower. In the case of countries with high unemployment rates among low-skilled workers, both the low quality of primary and secondary education and credit constraints tend to preclude large shares of the youth population from embarking on and completing postsecondary studies. Among countries with high unemployment rates among high-skilled workers (such as Nicaragua and Peru), tertiary education is often of low quality and focused on subjects that are not in demand in the labor market. The usual reasons for this mismatch are (1) governance structures in universities and training centers that reduce incentives to design curricula that respond to the needs of employers, (2) financing mechanisms that subsidize investments in careers with low wages and high unemployment rates, and (3) students’ lack of knowledge about the labor market prospects of different careers. However, fully explaining workers’ failure to acquire skills in demand requires more research and analysis.

Finally, there are important regional differences in unemployment rates, which indicate that there may be disparities between regional rates of labor market inflow and outflow and of job destruction and creation. In all of the countries analyzed, except for Costa Rica and El Salvador, unemployment rates are higher in urban areas than in rural areas. In the case of Argentina and Brazil, there is also evidence of large variations among provinces/states. In Argentina, for instance, the risk of unemployment is higher in Gran Buenos Aires than in the northeastern region (Nordeste).
while in Brazil the risk is higher in Recife than in Rio de Janeiro (see figure 2.9). These regional disparities imply that either outflows due to migration are not high enough to compensate for rising job destruction rates (for instance, as industries are delocalized) or employment creation is not fast enough to absorb a growing labor force. Unfortunately, there is still very little research on the regional mobility of the labor force across countries. More work needs to be done at the country level on constraints on regional mobility so that SP policies can be designed to overcome them or mitigate their effects.

**Figure 2.9 Unemployment Risks by Region, Argentina and Brazil**

*Source: Authors’ calculations based on data from SEDLAC.*
**Inflows and Duration**

The unemployment rates for the labor categories discussed above are ultimately determined by the rates of inflow into unemployment and by the duration of the periods of unemployment. For instance, for a given inflow rate, the longer the duration of unemployment, the higher the unemployment rate. Understanding this decomposition is important from a policy point of view because very different policies are needed to address a high inflow rate than to address long periods of unemployment. Unfortunately, in Latin American countries, the existing aggregate data refer only to unemployment rates and unemployment duration (see annex 2.2). This discussion is based on imputed inflow rates and, therefore, needs to be interpreted with caution.

At the aggregate level, countries can be grouped into two categories: those with low inflow rates and long duration and those with high inflow rates and short duration. The first group includes Bolivia, Brazil, Colombia, and Venezuela, where the average duration of unemployment is more than six months. The second group includes countries like El Salvador, Nicaragua, and Peru, where each month over 4 percent of the workforce become unemployed (see figure 2.10). The important thing to note is that, even in countries with a relatively low unemployment rate, such as Bolivia, policy makers should be concerned with the long duration of unemployment periods. Similarly, in countries where the duration of unemployment is relatively short, such as Chile and Peru, policy makers should still be concerned about the high inflow rates into unemployment.

In general, estimated inflow rates are higher for young people and unskilled workers. The most striking differences are between young (aged 15–24) and adult (aged 25 or more) workers. In Argentina, for instance, the inflow rate for young workers is estimated to be 3.0 percent of the group, whereas for adult workers it is only 0.6 percent. The highest inflow rates for young people are found in Chile, El Salvador, Nicaragua, Peru, and Uruguay, where they surpass 7 percent. In general, inflow rates for young workers are two to six times higher than the inflow rates for adults. Inflow rates are also higher among low-skilled workers in most countries (the exceptions are Bolivia, the Dominican Republic, Guatemala, Honduras, and Peru). The differences between the inflow rates of those with a low level of education and those with a high level of education range between 10 percent in Panama to 350 percent in Costa Rica. As discussed in the section above, higher inflow rates (in other words, higher unemployment risks) for young people and the unskilled can be explained by the higher likelihood that these groups participate in the informal sector.

Unemployment duration, on the other hand, is generally longer for the elderly, the educated, women, and those living in urban areas. The longer
duration of unemployment for educated workers, women, and those in urban areas goes hand in hand with higher unemployment rates. For the young, however, the relationship is reversed: while the duration of unemployment is shorter among the young than among adults and old workers, the unemployment rate is higher. This is explained by the higher inflow rate discussed above. In other words, young people change jobs more frequently as a result of having a higher risk of job loss but also have a higher job-finding rate. Low-skilled workers, who also have higher inflow rates, have shorter periods of unemployment than skilled workers and therefore tend to have lower unemployment rates.

Long periods of unemployment for certain groups might be explained by a low ratio of vacancies relative to the stock of the unemployed but also by the inefficiency of the matching process. In the case of skilled workers in particular, long unemployment duration might be the result of skills mismatches and high reservation wages. Long unemployment duration across the board might also reflect a broader mismatch problem driven by three factors: (1) a lack of well-developed job intermediation systems, (2) signaling problems among low-skilled workers, and (3) low search efforts by the long-term unemployed for whom the likelihood of finding a
job diminishes over time. At this stage, however, no comprehensive assessment of the relative importance of each of these factors has yet been done.

**Microdeterminants of Unemployment Risks**

To a large extent, the risk of unemployment depends on firms’ decisions to expand or contract, which determine job destruction and job creation rates. This dynamic has been analyzed in a recent study of five Latin American countries (Argentina, Brazil, Chile, Colombia, and Mexico) that used firm-level data comparable with data from OECD countries and some countries in Eastern Europe (Barltesman, Haltiwanger, and Scarpetta 2004). The study looked only at formal sector firms so left out an important part of the labor market. Nevertheless, it yielded some important insights. The study showed that job reallocation appeared to be high in the LAC countries analyzed—up to one-quarter of all jobs were created or destroyed in one year. This was the result of high job destruction and job creation rates, both of which tended to be above those in industrialized countries (see figure 2.11). The number of new firms entering the market is also higher in LAC than in the OECD countries, but many do not survive very long. In Argentina, Colombia, and Mexico, only between 50 and 55 percent of new firms survive beyond their second year of activity. The rate is even higher in Chile (70 percent) but is still below comparator countries worldwide.

Because the dynamic of firms differs by type of activity, there are also key differences between unemployment risks by sector. In Argentina and Brazil, for instance, unemployment risks are higher in the construction, agricultural, and domestic services sectors, with restaurants and hotels, financial services, and industry following. The lowest risks are in mining, utilities, and, not surprisingly, public administration. However, the pattern of risk is different in Mexico. The construction sector remains the sector with the highest risk of unemployment, but this is followed by financial services and restaurant and hotel services. Unemployment risks in the agricultural sector are among the lowest in Mexico (see figure 2.12).

There is also evidence that unemployment risks are higher in the informal sector than in the formal sector. In the case of Argentina, Brazil, and Mexico, informal wage earners face almost twice as much risk as formal wage earners. The variation over time is also higher; informal sector workers are subject to higher volatility. In Argentina and Brazil, the risk for the informal self-employed tends to be lower than for informal wage earners but is still higher than for formal sector workers. The situation is different in Mexico, where the informal self-employed face an unemployment risk as about as low as that of formal wage earners. Overall, for both males and females, formal jobs last on average between four and six years. Informal salaried jobs, on the other hand, last on average around one year for both males and females. For males, self-employment lasts a
**Figure 2.11 Job Creation and Destruction Rates in Manufacturing**

**a. Job creation**

- France
- Brazil
- United Kingdom
- Mexico
- Chile
- Hungary
- Latvia
- Romania
- Colombia
- Finland
- Estonia
- Italy
- Netherlands
- Slovenia
- Portugal
- Argentina
- United States

**b. Job destruction**

- France
- Brazil
- United Kingdom
- Mexico
- Chile
- Hungary
- Latvia
- Romania
- Colombia
- Finland
- Estonia
- Italy
- Netherlands
- Slovenia
- Portugal
- Argentina
- United States

**Source:** Barltesman, Haltiwanger and Scarpetta 2004.

**Note:** Data are for firms with 20 employees or more. The sum of the job creation and job destruction rates gives the turnover rate. The numbers are for years since 1990.
Figure 2.12 Unemployment Risk by Sector in Argentina, Brazil, and Mexico

 Argentina

<table>
<thead>
<tr>
<th>Sector</th>
<th>Probability of Unemployment (percent per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>Domestic services</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
</tr>
<tr>
<td>Community services</td>
<td></td>
</tr>
<tr>
<td>Retail/wholesale, restaurants, &amp; hotels</td>
<td></td>
</tr>
<tr>
<td>Financial &amp; other high-skill services</td>
<td></td>
</tr>
<tr>
<td>Utilities &amp; mining</td>
<td></td>
</tr>
<tr>
<td>Public administration, education, &amp; health</td>
<td></td>
</tr>
</tbody>
</table>

 Brazil

<table>
<thead>
<tr>
<th>Sector</th>
<th>Probability of Unemployment (percent per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Domestic services</td>
<td></td>
</tr>
<tr>
<td>Community services</td>
<td></td>
</tr>
<tr>
<td>Retail/wholesale, restaurants, &amp; hotels</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
</tr>
<tr>
<td>Financial &amp; other high-skill services</td>
<td></td>
</tr>
<tr>
<td>Utilities &amp; mining</td>
<td></td>
</tr>
<tr>
<td>Public administration, education, &amp; health</td>
<td></td>
</tr>
</tbody>
</table>

 Brazil

<table>
<thead>
<tr>
<th>Probability of Unemployment (percent per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal employee (2.04%)</td>
</tr>
<tr>
<td>Informal self-employed (1.48%)</td>
</tr>
<tr>
<td>Formal employee (0.95%)</td>
</tr>
</tbody>
</table>
Source: Authors’ calculations based on labor force surveys for each country.
little longer than two years and between one and two years for females in all countries.\textsuperscript{24}

\textit{Unemployment Entry and Exit Rates at the Individual Level}

For policy purposes, it is important to look at the effect that both individual and economic factors have on the likelihood of entering or exiting unemployment. Doing so makes it possible to reach the specific groups that are at risk—for instance, not all young people, just those working in the informal sector. Moreover, entry and exit rates need to be taken into account when designing unemployment benefit systems because they determine the cost of the programs, the type of redistribution that emerges under various designs, and, therefore, issues related to incentives (see chapter 5).

This subsection looks at the results of simple models of the probability of becoming unemployed (if employed) or finding a job (if unemployed) in Argentina, Brazil, and Mexico.\textsuperscript{25} The results of these models confirm the insights, described above, about the role of earnings and education in determining unemployment risk, and they clarify the role played by education (figure 2.13). The findings are these:

- As earnings increase, the probability of becoming unemployed falls in the three countries.
- Both the self-employed and employees in the informal sector have a higher risk of unemployment than formal sector workers.
- In all cases, all other things being equal, the risk of unemployment declines with age. Younger workers face a higher unemployment risk than older workers.
- After controlling for earnings, the role of skills in influencing unemployment is unclear. All other things being equal, unskilled workers have a lower probability of becoming unemployed than skilled workers in Mexico, but a higher probability in Brazil and a similar probability in Argentina.
- Another important predictor of unemployment risk at the individual level is, not surprisingly, the aggregate unemployment rate in the economy (the higher the unemployment rate, the higher the risk of unemployment). Other important predictors are gender (women face a lower risk than men of becoming unemployed in the three countries), civil status (married individuals are less likely to become unemployed than single people), and school enrollment status (effects of attending school vary by country).

In terms of exit rates from unemployment, the duration of the unemployment spell and skill levels are important predictors (figure 2.14).
Figure 2.13 Determinants of the Probability of Unemployment in Argentina, Brazil, and Mexico

Source: Authors’ calculations.
Note: Data and methods for calculating unemployment risks are as explained in annex 3.

Figure 2.14 Determinants of the Probability of Exiting Unemployment in Argentina, Brazil, and Mexico

Source: Authors’ calculations.
Note: Data and methods for calculating unemployment risks are explained in annex 3.
• The longer an individual has been unemployed, the lower his or her probability of exiting unemployment.
• After controlling for the duration of unemployment, age has no significant effect. However, as discussed in the previous section and shown in other studies, the duration of periods of unemployment is actually shorter for young workers than for old workers.
• In all countries, all other things being equal, unskilled workers are more likely to exit unemployment than skilled workers (the effect of reservation wages).
• As before, other factors that influence exit rates are the unemployment rate in the economy (the higher it is, the lower the probability of exiting), gender (women have a lower probability of exiting unemployment than men), and civil status (married individuals tend to exit unemployment faster than single people).

Labor Market Dynamics

Within the SP system, social insurance programs in LAC have been designed with the presumption that, as economies develop, the number of people employed in the formal sector increases. The predominant assumption has been that the labor market is inherently fragmented, with workers in the formal sector on one side and those working informally on the other. However, the reality seems to be different. In fact, workers actually move frequently between the formal and informal sector and in and out of the social security system. Therefore, it is vital to understand these transitions and their possible causes to design effective social insurance programs. This section reviews the main findings of recent studies (Bosch and Maloney 2007; Perry et al. 2007, chap. 2) that looked at the transition between formal and informal work (Argentina, Brazil, and Mexico) and into and out of the social security system (Argentina, Brazil, Chile, Mexico, and Uruguay).

Mobility between Formal and Informal Sectors

There is evidence that participation in formal sector work, informal salaried work, and self-employment changes throughout the life cycle. In Argentina, Brazil, and Mexico, for instance, young workers are more likely to be employed in the informal sector than in the formal sector, and very few are self-employed. Up to the age of 30, the share of those in formal sector work increases while the share of those in informal sector work decreases. The share of self-employment starts at zero but gradually increases over the life cycle. Thus, at around the age of 55, the share of formal sector work and self-employment are similar, or self-employment is slightly larger (figure 2.15). The recent studies of the relationship between
formal and informal employment find that individuals move between the sectors and among different types of jobs throughout their lives. Young workers tend to start in the informal sector and gradually move into formal employment, and, eventually, a large share gradually moves into self-employment. However, this trend does not imply that informal salaried work is just a transitory state that is eventually abandoned. For instance, 84 percent of informal salaried workers in Argentina and the Dominican Republic have never held a formal salaried job.

There is also evidence of considerable mobility from the formal to the informal sector. For instance, in any given year in Argentina, 24.7 percent of informal sector workers will transition into a formal sector job, and 9.2 percent of formal sector workers will transition into an informal sector job. In Brazil and Mexico, these figures are 46.8 and 6.9 percent and 41.2 and 9.3 percent, respectively. While at first sight flows from informal into formal jobs seem larger than the reverse (suggesting a preference for formal jobs), the flows are often of similar size after adjusting for the probability of separation. Thus, in Brazil and Mexico, the propensity

Figure 2.15 Formal and Informal Employment over the Life Cycle in Argentina, Brazil, and Mexico

Source: Authors’ calculations based on Perry et al. 2007.
Note: Shares reflect average patterns observed in Argentina, Brazil, and Mexico.
among males to move from informal jobs to self-employment is the same as (symmetrical to) the propensity to move in the other direction. In Argentina and Mexico, the propensity among males to move between formal and informal salaried work is also symmetrical to the propensity to move in the other direction. The propensities are also symmetrical among females in Brazil (see table 2.1). Therefore, the evidence suggests that, to some extent, workers actively choose informal salaried work and self-employment. In the case of self-employment, for example, a story that would be consistent with a life cycle pattern is that some individuals enter the formal sector while young to gain experience and probably accumulate savings but then spend those savings in creating a business and moving into self-employment. It has also been suggested that women may transition into self-employment to accommodate their household responsibilities that increase with age (in other words, after they have children). The alternative story, that after a given age workers suddenly cannot find formal sector jobs and move into self-employment as a last resort, is less consistent with the smooth decrease in the likelihood of being employed in the formal sector. In any case, even if it is correct in some cases, it is unlikely to be the sole explanation.

In the case of informal salaried jobs, the story is more complex. First, it is clear that these jobs are more prevalent among the young and less well-educated. So even in the absence of nominal rigidities that would segment the market, there may be barriers that prevent young people from entering the formal sector. For instance, having no work experience makes it difficult for workers to signal their skills to formal sector employers. For unskilled young people (for example, young people who drop out of school without completing at least a full course of secondary education), finding a formal sector job is also likely to be more difficult. However, it is also possible that some workers prefer to work in the informal sector, particularly if the informal sector job gives them more flexible working hours, similar earnings, and access to social insurance (such as health insurance and pensions) through noncontributory arrangements.

In fact, many informal sector workers like their jobs. Self-reported data from surveys have shown that a significant share of workers in the informal sector do not consider their jobs to be inferior options. Indeed, around 30 percent of males and 37 percent of females in informal salaried jobs say that they do not want to have a formal sector job (Perry et al. 2007, chap. 2). This share is positively correlated with age, with 23 percent of males and 28 percent of females between the ages of 19 and 24 preferring their informal sector jobs, compared with 55 percent of males and 70 percent of females between the ages of 55 and 70. Among the reasons given for preferring informal salaried jobs are higher earnings (6 percent of males and 2 percent of females), having time to do other activities (7 percent of males and females), having time to take care of the home (18 percent of females), and simply liking the activity in question (67 percent of males
Table 2.1 Transition Intensities and Propensities between Sectors in Argentina, Brazil, and Mexico

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argentina</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employment</td>
<td>—</td>
<td>0.219</td>
<td>0.034</td>
<td>—</td>
<td>0.293</td>
<td>0.029</td>
<td>—</td>
<td>0.293</td>
<td>0.029</td>
<td>—</td>
<td>0.293</td>
<td>0.029</td>
</tr>
<tr>
<td>Informal</td>
<td>0.258</td>
<td>—</td>
<td>0.247</td>
<td>—</td>
<td>0.242</td>
<td>—</td>
<td>0.242</td>
<td>—</td>
<td>0.143</td>
<td>—</td>
<td>0.143</td>
<td>—</td>
</tr>
<tr>
<td>Formal</td>
<td>0.025</td>
<td>0.092</td>
<td>—</td>
<td>0.020</td>
<td>0.071</td>
<td>—</td>
<td>0.020</td>
<td>0.071</td>
<td>—</td>
<td>0.020</td>
<td>0.071</td>
<td>—</td>
</tr>
<tr>
<td><strong>Propensities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employment</td>
<td>—</td>
<td>0.516</td>
<td>0.081</td>
<td>—</td>
<td>0.447</td>
<td>0.044</td>
<td>—</td>
<td>0.447</td>
<td>0.044</td>
<td>—</td>
<td>0.447</td>
<td>0.044</td>
</tr>
<tr>
<td>Informal</td>
<td>0.285</td>
<td>—</td>
<td>0.273</td>
<td>0.269</td>
<td>—</td>
<td>0.159</td>
<td>0.269</td>
<td>—</td>
<td>0.159</td>
<td>—</td>
<td>0.269</td>
<td>—</td>
</tr>
<tr>
<td>Formal</td>
<td>0.121</td>
<td>0.439</td>
<td>—</td>
<td>0.019</td>
<td>0.032</td>
<td>—</td>
<td>0.019</td>
<td>0.032</td>
<td>—</td>
<td>—</td>
<td>0.032</td>
<td>—</td>
</tr>
<tr>
<td><strong>Brazil</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employment</td>
<td>—</td>
<td>0.201</td>
<td>0.091</td>
<td>—</td>
<td>0.159</td>
<td>0.047</td>
<td>—</td>
<td>0.159</td>
<td>0.047</td>
<td>—</td>
<td>0.159</td>
<td>0.047</td>
</tr>
<tr>
<td>Informal</td>
<td>0.308</td>
<td>—</td>
<td>0.468</td>
<td>0.210</td>
<td>—</td>
<td>0.414</td>
<td>0.210</td>
<td>—</td>
<td>0.414</td>
<td>—</td>
<td>0.210</td>
<td>—</td>
</tr>
<tr>
<td>Formal</td>
<td>0.037</td>
<td>0.069</td>
<td>—</td>
<td>0.017</td>
<td>0.069</td>
<td>—</td>
<td>0.017</td>
<td>0.069</td>
<td>—</td>
<td>—</td>
<td>0.069</td>
<td>—</td>
</tr>
</tbody>
</table>

(continued next page)
Table 2.1 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-employment</td>
<td>Informal</td>
<td>Formal</td>
<td>Self-employment</td>
</tr>
<tr>
<td>Self-employment</td>
<td>—</td>
<td>0.472</td>
<td>0.213</td>
<td>—</td>
</tr>
<tr>
<td>Informal</td>
<td>0.279</td>
<td>—</td>
<td>0.425</td>
<td>0.200</td>
</tr>
<tr>
<td>Formal</td>
<td>0.167</td>
<td>0.310</td>
<td>—</td>
<td>0.079</td>
</tr>
</tbody>
</table>

**Mexico**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-employment</td>
<td>Informal</td>
<td>Formal</td>
<td>Self-employment</td>
</tr>
<tr>
<td>Self-employment</td>
<td>—</td>
<td>0.265</td>
<td>0.175</td>
<td>—</td>
</tr>
<tr>
<td>Informal</td>
<td>0.259</td>
<td>—</td>
<td>0.412</td>
<td>0.139</td>
</tr>
<tr>
<td>Formal</td>
<td>0.055</td>
<td>0.093</td>
<td>—</td>
<td>0.019</td>
</tr>
</tbody>
</table>

**Source:** Bosh and Maloney 2007.

**Note:** The *intensities* indicate the probability of a worker moving across a sector but do not permit any inference of desirability or ease of entry; they combine the latter with any intrinsic disposition to separate. The *propensities* standardize the probability of separation and thus facilitate comparing entrants into a particular terminal sector from distinct sectors of origin.
and 60 percent of females). Among the self-employed, the shares of those not wanting to have a formal sector job are even higher: 68 percent of males and 55 percent of females. Among males, the reasons given are higher earnings (18 percent of respondents) and liking the activity (65 percent). Among females, the same two reasons are given—higher earnings (10 percent) and liking the activity (44 percent)—but they also stress wanting the flexibility to take care of children (26 percent). The most recent study that compares earnings in the formal and informal sectors also found relatively small premiums to formal sector jobs that vanish with the individual level of earnings (Bothelo and Ponczek 2008).

A study of gross worker flows during expansions and contractions of the economy in Brazil and Mexico (Bosch and Maloney 2008) has also challenged the view that the informal sector is just a warehouse for residual labor. The analysis in question showed that formal employment as a share of the working-age population is procyclical; during downturns, formal employment decreases while informal employment increases. On average, a 1.0 percent fall in output (from its trend) increases the share of informal employment by 0.2 percent and decreases the share of formal labor by 0.5 percent. This result is consistent with the view of the informal sector as an employer of last resort, except that the study also showed that lower formal employment is mainly explained by lower job finding rates in the formal sector and not by higher separation rates. Moreover, in the case of these two countries (Brazil and Mexico), movements from informal to formal sector jobs and from formal to informal sector jobs are both procyclical, which contradicts the view that during downturns transition rates from the formal to the informal sector always increase (in other words, are countercyclical). The evidence for Brazil and Mexico shows, in fact, that during a downturn the informal sector does not act as a safety net. Flows from the formal to the informal sector actually decrease.

**Movements Into and Out of the Social Security System**

This subsection discusses an analysis of transitions in and out of the social security system in Argentina, Brazil, Chile, Mexico, and Uruguay. The value added by this analysis relative to the previous analysis is that workers could be observed over very long periods of time; it was thus possible to get precise estimates of contribution densities (in other words, the percentage of time during their working life that people contribute to the social security system), which ultimately determine the level of the benefits they receive (if they meet the necessary vesting period).

*Argentina, Chile, and Uruguay.* The main finding for these three countries is that only small shares of workers have complete contribution densities; the majority of workers contribute to the social security system
less than 50 percent of the time. In Argentina, half of the sample had contribution densities below 56.7 percent, and in Chile and Uruguay, these contribution densities were 47.4 and 61.0 percent, respectively (see table 2.2). In these three countries, close to one-third of workers had contribution densities below 25 percent. The case of Argentina also shows that contribution densities were higher in the redistributive component of the pension system than in the savings component—a median of 60.0 percent versus 55.6 percent, respectively. In addition, and not surprisingly, contribution densities were higher for wage earners than for the self-employed—a median of 78.9 versus 65.6 percent—and for men than women.

Age plays a key role in explaining contribution densities and suggests that, even when young, workers transition between formal and informal sector jobs. In Argentina, the median contribution rate for young workers (aged 20 to 34) is 20 percent, while the rate for older workers (aged 35 to 54) is 85 percent. In Chile and Uruguay, these figures are 45.1 and

Table 2.2 Contribution Densities of the Social Security System in Argentina, Chile, and Uruguay

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th></th>
<th></th>
<th>Chile</th>
<th></th>
<th></th>
<th>Uruguay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mean</td>
<td>Median</td>
<td>Mean</td>
<td>Median</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.0</td>
<td>56.7</td>
<td>47.2</td>
<td>47.4</td>
<td>58.4</td>
<td>61.0</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>56.9</td>
<td>61.2</td>
<td>53.0</td>
<td>55.4</td>
<td>59.6</td>
<td>63.0</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>55.0</td>
<td>55.6</td>
<td>39.7</td>
<td>35.7</td>
<td>57.0</td>
<td>58.1</td>
<td></td>
</tr>
<tr>
<td>Income bracket</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorest quintile</td>
<td>44.1</td>
<td>36.9</td>
<td>28.6</td>
<td>21.9</td>
<td>42.9</td>
<td>31.4</td>
<td></td>
</tr>
<tr>
<td>2nd quintile</td>
<td>51.4</td>
<td>48.0</td>
<td>43.0</td>
<td>40.9</td>
<td>55.9</td>
<td>54.8</td>
<td></td>
</tr>
<tr>
<td>3rd quintile</td>
<td>54.5</td>
<td>54.5</td>
<td>48.7</td>
<td>50.3</td>
<td>60.3</td>
<td>62.9</td>
<td></td>
</tr>
<tr>
<td>4th quintile</td>
<td>58.6</td>
<td>65.6</td>
<td>56.4</td>
<td>59.7</td>
<td>64.4</td>
<td>71.4</td>
<td></td>
</tr>
<tr>
<td>Richest quintile</td>
<td>67.7</td>
<td>88.9</td>
<td>60.5</td>
<td>65.6</td>
<td>68.5</td>
<td>85.7</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>34.7</td>
<td>20.0</td>
<td>44.9</td>
<td>45.1</td>
<td>49.0</td>
<td>47.6</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>69.2</td>
<td>83.3</td>
<td>51.9</td>
<td>54.2</td>
<td>69.6</td>
<td>86.7</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>68.0</td>
<td>85.0</td>
<td>42.3</td>
<td>48.6</td>
<td>71.6</td>
<td>92.4</td>
<td></td>
</tr>
</tbody>
</table>

54.2 percent and 47.6 and 86.7 percent, respectively. These figures are consistent with the finding presented in the previous subsection that young workers are more likely to participate in the informal sector than adults. However, these results also indicate that even young workers do not stay continuously in informal sector jobs—they move in and out. For instance, in Argentina, around 7 to 8 percent of workers between the ages of 18 and 25 can be expected to leave the informal sector each year, and around 3 percent of those outside the sector can be expected to come back. Similar percentages have been observed in the case of Chile and Uruguay.

Exit rates out of the social security system decline with age across countries (for both men and women), but entry rates increase or decrease with age depending on the country. In Argentina, entry rates go up with age, and in Chile, they increase at the start (up to the age of 25 to 30) but then remain flat or decline. In Uruguay, they decline from the start. The increasing likelihood of being employed in the formal sector in the first half of the life cycle (see previous section) thus reflects different combinations of exit and entry rates. For example, in Argentina, workers are less likely to leave formal jobs with age and are also more likely to acquire them. In Chile, a growing share of formal sector workers is mainly explained by falling exit rates.

Not surprisingly, income also has a noticeable effect on contribution densities. Workers in the poorest quintile in Argentina, for example, have a median contribution density of 36.9 percent, compared with a median of 88.9 percent for those in the richest quintile. The figures for Chile and Uruguay are 21.9 and 65.6 percent and 41.4 and 85.7 percent, respectively. Unfortunately, it is not possible to separate transitions that are intentional from transitions that are unintentional. However, the analysis in the previous section suggests that the risk of unemployment (which may be closer to an unintentional transition) cannot by itself explain these transitions. Unemployment risks are lower in most cases.

**Brazil.** The study for Brazil (Robalino et al. 2008) looks at how much time individuals spend in and out of the social security system over their life cycle. The typical distribution of each age cohort—in terms of who contributes to the social security system, is out of the social security system, is unemployed, or has retired—is strongly correlated with income (see figure 2.16). For instance, low-income individuals (first panel) spend less time contributing to social security than high-income workers (third panel). They also spend more time being unemployed and are likely to retire later. In the middle of the income distribution, the likelihood of contributing to social security is higher, but participation seems to go down after the age of 30, most likely as a result of more frequent transitions into self-employment (see discussion above). Middle-income workers retire later than all others. In all cases, not surprisingly, young people have a higher probability of becoming unemployed.
Source: Robalino et al. 2008.

Note: Distributions were derived using the PNAD (Pesquisa Nacional de Amostra Domicílios) household surveys for 1990–2006. For a description of the methodology used to move from cross-sectional to longitudinal cohorts, see Robalino et al. (2008). Civil servants and the military are excluded from the chart.
The study in question also shows that the design of the social insurance system itself can affect contribution densities (and retirement ages). Three programs were analyzed: the unemployment individual savings account system (Fundo de Garantia do Tempo de Serviço, or FGTS), the unemployment insurance systems, and the pensions system. The results show that the pension system gives both high- and low-income workers an incentive to delay retirement, in part because individuals who delay retirement receive a higher implicit rate of return on their contributions (see chapter 4 on pensions). At the same time, however, the pension system can reduce the contribution densities of high-income workers and can either increase or decrease the contribution densities of low-income workers (depending on levels of risk aversion, preferences for consumption and leisure, and other individual characteristics). The intuition behind these results is that the higher rates of return on contributions also allow individuals to achieve savings targets with less participation in the social security system (or less formal sector work). In addition, for low-income workers, once the level of the contributory pension is close to the minimum pension guarantee (equal to 42 percent of average earnings), additional contributions do not bring higher pensions; there is an implicit 100 marginal tax on contributions (see chapter 3).

The unemployment benefits system (unemployment insurance and the FGTS) also affects retirement ages and contribution densities. It increases retirement ages, reduces the contribution densities of high-income workers, and can increase or decrease the contribution densities of low-income workers. The FGTS, on the other hand, has little effect on the retirement age of high-income workers but increases the retirement age of low-income workers. It increases the contribution densities of both low- and high-income workers (see chapter 5). This effect is natural, as contributions to the FGTS are paid by employers. Other things being equal, the longer individuals participate in the formal sector, the greater the savings they accumulate in their unemployment accounts.

Mexico. The analysis for Mexico took the 9.2 million workers who enrolled in the Mexican social security system (Instituto Mexicano de Seguro Social) on July 1, 1997, and followed them over time. More precisely, the study recorded whether workers were in or out of the system on July 1 of each year between 1997 and 2006. With this information, two indicators were computed: the average duration of formal jobs and the frequency of entry and exit. The indicators were then tabulated by income (always high, always low, high/low), age (young or old), and gender.

The study showed that the time spent in the social security system is highly correlated with income; low-income workers have a much shorter contribution density than high-income workers. Across all workers, the average time spent enrolled in the system was 6.7 years. However,
high-income workers spent an average of 7.7 years in the system, compared with 4.9 years for low-income workers. In fact, among high-income workers, 51.6 percent held a formal sector job throughout the entire period of analysis, and only 5.9 percent held a formal job for only one year. Among low-income workers, the story is almost the reverse. Only around 16.2 percent had a formal job throughout the period, while 19.5 percent held a formal job only for one year.

Older workers have higher contribution densities than younger workers, and men have higher contribution densities than women, but the income effect dominates. Among high-income young workers, 53.9 percent held a formal sector job continuously throughout the period, compared with 48.5 percent among high-income old workers. Among low-income workers, however, these shares were reversed—13.1 percent for young workers, compared with 23.1 percent for old. Comparing men and women shows that men always spent more time in formal sector jobs than women, regardless of their level of income; but high-income women spent more time in formal jobs than low-income men (see figure 2.17).

The study also computed a mobility index that shows that movements in and out of the social security system are frequent. Young workers are more mobile than old workers, and low-income workers are more mobile than high-income workers. For example, among high-income workers who held formal jobs for five years, around 80 percent moved out of the social security system only once during a 10-year period (for example, they may have contributed for two years, left the system for a while and then come back and contributed for three more years). Among low-income workers, on the other hand, only 45 percent moved out of the system only once. Half moved more than three times and 30 percent more than five times during a 10-year period (see figure 2.18). One caveat with findings is that, in the case of Mexico, the data did not make it possible to differentiate between changes in jobs and changes in the status of the job (contributing or not to social security). Thus, a worker could have lost coverage without switching jobs. However, the bottom line is that, whether workers switched jobs or not, the intermittent nature of social security contributions is as much an issue in Mexico as in Argentina, Brazil, Chile, and Uruguay.

The study on Mexico emphasizes the role of noncontributory arrangements in explaining shorter contribution densities—and the increase in informality in general. There are two programs in question, Seguro Popular (subsidized health insurance) and the social pension. The study argues that, when the government designs programs for those who are not covered by social security, they implicitly reduce the earnings differential between the formal and the informal sector. Put in other terms, they impose an implicit tax on formal work. Other things being equal, the higher this implicit tax and the lower the differentials in labor productivity between the two sectors (for a given skill or level of experience), the
Figure 2.17 Mexican Workers’ Number of Years in the Formal Sector, 1997–2006

Source: Based on Levy 2008, chap. 5.

Note: The panels show the number of years the individual contributed to the social security system between July 1997 and July 2006. Only contributions in July of each year are taken into account, which means that movements in and out of the system within any given year are ignored. High-income workers are those with earnings equal to or above three times the minimum wage. Low-income workers are those with earnings less than three times the minimum wage.
Summary insights. Two questions emerge from this analysis of the five country cases: (1) Why cannot workers contribute continuously to social security? and (2) Why are contribution densities particularly sparse in the case of low-income workers and young people?

Part of the answer to the first question lies outside the scope of SP policy. Exogenous shocks can drive workers out of formal sector jobs, for instance, during an economic downturn. For various reasons, workers might be forced to move to regions or sectors (for example, into agriculture) where social security coverage is less prevalent. Casual or seasonal workers naturally have intermittent contribution histories. Finally, some workers (such as unskilled workers) might face barriers to entry into the formal sector and thus, after losing a job, might spend long periods of time in the informal sector.

However, the discussion above also suggests that SP policies can play a role in reducing contribution densities. Indeed, depending on its design, the system can provide more or fewer incentives to enroll. Three essential

Figure 2.18 Entries and Exits for Mexican Workers with Five Years in the Formal Sector

Source: Based on Levy 2008, chap. 5.
Note: Data are for workers who held formal sector jobs for five years during the period 1997–2006. High-income workers are those with earnings equal to or above three times the minimum wage. Low-income workers are those with earnings less than three times the minimum wage.
factors in determining incentives are (1) the bundle of social security benefits and how it is valued by different individuals, (2) the level of payroll taxes and social security contributions, and (3) the existence of any transfer that is given to individuals who do not participate in the social security system. The lower the value that workers put on the bundle of social security benefits, the higher the taxes; and the higher the transfers, the weaker the incentives to enroll (see chapter 7 for a more detailed discussion of these issues).

Part of the answer to the second question is that low-income workers and young people tend to be more vulnerable to exogenous shocks and more sensitive to the effects of implicit taxes and subsidies. Also, as discussed above, other things being equal, low-income workers and young people face higher unemployment risks. They are more likely to take short-term jobs, even in the formal sector, and are more likely to face barriers to entering the formal sector. Low-income workers also face higher marginal tax rates since transfers are in general targeted on the basis of income. Thus, individuals with incomes close to the eligibility line are more affected by the transfer. Low-income workers and young people are also less likely to enjoy some of the benefits of the contributory system. For instance, in the case of Brazil, low-income workers use less unemployment insurance because they are less likely to meet the eligibility conditions (Robalino et al. 2008). Young people, on the other hand, benefit less from health insurance and, given high discount rates, may also place less value on forced long-term savings.

Conclusions

The main implications of the discussion in this chapter for the design of SP policies can be summarized as follows:

- **Social protection policies can contribute to the creation of better-quality jobs.** This chapter has shown that, across countries, low-productivity sectors account for a large share of all jobs and that a large share of workers is engaged in informal activities. In addition, there is still a large pool of workers with no skills at all. Provided that countries implement other policies at the macro level that improve the business environment and stimulate investments and innovation, SP programs can address these problems by (1) facilitating the mobility of the labor force across sectors and regions (through the introduction of better income protection systems and more-flexible labor regulations), (2) keeping social security contributions (and the associated tax wedge) at reasonable levels, (3) retraining unskilled workers and increasing their employability, (4) certifying the skills of workers
in the informal sector, and (5) helping to match skills with jobs within and across sectors. Specific programs intended to meet these objectives will be discussed in chapter 5.

- **Well-designed income protection programs are necessary to manage unemployment risks.** This chapter has shown that the risks of employment are high for various groups because of a high likelihood of job loss and/or longer durations of unemployment. The risk of losing a job is higher for young workers, low-income workers, and low-skilled workers. While on the one hand, these groups tend to remain unemployed for shorter periods than average (due to their lower reservation wages), on the other hand, they are more likely to be working in the informal sector and, therefore, to have less access to social insurance. As a result, well-designed income protection programs with associated retraining and reemployment services are needed for these groups.

- **In general, there is a need to rethink social insurance programs and adapt them to labor market dynamics.** Given the mobility of the labor force across occupations and between the formal and informal sectors, contributory systems that cover only formal sector workers are insufficient. However, having a parallel contributory and non-contributory system does not seem to be the most efficient strategy, either. Thus, policy makers need to come up with integrated systems that do not discriminate between workers depending on where they work (sector or occupation), while also ensuring that the design encourages, rather than discourages, formal sector work.

- **Young people present a special challenge that calls for targeted interventions.** As discussed in the first section, the labor force in most countries will continue to expand rapidly, driven in part by the growing number of young people who are entering the labor market. The challenge is not so much to find jobs for them—the first section of this chapter showed that, in most cases, the jobs exist—but to help them find more productive and secure jobs. In addition to continued reforms in the education system, active labor market programs can play an important role in increasing employability and facilitating job search (see chapter 5).

- **In all cases, the design of social protection policies and programs should be based on a careful assessment of local conditions and labor market dynamics.** This chapter has outlined broad common trends across labor markets in Latin America, but the reality is that these markets are heterogeneous. The actual design and implementation of social protection policies requires a more thorough understanding of issues related to unemployment risks and associated income shocks, of the extent of skills mismatch and information/signaling problems in the labor market, and of the determinants of the transitions that workers make between employment states, occupations, economic sectors, and regions.
Annex 2.1. The Contribution of Different Sectors to Employment Growth and Labor Productivity

(continued next page)
The graph shows the contribution to labor productivity growth and employment growth across different sectors in Latin America and the Caribbean. The sectors include Agriculture, Wholesale/retail, restaurants/hotels, Construction, Other services, Transport, storage, and communication, Mining and utilities.

The table lists the countries included in the analysis: VEN, PER, PAR, PAN, NIC, MEX, SLV, DOM, CRI, COL, BRA, and ARG.

The graph indicates that Other services have a notable contribution to labor productivity growth, with values ranging from 38% to 110%.

**Source:** Based on Pagés, Pierre, and Scarpetta 2008.

**Note:** In panel h, the average was calculated for Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.
Annex 2.2 The Decomposition of Unemployment Rates

The calculation of inflow rates given the unemployment rate and the duration of the unemployment spell are based on the following assumptions.

The number of unemployed in period $t$ is given by $U_t = U_{t-1} - h U_{t-1} + s E_{t-1}$, where $E$ gives the number of employed. Dynamics for the unemployment rate can then be derived by dividing by $E_t$: $\frac{U_t}{E_t} = \frac{U_{t-1}}{E_{t-1}}(1 - h) + s \frac{E_{t-1}}{E_t}$.

In steady state, $\frac{U_t}{E_t} = \frac{U_{t-1}}{E_{t-1}}$. Thus, the unemployment rate is given by $u = \frac{U_t}{E_t} = \frac{s}{h}$. If $g$ is not very different from 1, $u = s^* d$. The variable $d$ is the duration of unemployment and is the inverse of the outflow rate: $d = 1/h$. Indeed, the average duration of unemployment is given by the ratio of the unemployed to the number of new vacancies: $d = U/V$; and the number of vacancies is equal to the flows out of unemployment: $V = h U$ (see table 2A2.1 to 2A2.3 for data and results of the calculations).
Table 2A2.1 The Structure of Unemployment

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total</th>
<th>(15–24)</th>
<th>(25–64)</th>
<th>(65+)</th>
<th>Female</th>
<th>Male</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Rural</th>
<th>Urban</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>2006</td>
<td>9.5</td>
<td>23.2</td>
<td>6.6</td>
<td>5.7</td>
<td>8.1</td>
<td>5.5</td>
<td>8.0</td>
<td>7.4</td>
<td>4.2</td>
<td>0.0</td>
<td>6.6</td>
<td>28.3</td>
<td>19.4</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2004</td>
<td>4.3</td>
<td>9.5</td>
<td>2.7</td>
<td>1.0</td>
<td>3.6</td>
<td>2.0</td>
<td>1.9</td>
<td>3.0</td>
<td>5.5</td>
<td>0.5</td>
<td>4.1</td>
<td>10.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>2005</td>
<td>9.3</td>
<td>19.4</td>
<td>6.2</td>
<td>2.1</td>
<td>8.5</td>
<td>4.4</td>
<td>6.0</td>
<td>7.6</td>
<td>3.8</td>
<td>1.7</td>
<td>7.1</td>
<td>24.9</td>
<td>15.3</td>
</tr>
<tr>
<td>Chile</td>
<td>2003</td>
<td>10.0</td>
<td>21.5</td>
<td>8.1</td>
<td>4.5</td>
<td>10.0</td>
<td>6.9</td>
<td>8.6</td>
<td>8.7</td>
<td>6.3</td>
<td>5.4</td>
<td>8.4</td>
<td>26.5</td>
<td>18.0</td>
</tr>
<tr>
<td>Colombia</td>
<td>2004</td>
<td>12.9</td>
<td>24.7</td>
<td>9.9</td>
<td>3.5</td>
<td>12.8</td>
<td>7.6</td>
<td>7.7</td>
<td>12.2</td>
<td>10.3</td>
<td>6.3</td>
<td>11.0</td>
<td>30.1</td>
<td>20.9</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2006</td>
<td>5.9</td>
<td>13.9</td>
<td>3.6</td>
<td>3.8</td>
<td>5.5</td>
<td>2.4</td>
<td>4.4</td>
<td>3.5</td>
<td>1.7</td>
<td>3.8</td>
<td>3.5</td>
<td>19.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Dominican</td>
<td>2006</td>
<td>3.7</td>
<td>7.3</td>
<td>2.9</td>
<td>0.3</td>
<td>4.0</td>
<td>2.3</td>
<td>2.0</td>
<td>4.3</td>
<td>3.3</td>
<td>1.9</td>
<td>3.4</td>
<td>11.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>2006</td>
<td>6.3</td>
<td>12.8</td>
<td>4.6</td>
<td>1.8</td>
<td>7.4</td>
<td>2.7</td>
<td>3.8</td>
<td>5.8</td>
<td>5.0</td>
<td>2.7</td>
<td>5.5</td>
<td>18.9</td>
<td>9.0</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2004</td>
<td>6.8</td>
<td>11.5</td>
<td>5.2</td>
<td>7.3</td>
<td>2.5</td>
<td>7.1</td>
<td>5.2</td>
<td>5.2</td>
<td>4.8</td>
<td>5.7</td>
<td>4.9</td>
<td>9.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2004</td>
<td>2.1</td>
<td>3.8</td>
<td>1.5</td>
<td>1.3</td>
<td>1.5</td>
<td>1.5</td>
<td>1.1</td>
<td>2.7</td>
<td>2.6</td>
<td>1.1</td>
<td>1.8</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Honduras</td>
<td>2006</td>
<td>2.1</td>
<td>3.7</td>
<td>1.5</td>
<td>0.4</td>
<td>1.3</td>
<td>1.7</td>
<td>1.1</td>
<td>2.8</td>
<td>3.0</td>
<td>0.6</td>
<td>2.4</td>
<td>4.8</td>
<td>3.2</td>
</tr>
</tbody>
</table>

(continued next page)
Table 2A2.1 (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total</th>
<th>(15–24)</th>
<th>(25–64)</th>
<th>(65+)</th>
<th>Gender</th>
<th>Education</th>
<th>Area</th>
<th>Gender</th>
<th>Youths (15–24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>Low</td>
<td>Rural</td>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>2005</td>
<td>3.8</td>
<td>8.9</td>
<td>2.4</td>
<td>2.2</td>
<td>1.4</td>
<td>3.0</td>
<td>1.9</td>
<td>2.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2005</td>
<td>6.6</td>
<td>10.2</td>
<td>5.3</td>
<td>1.8</td>
<td>5.9</td>
<td>4.9</td>
<td>4.1</td>
<td>7.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Panama</td>
<td>2004</td>
<td>8.6</td>
<td>19.4</td>
<td>6.3</td>
<td>1.1</td>
<td>8.3</td>
<td>5.0</td>
<td>4.2</td>
<td>7.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2005</td>
<td>5.8</td>
<td>12.3</td>
<td>3.6</td>
<td>1.8</td>
<td>4.6</td>
<td>2.9</td>
<td>3.7</td>
<td>3.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Peru</td>
<td>2006</td>
<td>4.2</td>
<td>8.8</td>
<td>3.0</td>
<td>1.1</td>
<td>3.8</td>
<td>2.4</td>
<td>1.7</td>
<td>3.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2005</td>
<td>12.1</td>
<td>29.3</td>
<td>8.8</td>
<td>4.6</td>
<td>11.8</td>
<td>6.0</td>
<td>10.4</td>
<td>9.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>2005</td>
<td>11.4</td>
<td>19.8</td>
<td>9.3</td>
<td>7.8</td>
<td>10.5</td>
<td>8.4</td>
<td>9.0</td>
<td>9.9</td>
<td>8.9</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>14.4</td>
<td>5.1</td>
<td>2.9</td>
<td></td>
<td>6.2</td>
<td>4.3</td>
<td>4.7</td>
<td>6.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td>0.959</td>
<td>0.987</td>
<td>0.635</td>
<td></td>
<td>0.951</td>
<td>0.944</td>
<td>0.947</td>
<td>0.942</td>
<td>0.682</td>
</tr>
</tbody>
</table>

Source: Based on data from the Socio-Economic Database for Latin America and the Caribbean (SEDLAC).

Note: — = not available.
### Table 2A2.2 Estimated Unemployment Inflow Rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total</th>
<th>(15–24)</th>
<th>(25–64)</th>
<th>(65+)</th>
<th>Adults (25–64)</th>
<th>Youths (15–24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Gender</td>
<td></td>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>2006</td>
<td>1.0</td>
<td>3.0</td>
<td>0.6</td>
<td>0.5</td>
<td>4.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2004</td>
<td>0.4</td>
<td>1.3</td>
<td>0.2</td>
<td>0.1</td>
<td>6.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>2005</td>
<td>0.7</td>
<td>2.0</td>
<td>0.3</td>
<td>0.1</td>
<td>5.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Chile</td>
<td>2003</td>
<td>2.8</td>
<td>7.0</td>
<td>2.1</td>
<td>1.3</td>
<td>3.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Colombia</td>
<td>2004</td>
<td>1.0</td>
<td>2.2</td>
<td>0.7</td>
<td>0.2</td>
<td>3.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2006</td>
<td>1.0</td>
<td>2.7</td>
<td>0.6</td>
<td>0.5</td>
<td>4.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2006</td>
<td>0.7</td>
<td>1.6</td>
<td>0.5</td>
<td>0.0</td>
<td>3.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2006</td>
<td>1.0</td>
<td>2.7</td>
<td>0.7</td>
<td>0.2</td>
<td>4.2</td>
<td>0.9</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2004</td>
<td>6.3</td>
<td>10.9</td>
<td>4.9</td>
<td>5.0</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2004</td>
<td>1.0</td>
<td>1.9</td>
<td>0.6</td>
<td>2.6</td>
<td>3.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Honduras</td>
<td>2006</td>
<td>0.7</td>
<td>1.6</td>
<td>0.5</td>
<td>0.1</td>
<td>3.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2005</td>
<td>3.9</td>
<td>8.4</td>
<td>2.5</td>
<td>0.7</td>
<td>3.3</td>
<td>2.4</td>
</tr>
</tbody>
</table>

(continued next page)
### Table 2A2.2 (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total</th>
<th>(15–24)</th>
<th>(25–64)</th>
<th>(65+)</th>
<th>Gender</th>
<th>Education</th>
<th>Area</th>
<th>Youths (15–24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>Low</td>
<td>Rural</td>
<td>Female</td>
</tr>
<tr>
<td>Panama</td>
<td>2004</td>
<td>0.9</td>
<td>2.9</td>
<td>0.6</td>
<td>0.1</td>
<td>5.2</td>
<td>0.7</td>
<td>0.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2005</td>
<td>1.2</td>
<td>2.5</td>
<td>0.7</td>
<td>1.3</td>
<td>3.6</td>
<td>0.8</td>
<td>0.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Peru</td>
<td>2006</td>
<td>4.2</td>
<td>10.6</td>
<td>2.6</td>
<td>1.8</td>
<td>4.2</td>
<td>3.3</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2005</td>
<td>3.4</td>
<td>8.9</td>
<td>2.3</td>
<td>1.4</td>
<td>3.8</td>
<td>2.9</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>2005</td>
<td>1.0</td>
<td>2.5</td>
<td>0.8</td>
<td>0.3</td>
<td>3.3</td>
<td>0.7</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td>0.965</td>
<td>0.992</td>
<td>0.780</td>
<td></td>
<td>0.865</td>
<td>0.929</td>
<td>0.941</td>
<td>0.978</td>
</tr>
</tbody>
</table>

**Source:** Based on data from SEDLAC.

**Note:** — = not available.
Table 2A2.3 Average Duration of the Unemployment Spell (months)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total</th>
<th>Age</th>
<th>Gender</th>
<th>Education</th>
<th>Area</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(15–24)</td>
<td>(25–64)</td>
<td>(65+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Argentina</td>
<td>2006</td>
<td>7.7</td>
<td>10.2</td>
<td>11.8</td>
<td>11.8</td>
<td>8.4</td>
<td>10.8</td>
</tr>
<tr>
<td>Bolivia</td>
<td>2004</td>
<td>10.1</td>
<td>7.2</td>
<td>12.7</td>
<td>15.3</td>
<td>14.9</td>
<td>9.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>2005</td>
<td>13.7</td>
<td>9.8</td>
<td>18.1</td>
<td>22.7</td>
<td>20.4</td>
<td>15.0</td>
</tr>
<tr>
<td>Chile</td>
<td>2003</td>
<td>3.6</td>
<td>3.1</td>
<td>3.9</td>
<td>3.5</td>
<td>4.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Colombia</td>
<td>2004</td>
<td>13.4</td>
<td>11.1</td>
<td>14.8</td>
<td>23.2</td>
<td>14.4</td>
<td>15.5</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2006</td>
<td>5.6</td>
<td>5.2</td>
<td>6.1</td>
<td>7.7</td>
<td>6.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2006</td>
<td>5.1</td>
<td>4.5</td>
<td>5.3</td>
<td>14.3</td>
<td>6.8</td>
<td>4.3</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2006</td>
<td>0.3</td>
<td>4.7</td>
<td>7.1</td>
<td>8.3</td>
<td>8.3</td>
<td>5.5</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2004</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.5</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2004</td>
<td>2.2</td>
<td>2.0</td>
<td>2.5</td>
<td>0.5</td>
<td>1.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Honduras</td>
<td>2006</td>
<td>2.9</td>
<td>2.2</td>
<td>3.2</td>
<td>7.8</td>
<td>3.3</td>
<td>3.2</td>
</tr>
</tbody>
</table>

(continued next page)
Table 2A2.3 (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Total</th>
<th>(15–24)</th>
<th>(25–64)</th>
<th>(65+)</th>
<th>Gender</th>
<th>Education</th>
<th>Area</th>
<th>Youths (15–24)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicaragua</td>
<td>2005</td>
<td>1.7</td>
<td>1.2</td>
<td>2.21</td>
<td>2.7</td>
<td>2.4</td>
<td>1.9</td>
<td>1.4</td>
<td>2.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Panama</td>
<td>2004</td>
<td>9.1</td>
<td>6.6</td>
<td>11.1</td>
<td>15.8</td>
<td>12.4</td>
<td>9.8</td>
<td>7.8</td>
<td>11.4</td>
<td>13.8</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2005</td>
<td>5.0</td>
<td>4.9</td>
<td>5.2</td>
<td>1.3</td>
<td>5.5</td>
<td>4.9</td>
<td>4.8</td>
<td>4.5</td>
<td>8.3</td>
</tr>
<tr>
<td>Peru</td>
<td>2006</td>
<td>1.0</td>
<td>0.8</td>
<td>1.2</td>
<td>0.6</td>
<td>1.1</td>
<td>1.3</td>
<td>1.0</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2005</td>
<td>3.6</td>
<td>3.3</td>
<td>3.8</td>
<td>3.4</td>
<td>4.0</td>
<td>3.3</td>
<td>3.4</td>
<td>4.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>6.1</td>
<td>4.9</td>
<td>7.1</td>
<td>9.6</td>
<td>8.0</td>
<td>6.1</td>
<td>6.1</td>
<td>7.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.986</td>
<td>0.992</td>
<td>0.929</td>
<td>0.979</td>
<td>0.977</td>
</tr>
</tbody>
</table>

Source: Based on data from SEDLAC.
Note: — = not available.
Annex 2.3 Data and Methods for Calculating Unemployment Risks

The analysis of unemployment risks and unemployment exits was carried out for three different countries: Argentina, Brazil, and Mexico. Before advancing into the description of the data and the methods used in analyzing them, it is important to clarify the definition of unemployment risk.

The risk is simply defined as the probability of a worker becoming unemployed at period $t$ given that he or she was employed at period $t - 1$. One obvious but important point is that workers who leave their jobs because they have left the economically active population are not considered in the calculation since they do not become unemployed. The unemployment exit, on the other hand, is the exact opposite situation: it is the probability of a worker becoming employed at period $t$ given that he or she was unemployed at period $t - 1$.

If longitudinal data on employment are available, the calculation is then straightforward, as the next sections show.

The Data

The data available for the three countries have many similarities but also a few differences. The main characteristics of the panels are summarized in table 2A3.1.

The main goal was to build a panel for each country, making it possible to observe individuals at two different periods in time. For Argentina, the data used were the Encuesta Permanente de Hogares (EPH), or Permanent Household Survey, which is carried out every three months by the National Institute of Statistics and Census (INDEC, or Instituto Nacional de Estadística y Censos). For Brazil, the Pesquisa Mensal de Emprego (PME), or Monthly Employment Survey from the Brazilian Institute of Geography and Statistics (IBGE, or Instituto Brasileiro de Geografia e Estatística), was the source of information. Last, in the Mexican case, data from the Encuesta Nacional de Ocupación y Empleo (ENOE, or National Survey of Occupation and Employment) from INEGI (Instituto Nacional de Estadística, Geografía y Informática, or National Institute of Statistics, Geography and Data Processing) were used. It is worth mentioning that both INEGI and INDEC have made the microdata available on their websites. Also, even though the Brazilian surveys occur on a monthly basis, all three panels were built with a three-month interval between observations so that the results could be properly compared.

To identify the variables that affect unemployment risk, some adjustments had to be made. Variables such as age, sex, and income were directly available in all the surveys, but others—such as occupation, whether the job was in the formal or informal sector, and the economic sector in which
Table 2A3.1 Surveys and Their Main Characteristics

<table>
<thead>
<tr>
<th>Provider</th>
<th>Argentina (EPH)</th>
<th>Brazil (PME)</th>
<th>Mexico (ENOIE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>INDEC</td>
<td>IBGE</td>
<td>INEGI</td>
</tr>
<tr>
<td></td>
<td>Every three</td>
<td>Every month</td>
<td>Every three</td>
</tr>
<tr>
<td></td>
<td>months</td>
<td></td>
<td>months</td>
</tr>
<tr>
<td>Regions included</td>
<td>Whole country</td>
<td>Six metropolitan areas</td>
<td>Whole country</td>
</tr>
<tr>
<td>Longitudinal?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Participation scheme</td>
<td>Two interviews in two consecutive trimesters, a two-trimester absence, and two other interviews in two consecutive trimesters; in each trimester, 50% of the sample changes (2-2-2)</td>
<td>Four interviews in four consecutive months, a four-month absence, and four other interviews in four consecutive months; in each month, 25% of the sample changes (4-4-4)</td>
<td>Five consecutive interviews; in each trimester, 20% of the sample changes</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis.

Note: EPH = Encuesta Permanente de Hogares; PME = Pesquisa Mensal de Empleo; ENOE = Encuesta Nacional de Ocupación y Empleo; INDEC = Instituto Nacional de Estadística y Censos; IBGE = Instituto Brasileiro de Geografia e Estatística; INEGI = Instituto Nacional de Estadística, Geografía y Informática.

the individual worked—needed to be constructed. The next few paragraphs describe the methods used to build some of the variables.

First (and most important) is the occupations. Eight different categories were defined: (1) unemployed, (2) civil servant, (3) informal employee, (4) informal self-employed, (5) informal employer, (6) formal employee, (7) formal self-employed, and (8) formal employer.

In Argentina, the EPH survey has a question to determine the categoria ocupacional or occupational category. Disregarding those who did not know how to answer and those who were not economically active or
unemployed, there are four possible answers: patrón (employer), cuenta propia (self-employed), obrero o empleado (employee), and trabajador familiar sin remuneración (family worker with no remuneration). One person who had chosen the last option (no remuneration) was excluded from the sample; all of the others who were employed were then classified as belonging to the formal or the informal sector, according to the criteria used in Pok (2001). All of the employees from firms with five workers or fewer were considered as informal. Once this classification was concluded, all that remained was to define who was a civil servant. For that purpose, all of those who were employees and had answered that their institution or company belonged to the economic sector administración pública, defensa y seguridad social obligatoria (public administration, defense and mandatory social security) were considered to be civil servants.

There is one other variable worth mentioning in Argentina’s case: years of education. In the Brazil and Mexico data, years of education were explicit, but in the Argentina data, the only information available was about the respondent’s educational level. To keep the information on the three countries comparable, the educational level was converted into years of education and placed in one of five categories: less than one year, 1 to 3 years, 4 to 7 years, 8 to 10 years, and 11 years or more. The information was grouped in this way because this is how it was available in the Brazilian survey (whereas the Mexican data had the precise number of years).

For Brazil, the criterion used to classify workers into the eight categories mentioned above is completely different. In that country, formal or informal work is defined based on whether the work is with or without carteira, which is nothing more than a card issued by the Ministry of Labor that must be signed by the employer every time he or she hires someone. For this purpose, the survey asked employed workers whether they contributed to the social security system. All of those who have a carteira must contribute by law. Even self-employed workers who contribute can be considered as formal sector workers, since the carteira is what is legally needed for them to be categorized in that way.

In Mexico, three questions from the ENOE were used to classify workers into the same eight categories: (1) posición en la ocupación (position in occupation), which tells whether the worker is an employee, an employer, or self-employed; (2) tipo de unidad económica–subtotales (the type of firm or economic unit), which shows whether the firm is informal or not; and (3) tamaño de la unidad económica–subtotales (the firm’s size), which shows whether the firm is small, medium, or large or if it is part of the government. The latter category was used only to identify the civil servants (in contrast with the way civil servant status was determined for Argentina).

There are some other variables that were built under the same criteria for all three surveys. Among them was the marital status dummy, which
was set to one when the individual reported being married or living with
someone else, and which was zero otherwise.

Finally, 11 economic sectors were defined: (1) agriculture, (2) utilities and
mining, (3) industry, (4) construction, (5) retail and wholesale, (6) restau-
trants and hotels, (7) transportation and communication, (8) financial and
other high-skilled services, (9) community services, (10) public administra-
tion, and (11) other or unspecified. To classify each individual into one of
these groups, the Clasificador de Actividades para Encuestas Sociodemográ-
ficas (Activities Classification for Social-demographic Surveys) was used for
both Brazil and Argentina since this is a classification system used in the
entire Mercosur. For Mexico, the Sistema de Clasificaciones Industrial de
América del Norte (North American Industrial Classification System) was
used instead.

Once all the variables were used, the three panels could then be built.
This was accomplished by identifying each individual in each survey and
then looking for him or her in the next period (that is, in the next three-
month period, including the Brazilian case).

Table 2A3.2 shows the average values and standard deviations for all of
the variables used in the analysis. Figure 2A3.1 shows the unemployment
risk for every period available in each survey, while table 2A3.3 shows
the average unemployment risks for every different variable in the three
countries.

Econometric Procedure: Logit

To estimate the effect of each variable on unemployment risk, the econo-
metric procedure used was the logistic regression, or logit model. In simple
terms, this procedure makes it possible to calculate the probability that
an event $e$ occurs given certain characteristics of the variables involved.$^{38}$
Since our analysis could be narrowed to whether the individual became
unemployed (or employed) at period $t$ given his or her characteristics at
period $t - 1$, the logistic regression suited our needs.

Results

The results from the first round of estimations are shown in table 2A3.4.

Because of a strong correlation between occupations and economic sec-
tors, the results above need to be read with extreme caution. Notice that in
Mexico most of the coefficients for economic sector have a negative sign
(although some are not statistically significant), which would mean that
the probability of becoming unemployed is lower for every sector when
compared with the reference dummy, public administration. However,
this finding is simply not true (see table 2A3.3). The explanation for this
apparently strange behavior is that there is also the occupation effect.
Notice as well that all of the coefficients for occupations are positive
Table 2A3.2 Mean and Standard Deviations for Explanatory Variables—Unemployment Risk and Exit

a. Unemployment Risk

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina Mean</th>
<th>Argentina Standard error</th>
<th>Brazil Mean</th>
<th>Brazil Standard error</th>
<th>Mexico Mean</th>
<th>Mexico Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of observations</td>
<td>105,149</td>
<td></td>
<td>623,062</td>
<td></td>
<td>1,678,288</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>39.6</td>
<td>12.8</td>
<td>37.4</td>
<td>12.2</td>
<td>38.1</td>
<td>13.3</td>
</tr>
<tr>
<td>Age²</td>
<td>1,731.3</td>
<td>1,083.8</td>
<td>1,548.0</td>
<td>985.3</td>
<td>1,627.4</td>
<td>1,113.9</td>
</tr>
<tr>
<td>Education dummies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>0.006</td>
<td>0.074</td>
<td>0.026</td>
<td>0.159</td>
<td>0.044</td>
<td>0.206</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>0.064</td>
<td>0.245</td>
<td>0.056</td>
<td>0.230</td>
<td>0.077</td>
<td>0.266</td>
</tr>
<tr>
<td>4 to 7 years</td>
<td>0.218</td>
<td>0.413</td>
<td>0.235</td>
<td>0.424</td>
<td>0.212</td>
<td>0.409</td>
</tr>
<tr>
<td>8 to 10 years</td>
<td>0.400</td>
<td>0.490</td>
<td>0.185</td>
<td>0.388</td>
<td>0.269</td>
<td>0.443</td>
</tr>
<tr>
<td>11 years or more</td>
<td>0.313</td>
<td>0.464</td>
<td>0.498</td>
<td>0.500</td>
<td>0.398</td>
<td>0.490</td>
</tr>
<tr>
<td>Economic sector at t – 1 dummies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>0.014</td>
<td>0.118</td>
<td>0.006</td>
<td>0.079</td>
<td>0.100</td>
<td>0.299</td>
</tr>
<tr>
<td>Utilities &amp; mining</td>
<td>0.014</td>
<td>0.119</td>
<td>0.008</td>
<td>0.088</td>
<td>0.012</td>
<td>0.107</td>
</tr>
<tr>
<td>Industry</td>
<td>0.118</td>
<td>0.322</td>
<td>0.164</td>
<td>0.370</td>
<td>0.159</td>
<td>0.366</td>
</tr>
<tr>
<td>Construction</td>
<td>0.088</td>
<td>0.284</td>
<td>0.075</td>
<td>0.263</td>
<td>0.086</td>
<td>0.280</td>
</tr>
<tr>
<td>Retail and wholesale</td>
<td>0.201</td>
<td>0.401</td>
<td>0.222</td>
<td>0.416</td>
<td>0.194</td>
<td>0.395</td>
</tr>
<tr>
<td>Restaurants &amp; hotels</td>
<td>0.030</td>
<td>0.171</td>
<td>0.044</td>
<td>0.205</td>
<td>0.062</td>
<td>0.241</td>
</tr>
</tbody>
</table>

(continued next page)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard error</td>
<td>Mean</td>
</tr>
<tr>
<td>Transportation &amp; communication</td>
<td>0.063</td>
<td>0.243</td>
<td>0.069</td>
</tr>
<tr>
<td>Financial &amp; other high-skill services</td>
<td>0.241</td>
<td>0.427</td>
<td>0.228</td>
</tr>
<tr>
<td>Public administration</td>
<td>0.116</td>
<td>0.320</td>
<td>0.054</td>
</tr>
<tr>
<td>Community services</td>
<td>0.037</td>
<td>0.189</td>
<td>0.026</td>
</tr>
<tr>
<td>Other or Unspecified</td>
<td>0.078</td>
<td>0.268</td>
<td>0.105</td>
</tr>
<tr>
<td>Female</td>
<td>0.405</td>
<td>0.491</td>
<td>0.430</td>
</tr>
<tr>
<td>In school at t − 1</td>
<td>0.073</td>
<td>0.260</td>
<td>0.106</td>
</tr>
<tr>
<td>Married at t − 1</td>
<td>0.629</td>
<td>0.483</td>
<td>0.575</td>
</tr>
<tr>
<td>Occupation at t − 1 dummies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil servant</td>
<td>0.116</td>
<td>0.320</td>
<td>0.080</td>
</tr>
<tr>
<td>Informal employee</td>
<td>0.192</td>
<td>0.394</td>
<td>0.201</td>
</tr>
<tr>
<td>Informal self-employed</td>
<td>0.201</td>
<td>0.401</td>
<td>0.161</td>
</tr>
<tr>
<td>Informal employer</td>
<td>0.031</td>
<td>0.172</td>
<td>0.020</td>
</tr>
<tr>
<td>Formal employee</td>
<td>0.435</td>
<td>0.496</td>
<td>0.473</td>
</tr>
<tr>
<td>Formal self-employed</td>
<td>0.002</td>
<td>0.041</td>
<td>0.035</td>
</tr>
<tr>
<td>Formal employer</td>
<td>0.013</td>
<td>0.113</td>
<td>0.030</td>
</tr>
<tr>
<td>Relative wage at t − 1</td>
<td>1.119</td>
<td>1.412</td>
<td>1.041</td>
</tr>
</tbody>
</table>

Table 2A3.2 (continued)
### b. Unemployment Exit

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard error</td>
<td>Mean</td>
</tr>
<tr>
<td>Seasonality dummies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st trimester</td>
<td>0.290</td>
<td>0.454</td>
<td>0.230</td>
</tr>
<tr>
<td>2nd trimester</td>
<td>0.200</td>
<td>0.400</td>
<td>0.248</td>
</tr>
<tr>
<td>3rd trimester</td>
<td>0.212</td>
<td>0.409</td>
<td>0.276</td>
</tr>
<tr>
<td>4th trimester</td>
<td>0.297</td>
<td>0.457</td>
<td>0.245</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>10.118</td>
<td>1.925</td>
<td>10.097</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.446</td>
</tr>
<tr>
<td>Number of observations</td>
<td>7,732</td>
<td></td>
<td>46,938</td>
</tr>
<tr>
<td>Age</td>
<td>31.8</td>
<td>13.0</td>
<td>28.9</td>
</tr>
<tr>
<td>Age$^2$</td>
<td>1,182.5</td>
<td>1,013.4</td>
<td>942.7</td>
</tr>
<tr>
<td>Education dummies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>0.005</td>
<td>0.070</td>
<td>0.021</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>0.063</td>
<td>0.243</td>
<td>0.045</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.048</td>
</tr>
</tbody>
</table>
### Table 2A3.2 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th></th>
<th>Brazil</th>
<th></th>
<th>Mexico</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard error</td>
<td>Mean</td>
<td>Standard error</td>
<td>Mean</td>
<td>Standard error</td>
</tr>
<tr>
<td>4 to 7 years</td>
<td>0.197</td>
<td>0.398</td>
<td>0.207</td>
<td>0.405</td>
<td>0.172</td>
<td>0.378</td>
</tr>
<tr>
<td>8 to 10 years</td>
<td>0.480</td>
<td>0.500</td>
<td>0.248</td>
<td>0.432</td>
<td>0.307</td>
<td>0.461</td>
</tr>
<tr>
<td>11 years or more</td>
<td>0.255</td>
<td>0.436</td>
<td>0.479</td>
<td>0.500</td>
<td>0.448</td>
<td>0.497</td>
</tr>
<tr>
<td>Female</td>
<td>0.464</td>
<td>0.499</td>
<td>0.537</td>
<td>0.499</td>
<td>0.326</td>
<td>0.469</td>
</tr>
<tr>
<td>In school at $t-1$</td>
<td>0.165</td>
<td>0.371</td>
<td>0.221</td>
<td>0.415</td>
<td>0.071</td>
<td>0.257</td>
</tr>
<tr>
<td>Length of unemployment spell dummies**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 month</td>
<td>0.153</td>
<td>0.360</td>
<td>0.217</td>
<td>0.412</td>
<td>0.638</td>
<td>0.481</td>
</tr>
<tr>
<td>1 to 3 months</td>
<td>0.252</td>
<td>0.434</td>
<td>0.284</td>
<td>0.451</td>
<td>0.227</td>
<td>0.419</td>
</tr>
<tr>
<td>3 to 6 months</td>
<td>0.130</td>
<td>0.336</td>
<td>0.172</td>
<td>0.377</td>
<td>0.089</td>
<td>0.285</td>
</tr>
<tr>
<td>6 to 12 months</td>
<td>0.121</td>
<td>0.326</td>
<td>0.157</td>
<td>0.364</td>
<td>0.032</td>
<td>0.177</td>
</tr>
<tr>
<td>1 year or more</td>
<td>0.344</td>
<td>0.475</td>
<td>0.171</td>
<td>0.376</td>
<td>0.014</td>
<td>0.117</td>
</tr>
<tr>
<td>Married at $t-1$</td>
<td>0.347</td>
<td>0.476</td>
<td>0.345</td>
<td>0.475</td>
<td>0.383</td>
<td>0.486</td>
</tr>
<tr>
<td>Nonwhite dummy</td>
<td>—</td>
<td>—</td>
<td>0.584</td>
<td>0.493</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Variable</td>
<td>Argentina</td>
<td></td>
<td>Brazil</td>
<td></td>
<td>Mexico</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------</td>
<td>-----------------------</td>
<td>--------</td>
<td>-----------------------</td>
<td>--------</td>
<td>-----------------------</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Standard error</td>
<td>Mean</td>
<td>Standard error</td>
<td>Mean</td>
<td>Standard error</td>
</tr>
<tr>
<td>Seasonality dummies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st trimester</td>
<td>0.255</td>
<td>0.436</td>
<td>0.211</td>
<td>0.408</td>
<td>0.107</td>
<td>0.309</td>
</tr>
<tr>
<td>2nd trimester</td>
<td>0.231</td>
<td>0.422</td>
<td>0.255</td>
<td>0.436</td>
<td>0.252</td>
<td>0.434</td>
</tr>
<tr>
<td>3rd trimester</td>
<td>0.215</td>
<td>0.411</td>
<td>0.284</td>
<td>0.451</td>
<td>0.469</td>
<td>0.499</td>
</tr>
<tr>
<td>4th trimester</td>
<td>0.299</td>
<td>0.458</td>
<td>0.250</td>
<td>0.433</td>
<td>0.171</td>
<td>0.377</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>10.735</td>
<td>1.950</td>
<td>10.333</td>
<td>1.586</td>
<td>3.430</td>
<td>0.341</td>
</tr>
</tbody>
</table>

*Source: Authors' calculation based on EPH, PME, and ENOE.*

— = not available.
except one, which would mean that the unemployment risk is higher for almost every one of them than for the reference dummy, civil servant. Moreover, when one adds up the values of any economic sector coefficient with any occupation coefficient, the result is positive, except in some cases of formal self-employed and formal employer. This result is exactly what the data showed (see table 2A3.3).

Given this apparent inconsistency, a second estimation is shown in table 2A3.5. This model does not consider economic sectors.

Results for the unemployment exit model are shown in table 2A3.6.
Table 2A3.3 Average Unemployment Risk

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole population</td>
<td>4.99</td>
<td>5.59</td>
<td>2.77</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4.83</td>
<td>4.58</td>
<td>2.69</td>
</tr>
<tr>
<td>Female</td>
<td>5.20</td>
<td>6.82</td>
<td>2.97</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil servant</td>
<td>0.83</td>
<td>0.32</td>
<td>1.04</td>
</tr>
<tr>
<td>Informal employee</td>
<td>6.26</td>
<td>4.71</td>
<td>3.09</td>
</tr>
<tr>
<td>Informal self-employed</td>
<td>4.49</td>
<td>2.60</td>
<td>1.79</td>
</tr>
<tr>
<td>Informal employer</td>
<td>1.17</td>
<td>1.10</td>
<td>1.75</td>
</tr>
<tr>
<td>Formal employee</td>
<td>2.88</td>
<td>1.74</td>
<td>2.17</td>
</tr>
<tr>
<td>Formal self-employed</td>
<td>3.94</td>
<td>0.94</td>
<td>0.76</td>
</tr>
<tr>
<td>Formal employer</td>
<td>0.53</td>
<td>0.28</td>
<td>0.56</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>5.84</td>
<td>5.50</td>
<td>1.47</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>5.26</td>
<td>4.96</td>
<td>1.71</td>
</tr>
<tr>
<td>4 to 7 years</td>
<td>6.77</td>
<td>5.61</td>
<td>2.38</td>
</tr>
<tr>
<td>8 to 10 years</td>
<td>5.69</td>
<td>7.46</td>
<td>3.31</td>
</tr>
<tr>
<td>11 years or more</td>
<td>1.88</td>
<td>4.87</td>
<td>3.07</td>
</tr>
<tr>
<td>Relative earnings (percent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>8.69</td>
<td>2.84</td>
<td>1.93</td>
</tr>
<tr>
<td>25–50</td>
<td>5.82</td>
<td>3.53</td>
<td>2.51</td>
</tr>
<tr>
<td>50–75</td>
<td>4.66</td>
<td>2.12</td>
<td>2.63</td>
</tr>
<tr>
<td>75–100</td>
<td>3.25</td>
<td>1.50</td>
<td>2.17</td>
</tr>
<tr>
<td>100–150</td>
<td>1.89</td>
<td>1.08</td>
<td>1.60</td>
</tr>
<tr>
<td>150–200</td>
<td>1.03</td>
<td>0.80</td>
<td>1.25</td>
</tr>
<tr>
<td>200 or more</td>
<td>0.81</td>
<td>0.42</td>
<td>0.89</td>
</tr>
<tr>
<td>Age group (years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16–20</td>
<td>13.21</td>
<td>15.98</td>
<td>6.84</td>
</tr>
<tr>
<td>21–25</td>
<td>8.75</td>
<td>8.33</td>
<td>5.10</td>
</tr>
<tr>
<td>26–30</td>
<td>4.94</td>
<td>5.83</td>
<td>3.18</td>
</tr>
<tr>
<td>31–35</td>
<td>3.60</td>
<td>4.37</td>
<td>2.24</td>
</tr>
<tr>
<td>36–40</td>
<td>3.05</td>
<td>3.78</td>
<td>1.78</td>
</tr>
</tbody>
</table>

(continued next page)
### Table 2A3.3 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>41–45</td>
<td>3.09</td>
<td>3.31</td>
<td>1.57</td>
</tr>
<tr>
<td>46–50</td>
<td>3.21</td>
<td>2.92</td>
<td>1.48</td>
</tr>
<tr>
<td>51–55</td>
<td>3.28</td>
<td>2.71</td>
<td>1.48</td>
</tr>
<tr>
<td>56–60</td>
<td>3.40</td>
<td>2.47</td>
<td>1.56</td>
</tr>
<tr>
<td>61–65</td>
<td>4.11</td>
<td>2.18</td>
<td>1.40</td>
</tr>
<tr>
<td>66 or more</td>
<td>5.07</td>
<td>2.00</td>
<td>0.92</td>
</tr>
</tbody>
</table>

**Economic sector**

<table>
<thead>
<tr>
<th>Economic sector</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>5.96</td>
<td>3.33</td>
<td>1.32</td>
</tr>
<tr>
<td>Utilities &amp; mining</td>
<td>2.26</td>
<td>2.42</td>
<td>1.31</td>
</tr>
<tr>
<td>Industry</td>
<td>4.01</td>
<td>2.25</td>
<td>2.14</td>
</tr>
<tr>
<td>Construction</td>
<td>9.40</td>
<td>4.70</td>
<td>3.94</td>
</tr>
<tr>
<td>Retail &amp; wholesale</td>
<td>3.91</td>
<td>2.59</td>
<td>1.91</td>
</tr>
<tr>
<td>Restaurants &amp; hotels</td>
<td>5.35</td>
<td>3.29</td>
<td>2.34</td>
</tr>
<tr>
<td>Transportation &amp; communication</td>
<td>3.44</td>
<td>2.07</td>
<td>1.88</td>
</tr>
<tr>
<td>Financial &amp; other high-skill services</td>
<td>2.26</td>
<td>1.82</td>
<td>2.81</td>
</tr>
<tr>
<td>Public administration, education, &amp; health</td>
<td>0.84</td>
<td>0.83</td>
<td>1.04</td>
</tr>
<tr>
<td>Community services</td>
<td>3.99</td>
<td>3.14</td>
<td>0.84</td>
</tr>
<tr>
<td>Others</td>
<td>5.52</td>
<td>3.05</td>
<td>2.02</td>
</tr>
</tbody>
</table>

*Source: Authors’ calculation based on EPH, PME, and ENOE.*
### Table 2A3.4 Logit Coefficients and Standard Errors for Full Model—Unemployment Risk

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Standard error</td>
<td>Wald</td>
</tr>
<tr>
<td>Intercept</td>
<td>$-3.1713$</td>
<td>$0.6510$</td>
<td>23.7</td>
</tr>
<tr>
<td>Age</td>
<td>$-0.0944$</td>
<td>$0.0076$</td>
<td>152.6</td>
</tr>
<tr>
<td>Age$^2$</td>
<td>$0.0009$</td>
<td>$0.0001$</td>
<td>97.5</td>
</tr>
<tr>
<td>Education dummies$^a$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$&lt; 1$ year</td>
<td>$0.0129$</td>
<td>$0.2358$</td>
<td>0.0</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>$0.3796$</td>
<td>$0.0757$</td>
<td>25.1</td>
</tr>
<tr>
<td>4 to 7 years</td>
<td>$0.3398$</td>
<td>$0.0584$</td>
<td>33.8</td>
</tr>
<tr>
<td>8 to 10 years</td>
<td>$0.3804$</td>
<td>$0.0512$</td>
<td>55.3</td>
</tr>
<tr>
<td>Economic sector at $t - 1$ dummies$^b$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>$1.1776$</td>
<td>$0.1745$</td>
<td>45.5</td>
</tr>
<tr>
<td>Utilities &amp; mining</td>
<td>$1.1454$</td>
<td>$0.2229$</td>
<td>26.4</td>
</tr>
<tr>
<td>Industry</td>
<td>$0.9658$</td>
<td>$0.1403$</td>
<td>47.4</td>
</tr>
<tr>
<td>Construction</td>
<td>$1.6076$</td>
<td>$0.1393$</td>
<td>133.2</td>
</tr>
<tr>
<td>Retail &amp; wholesale</td>
<td>$0.7558$</td>
<td>$0.1365$</td>
<td>30.6</td>
</tr>
</tbody>
</table>

(continued next page)
### Table 2A3.4 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Estimate</strong></td>
<td><strong>Standard error</strong></td>
<td><strong>Wald</strong></td>
</tr>
<tr>
<td>Restaurants &amp; hotels</td>
<td>1.0347</td>
<td>0.1556</td>
<td>44.2</td>
</tr>
<tr>
<td>Transportation &amp; communication</td>
<td>0.8733</td>
<td>0.1498</td>
<td>34.0</td>
</tr>
<tr>
<td>Financial &amp; other high-skill services</td>
<td>0.6713</td>
<td>0.1399</td>
<td>23.0</td>
</tr>
<tr>
<td>Community services</td>
<td>0.9331</td>
<td>0.1563</td>
<td>35.7</td>
</tr>
<tr>
<td>Other or unspecified</td>
<td>0.8836</td>
<td>0.1463</td>
<td>36.5</td>
</tr>
<tr>
<td>Female</td>
<td>-0.1271</td>
<td>0.0421</td>
<td>9.1</td>
</tr>
<tr>
<td>In school at t – 1</td>
<td>0.1443</td>
<td>0.0618</td>
<td>5.5</td>
</tr>
<tr>
<td>Married at t – 1</td>
<td>-0.3311</td>
<td>0.0380</td>
<td>76.1</td>
</tr>
<tr>
<td>Occupation on t – 1 dummiesc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal employee</td>
<td>0.5279</td>
<td>0.1077</td>
<td>24.0</td>
</tr>
<tr>
<td>Informal self-employed</td>
<td>0.5009</td>
<td>0.1082</td>
<td>21.4</td>
</tr>
<tr>
<td>Informal employer</td>
<td>-0.5876</td>
<td>0.1943</td>
<td>9.1</td>
</tr>
<tr>
<td>Formal employee</td>
<td>0.2008</td>
<td>0.1066</td>
<td>3.6</td>
</tr>
<tr>
<td>Variable</td>
<td>Argentina</td>
<td></td>
<td>Brazil</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>------------------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>Estimate</td>
<td>Standard error</td>
<td>Wald</td>
</tr>
<tr>
<td>Formal self-employed</td>
<td>0.7609</td>
<td>0.3498</td>
<td>4.7</td>
</tr>
<tr>
<td>Formal employer</td>
<td>–1.3017</td>
<td>0.3945</td>
<td>10.9</td>
</tr>
<tr>
<td>Relative wage at t – 1</td>
<td>–0.6864</td>
<td>0.0307</td>
<td>501.4</td>
</tr>
<tr>
<td>Seasonality dummies&lt;sup&gt;d&lt;/sup&gt;</td>
<td>0.0651</td>
<td>0.0473</td>
<td>1.9</td>
</tr>
<tr>
<td>1st trimester</td>
<td>–0.0482</td>
<td>0.0520</td>
<td>0.9</td>
</tr>
<tr>
<td>3rd trimester</td>
<td>–0.0218</td>
<td>0.0629</td>
<td>0.1</td>
</tr>
<tr>
<td>4th trimester</td>
<td>0.0163</td>
<td>0.0206</td>
<td>0.6</td>
</tr>
<tr>
<td>Trend</td>
<td>0.1115</td>
<td>0.0443</td>
<td>6.3</td>
</tr>
</tbody>
</table>

<sup>a</sup> Reference: 11 or more years.
<sup>b</sup> Reference: Public administration.
<sup>c</sup> Reference: Civil servant.
<sup>d</sup> Reference: 2nd trimester.

Source: Authors’ calculation based on EPH, PME, and ENOE.
Table 2A3.5 Logit Coefficients and Standard Errors for No Economic Sector Model—Unemployment Risk

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th></th>
<th></th>
<th>Brazil</th>
<th></th>
<th></th>
<th>Mexico</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Standard error</td>
<td>Wald</td>
<td>P value</td>
<td>Estimate</td>
<td>Standard error</td>
<td>Wald</td>
<td>P value</td>
<td>Estimate</td>
</tr>
<tr>
<td>Intercept</td>
<td>-2.7661</td>
<td>0.6445</td>
<td>18.4</td>
<td>0.0000</td>
<td>-4.6226</td>
<td>0.1677</td>
<td>759.9</td>
<td>0.0000</td>
<td>-3.2842</td>
</tr>
<tr>
<td>Age</td>
<td>-0.0967</td>
<td>0.0076</td>
<td>163.9</td>
<td>0.0000</td>
<td>-0.0369</td>
<td>0.0048</td>
<td>59.7</td>
<td>0.0000</td>
<td>-0.0572</td>
</tr>
<tr>
<td>Age²</td>
<td>0.0009</td>
<td>0.2346</td>
<td>100.8</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0181</td>
<td>0.3</td>
<td>0.5884</td>
<td>0.0004</td>
</tr>
<tr>
<td>Education dummies</td>
<td>0.1859</td>
<td>0.2346</td>
<td>0.6</td>
<td>0.4281</td>
<td>-0.0130</td>
<td>0.0548</td>
<td>0.1</td>
<td>0.8121</td>
<td>-0.1514</td>
</tr>
<tr>
<td></td>
<td>0.5810</td>
<td>0.0732</td>
<td>63.1</td>
<td>0.0000</td>
<td>-0.0731</td>
<td>0.0401</td>
<td>3.3</td>
<td>0.0684</td>
<td>-0.0629</td>
</tr>
<tr>
<td></td>
<td>0.5089</td>
<td>0.0559</td>
<td>83.0</td>
<td>0.0000</td>
<td>-0.0337</td>
<td>0.0234</td>
<td>2.1</td>
<td>0.1511</td>
<td>-0.0710</td>
</tr>
<tr>
<td></td>
<td>0.4703</td>
<td>0.0493</td>
<td>90.9</td>
<td>0.0000</td>
<td>-0.0049</td>
<td>0.0233</td>
<td>0.0</td>
<td>0.8325</td>
<td>-0.0798</td>
</tr>
<tr>
<td>Female</td>
<td>-0.3186</td>
<td>0.0362</td>
<td>77.4</td>
<td>0.0000</td>
<td>-0.1390</td>
<td>0.0181</td>
<td>58.8</td>
<td>0.0000</td>
<td>-0.4708</td>
</tr>
<tr>
<td>In school at t – 1</td>
<td>0.1404</td>
<td>0.0615</td>
<td>5.2</td>
<td>0.0224</td>
<td>-0.1031</td>
<td>0.0260</td>
<td>15.8</td>
<td>0.0001</td>
<td>-0.2984</td>
</tr>
<tr>
<td>Married at t – 1</td>
<td>0.3196</td>
<td>0.0378</td>
<td>71.5</td>
<td>0.0000</td>
<td>-0.1931</td>
<td>0.0201</td>
<td>92.5</td>
<td>0.0000</td>
<td>-0.5168</td>
</tr>
<tr>
<td>Occupation on t – 1</td>
<td>1.1351</td>
<td>0.0821</td>
<td>191.2</td>
<td>0.0000</td>
<td>1.9600</td>
<td>0.0832</td>
<td>555.3</td>
<td>0.0000</td>
<td>0.6483</td>
</tr>
<tr>
<td></td>
<td>1.1075</td>
<td>0.0833</td>
<td>176.6</td>
<td>0.0000</td>
<td>1.6894</td>
<td>0.0842</td>
<td>402.1</td>
<td>0.0000</td>
<td>0.6675</td>
</tr>
<tr>
<td></td>
<td>-0.0136</td>
<td>0.1814</td>
<td>0.0</td>
<td>0.1185</td>
<td>1.2494</td>
<td>0.9405</td>
<td>111.2</td>
<td>0.0000</td>
<td>0.6523</td>
</tr>
<tr>
<td>Variable</td>
<td>Argentina</td>
<td></td>
<td></td>
<td>Brazil</td>
<td></td>
<td></td>
<td>Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>Estimate</td>
<td>Standard error</td>
<td>Wald</td>
<td>P value</td>
<td>Estimate</td>
<td>Standard error</td>
<td>Wald</td>
<td>P value</td>
<td>Estimate</td>
</tr>
<tr>
<td>Formal employee</td>
<td>0.7468</td>
<td>0.0812</td>
<td>84.7</td>
<td>0.0000</td>
<td>1.0812</td>
<td>0.0826</td>
<td>171.3</td>
<td>0.0000</td>
<td>0.5318</td>
</tr>
<tr>
<td>Formal self-employed</td>
<td>1.3228</td>
<td>0.3431</td>
<td>14.9</td>
<td>0.0001</td>
<td>1.1173</td>
<td>0.1094</td>
<td>104.3</td>
<td>0.0000</td>
<td>-0.1781</td>
</tr>
<tr>
<td>Formal employer</td>
<td>-0.7040</td>
<td>0.3882</td>
<td>3.3</td>
<td>0.0698</td>
<td>0.4493</td>
<td>0.1648</td>
<td>7.4</td>
<td>0.0064</td>
<td>-0.3774</td>
</tr>
<tr>
<td>Relative wage at t – 1</td>
<td>-0.7154</td>
<td>0.0305</td>
<td>550.9</td>
<td>0.0000</td>
<td>-0.7043</td>
<td>0.0246</td>
<td>822.9</td>
<td>0.0000</td>
<td>-0.704</td>
</tr>
<tr>
<td>Seasonality dummies&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st trimester</td>
<td>0.0670</td>
<td>0.0472</td>
<td>2.0</td>
<td>0.1556</td>
<td>0.0879</td>
<td>0.0252</td>
<td>12.2</td>
<td>0.0005</td>
<td>0.0693</td>
</tr>
<tr>
<td>3rd trimester</td>
<td>-0.0517</td>
<td>0.0518</td>
<td>0.0</td>
<td>0.3181</td>
<td>-0.0526</td>
<td>0.0236</td>
<td>5.0</td>
<td>0.0257</td>
<td>0.0054</td>
</tr>
<tr>
<td>4th trimester</td>
<td>-0.0262</td>
<td>0.0627</td>
<td>0.2</td>
<td>0.6756</td>
<td>-0.0674</td>
<td>0.0260</td>
<td>6.7</td>
<td>0.0096</td>
<td>-0.0074</td>
</tr>
<tr>
<td>Trend</td>
<td>0.0191</td>
<td>0.0206</td>
<td>0.9</td>
<td>0.3529</td>
<td>0.0034</td>
<td>0.0007</td>
<td>24.8</td>
<td>0.0000</td>
<td>0.0038</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.1115</td>
<td>0.0441</td>
<td>6.4</td>
<td>0.0115</td>
<td>0.1239</td>
<td>0.0092</td>
<td>179.9</td>
<td>0.0000</td>
<td>0.2806</td>
</tr>
</tbody>
</table>

<sup>Source:</sup> Authors’ calculation based on EPH, PME, and ENOE.

<sup>a.</sup> Reference: 11 or more years.

<sup>b.</sup> Reference: Civil servant.

<sup>c.</sup> Reference: 2nd trimester.
### Table 2A3.6 Logit Coefficients and Standard Errors for Unemployment Exit

<table>
<thead>
<tr>
<th>Variable</th>
<th>Argentina</th>
<th></th>
<th></th>
<th>Brazil</th>
<th></th>
<th></th>
<th>Mexico</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Standard</td>
<td>Wald</td>
<td>P value</td>
<td>Estimate</td>
<td>Standard</td>
<td>Wald</td>
<td>P value</td>
<td>Estimate</td>
</tr>
<tr>
<td>Intercept</td>
<td>-1.3307</td>
<td>0.6314</td>
<td>4.4</td>
<td>0.0351</td>
<td>-1.4432</td>
<td>0.1773</td>
<td>66.2</td>
<td>0.0000</td>
<td>1.3207</td>
</tr>
<tr>
<td>Age</td>
<td>0.0428</td>
<td>0.0120</td>
<td>12.7</td>
<td>0.0004</td>
<td>0.0379</td>
<td>0.0066</td>
<td>32.9</td>
<td>0.0000</td>
<td>-0.0111</td>
</tr>
<tr>
<td>Age²</td>
<td>-0.0006</td>
<td>0.0002</td>
<td>16.0</td>
<td>0.0001</td>
<td>-0.0006</td>
<td>0.0001</td>
<td>41.6</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>&lt; 1 year education dummies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>0.8801</td>
<td>0.3460</td>
<td>6.5</td>
<td>0.0110</td>
<td>0.4331</td>
<td>0.0739</td>
<td>34.3</td>
<td>0.0000</td>
<td>1.0024</td>
</tr>
<tr>
<td>4 to 7 years</td>
<td>0.4402</td>
<td>0.0793</td>
<td>30.8</td>
<td>0.0000</td>
<td>0.2854</td>
<td>0.0292</td>
<td>95.8</td>
<td>0.0000</td>
<td>0.7019</td>
</tr>
<tr>
<td>8 to 10 years</td>
<td>0.1127</td>
<td>0.0652</td>
<td>3.0</td>
<td>0.0841</td>
<td>0.0922</td>
<td>0.0286</td>
<td>10.4</td>
<td>0.0013</td>
<td>0.3819</td>
</tr>
<tr>
<td>Female</td>
<td>-0.1701</td>
<td>0.0491</td>
<td>12.0</td>
<td>0.0005</td>
<td>-0.4232</td>
<td>0.0220</td>
<td>370.1</td>
<td>4.00.0</td>
<td>-0.0628</td>
</tr>
<tr>
<td>In school at t – 1</td>
<td>0.0552</td>
<td>0.0748</td>
<td>0.5</td>
<td>0.4606</td>
<td>0.1753</td>
<td>0.0302</td>
<td>33.8</td>
<td>0.0000</td>
<td>0.0677</td>
</tr>
<tr>
<td>Length of unemployment spell dummies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 month</td>
<td>0.9086</td>
<td>0.0736</td>
<td>152.3</td>
<td>0.0000</td>
<td>0.8503</td>
<td>0.0377</td>
<td>507.6</td>
<td>0.0000</td>
<td>0.7476</td>
</tr>
<tr>
<td>1 to 3 months</td>
<td>0.6200</td>
<td>0.0630</td>
<td>96.9</td>
<td>0.0000</td>
<td>0.6969</td>
<td>0.0365</td>
<td>363.9</td>
<td>0.0000</td>
<td>0.5842</td>
</tr>
<tr>
<td>3 to 6 months</td>
<td>0.4056</td>
<td>0.0778</td>
<td>27.2</td>
<td>0.0000</td>
<td>0.5899</td>
<td>0.0402</td>
<td>215.6</td>
<td>0.0000</td>
<td>0.3582</td>
</tr>
<tr>
<td>6 to 12 months</td>
<td>0.2287</td>
<td>0.0812</td>
<td>7.9</td>
<td>0.0049</td>
<td>0.2336</td>
<td>0.0428</td>
<td>29.8</td>
<td>0.0000</td>
<td>0.0651</td>
</tr>
<tr>
<td>Variable</td>
<td>Argentina</td>
<td>Brazil</td>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
<td>--------</td>
<td>--------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married at $t - 1$</td>
<td>0.1142</td>
<td>0.0991</td>
<td>0.5113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite dummy</td>
<td>—</td>
<td>0.0222</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trend</td>
<td>-0.0129</td>
<td>-0.0008</td>
<td>0.0128</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-0.0147</td>
<td>-0.0409</td>
<td>0.0108</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Authors’ calculation based on EPH, PME, and ENOE.

**Note:** — = not available.

  a. Reference: 11 or more years.
  b. Reference: More than 1 year.
Notes

1. During the first phase, mortality rates fall rapidly, life expectancy expands, but fertility rates remain high. This is a period of rapid population growth and a decreasing dependency ratio. During the second phase, fertility rates also start to decrease rapidly. The consequence is a slowdown in population growth and a reduction in the youth dependency ratio, which contributes to further reduction in the aggregate dependency ratio. However, as the old-age dependency ratio starts to increase and the share of the working-age population starts to decline, the total dependency ratio also increases. Most countries in LAC are currently in the middle of the second phase.

2. The only country with an already high old-age dependency ratio is Uruguay. Cuba, not included in this figure, has the second oldest population in LAC after Uruguay and is projected to overtake Uruguay by 2025. (World Bank, Social Protection and Labor pensions team.)

3. The standard theory is that the decision to participate in the labor market reflects an assessment of cost and benefits. Thus, better job opportunities, less discrimination, and higher pay all increase participation rates. Lower costs of living for the household (fewer children or more access to day care) also increase participation rates. Therefore, in general, more education among women (which improves their work prospects) and falling fertility rates tend to increase participation rates. In addition, cultural factors—for instance, the changing role of women in the household and trends toward more independence—can influence perceptions about costs and benefits (see Abramo and Valenzuela 2005). At the same time, there can be a question of need. For instance, other things being equal, women with children are more likely to participate in the labor market, particularly single mothers. The evidence in LAC supports a combination of these three factors.


5. Fertility rates have been declining rapidly. At the beginning of the 1970s, the total fertility rate was more than 5 children per mother, but this declined to 2.7 by the year 2000. See CELADE database.


7. Low level of education is defined as having primary education or less, a medium level of education refers to having a secondary education, and a high level of education refers to having a university education.

8. See de Ferranti et al. (2003).


11. These averages apply only to Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

12. See Pagés, Pierre, and Scarpetta (2008). When this analysis was done within the manufacturing sector for Argentina, Chile, Colombia, El Salvador, and Venezuela, a similar result emerged. The within term was positive in all countries, but the net shift was negative in four (Argentina, Colombia, El Salvador, and Mexico). The cross-term was nil or negative in all countries but Argentina. The authors of the analysis argue that there are two factors behind these results: the loss of comparative advantages in the dynamic industries and the downsizing of capital-intensive industries (which have the highest potential to generate jobs) in favor of natural resources-intensive activities (which have smaller effects on employment). Exceptions are Costa Rica, El Salvador, and Mexico, where assembly industries (electronics, computers, automobile, and apparel) have been developing and serving the U.S. market.
13. The informal sector is defined here (mainly for comparison purposes) as unskilled self-employed workers and wage earners in small enterprises. The data source is the Socio-Economic Database for Latin America and the Caribbean (SEDLAC).

14. See Perry et al. (2007). Informality is, in part, cyclical: the rate tends to rise during recessions and crises and to decline in growth periods. But the secular level of informality remains very high across LAC.

15. For a discussion, see Perry et al. (2007); Levy (2008).

16. These three countries were selected because they have available data from panel labor force surveys.

17. The idea in this chapter has been to describe the labor market and the programs that relate to it under “normal” conditions. Clearly, several of the programs discussed here can also play a critical role during downturns. These are discussed more fully in chapter 5.

18. These are factors that prevent wages from adjusting downward.

19. See, for example, the longitudinal study for Tunisian higher education (World Bank 2007).

20. The LAC median time and average time are, respectively, 2.79 and 5.76, relative to a work median and average time of 2.15 and 3.82. In Brazil and Ecuador, the median and average times are 7.00 and 14.32 and 5.60 and 8.77, respectively. China, Greece, India, Republic of Korea, Portugal, and Spain have median and average times below the world average.

21. Rates are also higher for women than for men. In the Dominican Republic, for instance, the inflow rate of women is 3.5 times higher than that of men. As shown in the next section, however, these gender differences are reversed when controlling for other factors such as education and income.

22. See table 2A2.2.

23. Similar results hold for Venezuela (see Duryea et al. 2006).


25. See annex 2.3 for a description of the methodology.

26. Countries have been selected based on data availability.

27. The propensity to move from one sector to another corrects for the probability of separation (see note for table 2.1).

28. See Perry et al. (2007).

29. Some interesting stories from Mexico about the types of transitions that can be observed between formal salaried work, informal salaried work, and self-employment can be found in Levy (2008, 91).

30. This refers to both self-employment and informal salaried work.

31. The analyses for Argentina, Chile, and Uruguay were prepared in the context of this study and, although the data sources differ (due to differences in the structure of administrative databases), the methods and the presentation of the results are similar (see Forteza et al. 2009). The cases of Brazil and Mexico are based on two prior studies (Levy 2008; Robalino et al. 2008) that used different data sources and analytical methods. In the five countries, however, similar types of indicators (contribution densities and transition rates) were analyzed. Although the results are not directly comparable, the issues raised are similar.

32. In the simulations, workers with “high” income were those earning 100 percent of average earnings and those with “low” income were those earning 50 percent of average earnings.

33. This approach implies that movements within the year are not recorded.

34. A high wage refers to three times the minimum wage or more, while a low wage refers to less than three times the minimum wage.

35. “Young” are those who were aged 35 or younger in 1997 and “old” those who were older than 35.
36. This survey is carried out only in six metropolitan areas: São Paulo, Rio de Janeiro, Salvador, Recife, Belo Horizonte, and Porto Alegre. There are approximately 47.5 million people living in these areas, which corresponds to approximately 24 percent of the country's total population.

37. As Pok (2001) points out, there is a large debate ever since the EPH was launched on how to measure the informal sector. The most common criterion is the one that was used in this work, that is, the number of workers in each firm. The main argument is that small firms are very likely to be informal.

38. See Greene (2000) for a technical explanation.

References


Part II
Financing for Universal Health Coverage in Latin America and the Caribbean

Health systems contribute to social protection objectives in two important ways. First and foremost, they improve health and thus increase human capital. They do this by providing access to health services, which many countries have enshrined in their constitutions as a basic human right. Yet policy makers across the globe are still struggling to reform health systems to ensure this right is a reality for all. They seek both to provide physical access to health services of decent quality and to remove financial barriers to accessing them when needed. Delays in providing treatment can put lives at risk and can also lead to medical complications or the spread of infectious diseases, which, in turn, increase costs.

Second, health systems mitigate the financial consequences of ill-health, helping to smooth household consumption and prevent poverty. The financial risks associated with ill-health include the costs of health care and lost income (because one’s own ill-health or the need to care for ill family members makes it impossible to work). The costs of health care alone, even for a single disease episode, can far exceed the saving capacity of most households, pushing them into poverty. So risk-pooling—as opposed to savings—is essential to prevent a lasting negative effect on the economic and social well-being of affected households. Pooling means that the contributions of members of a group (or “pool”) are combined to cover the health expenditures of these members according to their health needs.¹ However, in Latin America and the Caribbean (LAC), the level of risk-pooling for health is low. Half of health spending is financed out of pocket, and the lack of access to pooling arrangements is particularly severe for poor people.

The majority of health systems in LAC face two structural challenges to removing barriers to accessing quality health services equitably and
efficiently. First, systems tend to be *horizontally fragmented*, with care for different population groups carried out by different organizations and governed by different rules. Second, within each horizontal fragment of these systems, financing and provision is usually provided by the same entity (that is, they are *vertically integrated*).

In most of LAC, health systems are horizontally fragmented. Many countries have social health insurance (SHI) systems with multiple contributory schemes, typically associated with different employers in the public and private sectors. In parallel, national health service (NHS) systems, which are open to all, cover mainly those excluded from social health insurance, specifically the poor and informal workers and their families. Over time, reforms that attempted to improve the access, quality, and efficiency of health care have further fragmented SHI and NHS systems into multiple schemes and programs, operated by different organizations under competitive or decentralized delivery models. In this context, individuals’ affiliation with a given scheme, program, or organization determines their right to benefits, including access to services, the quality of services, and the extent of financial protection. Horizontal fragmentation has rendered health systems prone to inequalities and inefficiencies and has created complex contribution structures with incentives that have the potential to distort labor markets, since workers might seek to switch jobs, either to benefit from a given health plan or to avoid contributing to a plan they do not value.

Most of the region’s health systems are also vertically integrated, so that within each horizontal fragment, the same entity finances and produces services. Most SHI systems combine both financing and service production. Similarly, NHS systems are run by health ministries that administer the health budget and operate the hospitals and clinics. This vertical integration often has negative implications for efficiency. When financing systems are tied to delivery systems, it is difficult for them to induce and reward increases in efficiency by providers. Usually, most of the budget is transferred, almost as an entitlement, to service providers, to cover the salaries and benefits of their employees, which are not linked to productivity or quality indicators. When combined with a high degree of horizontal disintegration, the vertical integration of financing and provision in parallel social insurance (SI) and NHS systems creates overlaps in health service infrastructure and, consequently, below-par productivity.

This chapter examines the recent performance of health systems in LAC and suggests a reform path. The key concerns echo those of the book as a whole: (1) how to ensure adequate coverage for all and reduce the fragmentation and inequity of coverage between different population groups; (2) how to develop revenue collection systems that are fair, along with subsidy systems that are transparent and progressive and don’t distort labor markets; and (3) how to create stronger institutions and incentives for increased efficiency. It reviews reforms over the past two decades
and summarizes remaining challenges, emphasizing the role of financing arrangements in the performance of health systems. It proposes a path toward higher coverage and greater equity by increasing the coherence of financing arrangements. At the same time, it argues for promoting vertical separation between the insurance and service production functions to improve efficiency.

The chapter does not have a simple blueprint for reform. LAC has a complex legacy of health systems and subsystems. There are two basic configurations of publicly mandated systems for health social protection in LAC: (1) stand-alone NHS systems, which are funded from general taxation and provide services to the population at large; and (2) social health insurance systems combined with NHS or public provider networks. SHI systems are funded mainly from payroll taxes and earnings-based contributions. In some countries, they are complemented by subsidized noncontributory schemes, which are targeted on the poor or health priority groups. They are also combined with NHS or public provider networks that provide services for the uninsured. In recent years, all of these models have undergone waves of reforms that have sought to improve coverage, equity, or efficiency. For example, many SHI systems and NHS systems have been further developed by the addition of systems for the poor that are funded out of general taxes and that offer targeted subsidies. Other systems have undergone reforms to promote efficiency through the separation of financing and service provision. The immediate challenges facing this diverse panoply of systems are varied and country specific. Everywhere, policy makers’ room for maneuver is limited by political economy factors (which include the vested interests of insurance and financing agencies, beneficiaries, and producers and suppliers) and by fiscal constraints. Finally, socioeconomic priorities vary between countries.

This complex reality calls for an undogmatic approach to reform, one that promotes a gradual transition toward the desired outcomes from diverse points of departure. This approach is called a “third way” to differentiate it both from the status quo and from approaches—sometimes dogmatic—that seek sweeping reorganizations of health systems. In line with this philosophy, the chapter lays out recommendations for navigating toward the goal of universal coverage and improved efficiency. While the chapter focuses on combined systems, which face the biggest challenges to improve cohesion, many of its recommendations are valid for all configurations of system. The proposed reform path includes the following steps: (1) move toward standardizing basic benefit plans; (2) reform revenue collection and pooling, to ensure that total funding is sufficient and that public subsidies are transparent, well-targeted, and unlikely to distort labor market incentives; and (3) promote a stronger contractual nexus between financing agents and providers, one that promotes quality and efficiency and allows network structures to be rationalized.
The remainder of this chapter is structured as follows. The second section provides an overview of the organizational and institutional arrangements of health systems in LAC. The third section assesses the performance of health systems and provides a summary of the challenges they face. The fourth section draws on recent experiences in the LAC region and globally to propose a way to achieve greater equity and efficiency, and the last section offers conclusions.

Organizational and Institutional Arrangements

Health systems across the globe adopt a variety of organizational and institutional arrangements for financing and for service provision. Financing includes the collection of revenue, the pooling of funds, and the purchase of services. Service provision includes personal and nonpersonal services. Personal services tend to be curative, for example, the treatment of pneumonia, whereas nonpersonal services are often preventive and have a strong “public good” dimension, for example, the control of disease vectors.

Over the past century, three organizational and institutional models have emerged: national health services, contributory social health insurance, and voluntary private health insurance. In almost all countries, several of these models coexist in various forms and permutations. National health services are financed by general taxes, and the services are provided by an integrated set of public providers. Eligibility for receiving these services is determined by citizenship or country of residence, so coverage is universal by definition. Contributory social health insurance systems are financed by payroll taxes and earnings-based contributions from beneficiaries. In most regions of the world, they contract for the production of services with outside providers, but in LAC, many SHI systems still operate their own provider networks. Enrollment is commonly mandatory for all workers. However, contributions are difficult to enforce on informal sector workers, so universal coverage can be achieved only when additional financing mechanisms (such as targeted subsidized programs) are put in place. Finally, voluntary private health insurance is financed by risk-rated premiums. As in social health insurance systems, private health insurers usually contract out health care services, but eligibility for services depends on the level of contributions made by the individual.

A high degree of horizontal fragmentation characterizes most health systems in LAC. Fragmentation occurs when organizational and institutional arrangements vary among different population groups. One type of fragmentation occurs when different organizations carry out health system functions under different rules; another type occurs when health system functions are carried out under different rules within the same organization; and a third type occurs when health system functions are carried out under the same rule, but by different organizations (for
example, in decentralized systems). As an example, box 3.1 illustrates the fragmentation of the Peruvian health system.

Horizontally fragmented health systems are frequently riddled with design problems that impede their performance. They are prone to treat people inequitably (in the sense that similar people face different costs or enjoy different benefits). The coexistence of different operational rules

**Box 3.1 Health System Fragmentation: The Example of Peru**

The Peruvian health system is fragmented into six different financing subsystems with service provision carried out by five different types of networks. The Ministry of Finance and the Ministry of Health jointly finance national health services that are operated by regional governments through regional health directorates (DIRESAs). The Ministry of Finance channels part of the financing through a targeted health insurance system (called SIS), which covers the user costs of the national health services for poor households. The Ministry of Labor operates a separate health insurance system for formally employed workers, called ESSA-LUD, which is financed by worker and employer contributions. The Ministry of Defense operates a health insurance system for the armed forces, and the Ministry of the Interior operates a health insurance system for the National Police. The insurance systems of the Ministry of Labor, the Ministry of Defense, and the Ministry of the Interior each operate their own systems of hospitals and clinics, contracting out services they are unable to provide in-house. Finally, private health insurers offer health coverage to those who are willing and able to pay for it; services are then provided by private hospitals and clinics.

Originally, the SIS operated different schemes for different population groups. There was a Free School Health Insurance scheme for children and young people aged 3 to 17 and a noncontributory Maternal and Infant Health Insurance scheme for pregnant women and for mothers with infants and children up to 4 years of age. In recent years, the government has harmonized the different schemes into a single package for families and has expanded coverage rapidly. It plans to limit the noncontributory scheme to families in the two lowest income deciles and to develop a contributory, partially subsidized scheme for families in the third income decile.

A recently legislated reform (2009) will create a universal health insurance framework that, when implemented, will gradually harmonize all insurance schemes, requiring them to offer a standard minimum benefit package under either a noncontributory, partially subsidized scheme or a contributory financing scheme.

*Sources: PAHO 2008; CNPSS 2007.*
can yield complex incentives and disincentives for both beneficiaries and providers, some of which can cause unanticipated adverse effects. Fragmentation can also lead to the duplication of administrative and logistical procedures, of service delivery infrastructure, and of financial reserves, increasing total system costs.

LAC countries can be divided into two groups according to the way their health systems are organized (table 3.1). The first group comprises 12 countries with integrated systems where governments rely exclusively on national health services to provide health care through a single scheme. The second group comprises 21 countries with fragmented systems, where governments provide services through multiple SHI schemes or combining SHI and NHS elements. Several countries in this group have undergone growing fragmentation in recent years, as the direct consequence of efforts to improve access and quality of health services for population groups without social health insurance.

In line with this study’s focus on improving the coherence of LAC’s social protection (SP) systems, this chapter focuses on countries that have fragmented health systems. However, in addition to the specific problems arising from horizontal fragmentation, these systems also experience problems that are common to many of the region’s more integrated systems, including, for example, defective payment arrangements, in the context of vertically integrated financing and provision. The corresponding recommendations thus are relevant to the region’s health systems as a whole.

Health Systems’ Performance in Latin America and the Caribbean

This section assesses the performance of health systems in LAC, with special focus on fragmented systems. It starts with a comprehensive review of the coverage and the adequacy of benefits. It then reviews redistribution (tax and subsidy) mechanisms and their effects and, finally, the systems’ efficiency and financial sustainability.

System Organization and Adequacy of Benefits

Although most countries in LAC have a stated universal right to health care coverage, in reality the picture is mixed. Coverage, in this context, means having access, at a minimum, to a socially acceptable package of health services of decent quality, according to need and independent of income, social status, or residency (Nitayarumphong 1998). In most LAC countries, access to health care or health is a constitutional right that is reflected in the open access of all citizens to national health services (or, at the minimum, public provider networks). In countries with a fragmented system, workers employed in the formal sector generally use SHI systems;
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Integrated systems: Antigua and Barbuda; Barbados; Brazil; Cuba; Dominica; Grenada; Guyana; Haiti; Jamaica; St. Kitts and Nevis; St. Vincent and the Grenadines; Trinidad and Tobago</th>
<th>Fragmented systems: Argentina; The Bahamas; Belize; Bolivia; Chile; Colombia; Costa Rica; Dominican Republic; Ecuador; El Salvador; Guatemala; Honduras; Mexico; Nicaragua; Panama; Paraguay; Peru; St. Lucia; Suriname; Uruguay; Venezuela, RB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>215.5 million (38.5% of region)</td>
<td>344.0 million (61.5% of region)</td>
</tr>
<tr>
<td>Average GDP per capita (PPP)</td>
<td>US$9,430</td>
<td>US$10,650</td>
</tr>
<tr>
<td>Total health expenditure as a percentage of GDP (PPP)</td>
<td>7.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Social health insurance expenditure as a percentage of total health expenditure</td>
<td>0.0</td>
<td>30.4</td>
</tr>
<tr>
<td>Total government health expenditure as a percentage of total health expenditure</td>
<td>51.3</td>
<td>52.3</td>
</tr>
<tr>
<td>Expenditures on private prepaid health plans as a percentage of total health expenditure</td>
<td>7.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Out-of-pocket health expenditure as a percentage of total health expenditure</td>
<td>31.9</td>
<td>37.4</td>
</tr>
<tr>
<td>Other sources of health expenditure (for example, external financing) as a percentage of total health expenditure</td>
<td>8.9</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*Source:* National Health Accounts.

*Note:* GDP = gross domestic product, PPP = purchasing power parity.
others (unless they have private insurance) use the NHS system, so funding for the NHS tends to be highly progressive.

However, the financing of LAC’s health systems is often insufficient to enable recipients to build their human capital, smooth their consumption, and keep out of poverty. This inadequate financing is reflected, above all, in the relatively low level of pooled resources. As noted above, ex ante risk-pooling (whether financed by workers’ and employers’ contributions or through general taxation) is crucial if health care systems are to provide adequate benefits, remove financial barriers to services, and spread the cost of health expenditures across households. However, the level of pooled funds for health care in most LAC countries is relatively low in global terms (figure 3.1). This implies that a high proportion of health care costs are funded out of pocket, undermining effective coverage, especially for the poor, who are often unable to access most of the pooled funds.

It has long been recognized that the limited access of poor households to good-quality services financed by pooled funds results in inequitable

---

**Figure 3.1** Proportion of Pooled Health Expenditures by per Capita GDP, Global Distribution, 2006

Source: Authors’ calculations based on World Bank 2008b and WHOSIS.

*Note:* GDP = gross domestic product, PPP = purchasing power parity. Black diamonds represent LAC countries; gray diamonds represent non-LAC countries. Data are for 192 countries. Pooled expenditures are those not financed out of pocket. They include expenditures funded from social and private health insurance and from general taxation.
health outcomes. Tackling this problem has been the motivation behind many recent health system reforms in LAC countries. However, these have not always been successful in addressing the underlying problem of horizontal fragmentation. There are at least three types of fragmentation that are associated with inequalities. The first and most important is the organizational and financial separation of national health services and social health insurance schemes. The second is the geographical fragmentation of health service provider networks, coupled with the use of inflexible historical budgets that do not accurately reflect the relative needs of their beneficiary populations. This problem occurs within national health services and social health insurance schemes alike. The third type of fragmentation occurs when social health insurers (or purchasers) operate in competition (or within managed competition).

Organizational and financial separation of contributory social health insurance systems and national health services. During the 20th century, contributory SHI systems were established for salaried workers and their dependents in most of LAC. In a parallel development, many governments also set up NHS systems for those excluded from SHI (mostly the poor). Because of budgetary constraints for NHS funding, a pattern has emerged in which contributory SHI systems provide a wide range of benefits to well-off population groups, while NHS systems provide a narrower range of benefits to the poor and to informal workers and their dependents. In many cases, governments have started charging user fees to help to finance their NHS systems, which disproportionately affect low-income households. Moreover, the quality of services provided by the NHS systems has been generally lower than that of SHI systems.

The core of the problem is the difference in funding levels between contributory SHI schemes and NHS. In Mexico, for example, prior to a 2003 reform, public spending per beneficiary was six times higher in the SHI system. Such differences have resulted in big disparities in performance, since funding levels are an important determinant of access and quality of services. Access, quality, and fees, in turn, influence demand for and use of services and (therefore) health outcomes. Furthermore, lack of access and low quality can cause people to use alternative providers (mainly in the private sector), for which they usually have to pay out of pocket, reinforcing the impoverishing effects of ill-health. These patterns could be observed in Mexico, prior to the reforms introduced in 2003. At that time, NHS users had 20 percent lower utilization rates and registered 40 percent higher out-of-pocket expenditures (as a proportion of disposable household income) than users of contributory SHI schemes (Gakidou et al. 2006; Torres and Knaul 2003). Likewise, in Colombia, prior to a reform implemented in 1993, out-of-pocket spending of households in the lowest income decile, which relied on the NHS, was 40 percent higher than that of those in the highest decile, which were mostly covered by
the SHI system (Castano, Arbelaez, and Giedion 2002). Similarly, where they exist, the separate SHI schemes for civil servants, the police, and the military generally offer more generous coverage terms.

What explains differences in funding levels between contributory SHI schemes and NHS? First, the sources and mechanisms of revenue collection differ. SHI systems are financed primarily by payroll taxes (paid by employers) and earnings-based contributions (paid by employees) and are sometimes also subsidized from general government revenues. NHS systems are financed entirely from general government revenues. It is sometimes argued that payroll contributions are a more secure source of funding than general revenues, because they are less vulnerable to economic and budgetary policy cycles, but the evidence for this is weak (Schieber et al. 2006; Wagstaff 2007).

Second, the coexistence of SHI and NHS systems makes it easier to increase the funding of SHI schemes and harder to increase the funding of NHS. In contributory SHI systems, all who contribute are likely to use the system, so it is easier to negotiate increases in contributions. In contrast, when NHS systems are not the sole universal provider, the tax-paying population as a whole contributes to cover those who use the system. Increased funding therefore implies general tax rises, and these require the political support of taxpayers, many of whom (in fragmented systems) do not even use the NHS. As discussed in chapter 2, in many countries the target group for the NHS (informal sector workers and the unemployed poor) is very large, so the taxes required to provide similar funding to the SHI system would be high. As a result, policy makers might find it more politically feasible to increase social health insurance contributions than to increase funding for national health services. At the same time, the strict financial separation of the SHI and NHS systems prevents any transfer of funds across systems.

A further cause of disparities in funding is the difference in defined entitlements. As noted above, most LAC countries have open access to the NHS for all citizens. However, there is no specific entitlement to a given package of services. In contrast, SHI systems often confer a contractual right to specific health benefits and levels of care, sometimes presented as a list of interventions. This commonly goes along with complaint, mediation, and arbitration systems and a greater degree of accountability to beneficiaries.

Financing of service provider networks based on historical expenditures. Decentralized health service providers financed by historical budgeting are commonly associated with disparities in the adequacy of benefits. This disparity happens in both contributory SHI and NHS systems. Delegating the responsibility for service coverage to local providers de facto separates the users into geographically limited risk pools. When combined with financing rules that allocate funds based on historical costs or usage
patterns, this arrangement can perpetuate and compound geographical disparities in access to good-quality health services and, ultimately, in health outcomes.

Policy makers have tried two approaches to combating inequities in decentralized systems. The first is adjusting resource allocation formulas. For example, in the mid-1990s, Colombia’s resource allocation formulas for departments (regional authorities) and municipalities began taking into account poverty levels, quality of life indicators, unmet basic needs, local governments’ own-source fiscal contributions, and administrative efficiency. This practice reduced the ratio of funding between the richest to the poorest municipality from 42 to 1 in 1994 to 12 to 1 in 1997 (Bossert et al. 2003). Similarly, England uses an allocation formula based on health risk factors—such as age and gender—and the cost of providing care in different localities (Diderichsen 2004). Alternatively, several countries in LAC have introduced noncontributory health insurance programs with per capita (or per family) allocations for a defined benefit package. In general, moving away from historical budgets has reduced inequalities in financing allocations within both contributory SHI and NHS systems.

Insurers and purchasers operating under competition or managed competition. Some SHI systems have adopted organizational and institutional arrangements that further fragment their risk pools and can create disparities in the adequacy of benefits. Two models have emerged: competition and managed competition. Both aim to improve service quality and efficiency; at the same time, they render systems prone to inequalities in both the benefits available to different population groups and the inclusion or exclusion of individuals for treatment. This section focuses on these equity implications; subsequent sections will discuss the outcomes for the efficiency and financial sustainability of the health systems in question.

Under the competition model, adopted by countries of the Southern Cone, health insurance agencies compete for enrollees on the basis of benefit packages, leaving some individuals without sufficient coverage. For example, in Chile, formal workers must contribute a fixed 7 percent of their income. The insurers then offer benefit packages that are calibrated to take account of the individual’s absolute financial contribution and health risk factors. Although insurance is mandatory, thus ensuring that coverage is high, this system originally resulted in some individuals (those with small contributions but high risks) having insufficient financial protection against health care costs. To correct this problem, in 2005, the government introduced minimum health guarantees.5

Under the managed competition model, adopted in Colombia and the Dominican Republic, purchasing agencies compete for enrollees on the basis of service quality, which mitigates the risk of underinsurance, but
can create disparities in service quality. Under this approach, all contributions to the system are pooled. Purchasing agencies (or risk administrators) receive fixed per capita amounts for each person insured and are required to deliver a uniform benefit package. Thus, they compete for clients on the basis of service quality. The European experience with regulated competition suggests that it does encourage insurers to raise the quality of their administrative services. However, this system has not increased the quality of care, because most insurers have not adopted the strategic contracting of health service providers (Gresz et al. 2002). There are four possible reasons for this: (1) regulation limits the scope for selective contracting, (2) competition among providers is limited (for example, hospitals function as local monopolies), (3) funds do not have the capacity to contract strategically, and (4) funds have insufficient incentives to contract strategically as they find it easier to maximize profits through risk selection and collusion.

A common problem under the competition and managed competition models is risk selection. This occurs when, in an attempt to maximize profits, insurers or risk administrators deliberately select enrollees who are least likely to need health services. This is also known as “cream skimming” or “cherry picking.” The insurers analyze information on the enrollee’s age, medical history, and past health care use, using sophisticated actuarial systems such as adjusted clinical or diagnostic care groups. As a result, those with predicted high levels of future health expenditures find it hard to enroll with insurers or purchasing agencies. The European experience suggests that even where risk selection is illegal (that is, insurers must accept beneficiaries, independent of their health risks), funds will pursue covert strategies to select risks, for example, through marketing strategies that target the young and healthy (such as Internet-only marketing and enrollment) (Buchner and Wasem 2003). So unless there is a public insurer of last resort, some high-risk individuals tend to remain uninsured. It is noteworthy that in Chile, the vast majority of the elderly (high-risk individuals) are enrolled with the public insurer FONASA (Titelman 2000).

Preventing risk selection is a continuing challenge for health policy makers worldwide. Some countries require insurers to accept all residents, but they have yet to find effective ways to enforce this mandate. And as noted just above, even in mature systems with established complaint, mediation, and arbitration systems, insurers have found ways around the rules. Some countries have used mandatory reinsurance in an effort to discourage risk selection. For example, Colombia’s SHI scheme requires insurers and purchasing agencies to insure themselves against the risk of financial losses. However, there is no empirical evidence that mandatory reinsurance reduces risk-selection behavior in competitive health insurance markets. Some countries have started to pilot risk-equalization mechanisms, which adjust funding based on the health risk profiles of
Initiatives to Increase Insurance Coverage

Dissatisfaction with persistent differences in benefits of NHS and SHI schemes has led policymakers to undertake major health system reforms in LAC in recent decades. Many countries have attempted to expand social health insurance coverage by creating noncontributory schemes. Such reforms have often succeeded in reducing inequalities in health financing and in increasing the target populations’ use of good-quality health services. However, some challenges still remain, and new ones are emerging from the reforms themselves. This section reviews the challenges facing contributory schemes, looks at the impact of noncontributory schemes, discusses the potential role of partially subsidized schemes, and analyzes the effects of such reforms on health financing systems as a whole.

The role of contributory schemes. Historically, policymakers regarded inequalities among beneficiaries of national health services and social health insurance systems as a transitional problem. They assumed that, as the formal labor market expanded, the vast majority of people would become eligible for contributory social health insurance. However, as discussed in chapters 1 and 2, in LAC this process has stalled. For example, in Mexico between 1996 and 2006, contributory SHI and pension coverage were stagnant. In 1996, formal sector workers and the skilled self-employed constituted 47.4 percent of the labor force. Ten years later, the total had grown by only 0.2 percent (figure 3.2). Similarly, in Colombia, despite strong economic growth in recent years, the formal sector has stagnated at around 35 percent of the labor force, and few new contributors have been added to the SHI scheme (Castano 2008).

In addition, many workers move in and out of formal employment throughout their lifetimes. In many countries, contributory SHI is terminated soon after the end of employment, leaving individuals and families without coverage while the worker is unemployed. Extending SHI coverage of workers between jobs is an important challenge. Many workers also leave the system when they retire. The rules differ from system to system, but in general, those who fail to qualify for pension benefits also lose their health insurance. In other instances, retirees’ health insurance benefits are limited.

In addition to the tendency of businesses to avoid paying taxes, including payroll tax-based social security contributions, social health insurance systems face five challenges in enrolling informal workers and the self-employed. First, it is difficult impose SHI contributions on informal enrollees. This approach has had some success in European SHI systems, but most LAC countries lack health information systems sophisticated enough to produce the necessary data on individuals’ health risks.
workers and the self-employed. Second, informal sector and self-employed workers may not be able to afford to pay the required contributions in full, that is, without subsidies. Their ability to pay may also vary over time, preventing them from making regular contributions. For example, many agricultural workers depend on seasonal jobs or are not paid regularly (coffee workers in Colombia are paid twice a year). Third, many informal workers live in places with limited access to health facilities. Fourth, most SHI systems levy earnings-based contributions so there is a disincentive for high-income individuals with perceived good health to enroll, since their earnings-based contributions will be high and their expected health costs low. Finally, for the same reason that contributions are earnings based, SHI systems themselves have few incentives to recruit low-paid workers, whose health costs are likely to outstrip their contributions.

Efforts to promote voluntary enrollment in contributory SHI and social security schemes have done little to expand their coverage. Some countries
have attempted to encourage low-paid workers to enroll by reducing the share paid by workers while increasing the share paid by the employer. Between 1997 and 2007, for example, the Mexican Institute for Social Security (IMSS) increased the employer’s contribution from 13.9 percent to 19.0 percent of the minimum wage per month, while reducing the contribution of workers from 2.00 percent to 0.72 percent (IMSS 2008; Sánchez 2003). Yet there is no evidence that these changes had any significant impact on enrollment. Some countries have introduced voluntary contributory schemes aimed at nonpoor informal workers and the self-employed. These groups are allowed to join health insurance systems under different contribution rules, and the health insurance is not bundled with other social security benefits. But these efforts have not been very successful. The voluntary coverage of IMSS has reached only 5 percent of the target population. These low levels of enrollment in voluntary SHI suggest that it is unattractive for the targeted households. It is difficult to determine the income levels of informal sector workers and the self-employed, so premiums are usually set as a single flat rate that covers the actuarial risk of the whole target population. However, these flat rates are likely to be unaffordable for some households. At the same time, low-risk households have no incentive to enroll as they perceive the costs of doing so to be substantially higher than the benefits.

The role of noncontributory schemes. In response to the failure of contributory SHI to expand coverage, many LAC countries have developed noncontributory alternatives. These schemes vary in their design, with significant differences in benefits and target populations. Two major types of noncontributory insurance schemes can be distinguished: (1) those with comprehensive benefits targeted to the poor, and (2) those with limited benefits for health priority groups.

The model of adding a noncontributory comprehensive insurance scheme targeted to the poor has been adopted in several countries, including Chile, Colombia, the Dominican Republic, and Mexico. This type of scheme can be operated by SHI or NHS systems. It has several potential advantages over the traditional national health services approach. First, it guarantees access to an explicitly defined benefit package, opening up the possibility that everyone can have access to similar health insurance rights; in contrast, NHS systems in LAC tend to have little concept of entitlements. Second, it guarantees ex ante financing through a defined premium; in contrast, NHS systems are exposed to the vagaries of the budget process and often rely on out-of-pocket user fees. Third, it facilitates the targeting of benefits to priority groups, most importantly the poor; in contrast, NHS systems offer universal access. Fourth, it facilitates the use of strategic purchasing arrangements to improve system efficiency; in contrast, NHS systems are commonly vertically integrated. However, as will be discussed below, these benefits do not always emerge in practice.
The model of limited benefits targeted to health priority groups has been adopted in Argentina, Bolivia, Ecuador, and Peru. These programs are linked to NHS systems, rather than to SHI systems. They pursue objectives similar to those of noncontributory SHI schemes, on a limited scale. They introduce some explicit benefits for their beneficiaries; furthermore, they eliminate user fees to ensure free access to their services at the point of demand. In addition, they facilitate the targeting of benefits to health priority groups (mainly pregnant women and children without contributory health insurance coverage). They also create incentives to increase service production by paying the provider networks and units of the NHS on a fee-for-service basis, thus seeking to address capacity underutilization.

Noncontributory schemes of both types have had a remarkable impact on health insurance coverage in LAC. In 2006, total coverage in Chile and Uruguay was almost 100 percent, with 40 percent and 60 percent of the population, respectively, covered by noncontributory schemes. Similarly, Colombia had overall coverage of more than 80 percent, and noncontributory insurance covered 53 percent of the population. In Peru, overall coverage was 65 percent, and a noncontributory scheme provided around half of the total coverage. In Mexico, coverage was close to 60 percent, with approximately 30 percent of beneficiaries belonging to the noncontributory scheme. In Ecuador and Guatemala, overall coverage was in the range of 40 to 60 percent, and noncontributory schemes covered between 15 and 25 percent of the population (figure 3.3).

For those who are covered, noncontributory insurance schemes have increased the take-up of services and reduced out-of-pocket expenditures. In Colombia, 75 percent of those with noncontributory health insurance use medical services when needed, compared with only 58 percent of the uninsured (Giedion, Díaz, and Sovedoff 2007). With the introduction of noncontributory health insurance, overall out-of-pocket expenditures in Colombia have fallen dramatically, from 44 percent of total health expenditures in 1993 to 8 percent in 2003. Catastrophic expenditures (above 40 percent of income) declined for the insured by 4 percent more than for uninsured (Flórez et al. 2008) (box 3.2). Nevertheless, such schemes have also exhibited important shortcomings, which are discussed in the following paragraphs.

The first shortcoming of noncontributory insurance schemes is that most offer benefits inferior to those of contributory systems. The ideal of offering the poor similar benefits to those of contributory insurance, financed with means-tested subsidies, has proved elusive. For example, Colombia’s and Mexico’s noncontributory insurance schemes cover mostly primary and secondary services, while the contributory scheme offers benefits at all levels. Similarly, noncontributory insurance schemes in Argentina, Bolivia, and Ecuador offer only maternal and child health services. Notable exceptions to the general trend are Costa Rica and the
Dominican Republic, where national policy defines a basic package of services for all citizens.

Moreover, noncontributory schemes struggle to overcome structural impediments that implicitly ration services. First, noncontributory schemes often fail to link to provider networks with sufficient capacity to provide the full range of services. This failure is particularly likely where noncontributory insurance schemes are primarily tied to NHS networks, such as in Mexico and the Dominican Republic. In addition, beneficiaries often have limited knowledge of their entitlements. A recent study found that 44 percent of those with noncontributory health insurance in the Dominican Republic did not understand the benefits. This type of limited knowledge hampers demand for services and also undermines the effectiveness of user complaint and arbitration systems.

The third common problem is fiscal constraints to expansion. Having explicit links between benefits and premiums facilitates budgeting processes, but allocations have often been insufficient to meet affiliation targets. Progress toward affiliation targets has been particularly sluggish where governments finance NHS and contributory schemes in parallel. For example, the Dominican Republic established a noncontributory scheme in 2001 and set a goal to achieve full coverage of the poor by 2010. But
**Box 3.2 The Impact of Noncontributory Health Insurance on Service Use and Out-of-Pocket Expenditures in Latin America and the Caribbean**

Noncontributory health insurance schemes remove financial barriers to access. In theory, given the supply of health services, risky behavior, and income, these schemes should increase the use of health services and reduce the out-of-pocket expenditures associated with any level of service use. This increase has, in fact, occurred, both for schemes that extend contributory SHI systems to the poor, and for those that guarantee targeted free access to NHS services.

The Colombian noncontributory health insurance scheme (Regimen Subsidiado) increased the use of health services by its affiliates, compared with otherwise similar uninsured individuals (Giedion, Díaz, and Soivedoff 2007). This is mostly due to increased demand from women, children, and the elderly, especially in urban areas (Gaviria, Medina, and Mejía 2006). In Mexico, those with noncontributory health insurance (Seguro Popular) have a higher inpatient and outpatient service use than comparable uninsured people (Bleich et al. 2007; Sosa-Rubi, Galarraga, and Harris 2007). Affiliation with Seguro Popular is associated with more treatment for hypertension and blood pressure and more use of obstetric services.

In Bolivia, the noncontributory health insurance scheme Seguro Universal Materno Infantil guarantees free access to a comprehensive package of NHS services for pregnant women and children (up to the age of five), which has been associated with an increase in the demand for these services. In addition, the probability of women giving birth with the assistance of skilled birth attendants has increased by 16 percent. The proportion of children under the age of five who received care for acute diarrheal diseases and respiratory infections also increased (World Bank 2004).

Chile also guarantees a minimum package of health benefits to all citizens, regardless of contributions (see box 3.3 later in this chapter).

The impact of noncontributory health insurance on financial protection can be gauged by examining the disparity between the out-of-pocket expenditures of the insured and of the uninsured, conditional on ill-health. The evidence suggests that noncontributory schemes mitigate the impact of ill-health on household income and poverty. In Colombia, enrollment in noncontributory health insurance reduced members’ out-of-pocket expenditures despite an increase in their use of medicines (Castano and Zambrano 2006). Moreover, the probability that insured users of ambulatory and hospital services will fall below the poverty line due to health problems has been reduced by 10 percentage points, compared with the uninsured (Bitran et al. 2004). Evidence that catastrophic health expenditures have decreased has been documented for affiliates of the noncontributory health insurance in Mexico (Cavagnero et al. 2006; Hernández-Torres et al. 2008; Knaul et al. 2006).
The government continues to fully finance the parallel NHS, limiting the fiscal resources available for the noncontributory insurance scheme. By 2007—six years after the reform that created noncontributory health insurance—coverage had been extended to only one-third of the 3.4 million target population (World Bank 2008a).

Another frequent problem with noncontributory insurance schemes is the failure to reach part of their target population. For example, in 2005, the Colombian Beneficiary Identification System (Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales, SISBEN) had an estimated exclusion error of 19 percent. This implies that around 4 million people were not receiving the intended benefits. One contributing factor is that the poor often lack the necessary identification documentation; in the Dominican Republic, an estimated one million people are ineligible for this reason (World Bank 2008a).

The role of subsidized contributory schemes. A complementary approach is to provide partial subsidies to increase access to contributory SHI. Such programs are aimed at those who have some capacity to pay, but cannot afford the full cost of the contributory SHI scheme. The amount of subsidy is calibrated based on income. Such systems can be designed with tapered subsidy withdrawal so that the effective marginal tax rates associated with the loss of subsidy as income rises remain compatible with work incentives. This approach could both broaden the revenue base and resolve the incentive problems that arise from offering fully subsidized programs to some categories of worker with the ability to contribute.

Some countries in LAC have begun to experiment with such schemes. The most advanced is Mexico, where the government uses a proxy means test to classify households and has set different contribution levels for each income decile. Households in the two lowest income deciles (and some other priority groups) are admitted to a noncontributory scheme. From the third decile onward, there are progressively rising contributions. So far, however, the results of the Mexican experience are not encouraging. Estimates based on census data suggest that more than 50 percent of all insured households should be paying contributions, but only 7 percent actually do so. It appears that the proxy means test misclassifies many households, and there are also problems enforcing payments (Scott 2006). In the Dominican Republic, the legal framework foresees a subsidized, contributory scheme, but it has yet to be implemented. Colombia is currently exploring the possibility of such a scheme.

Effects of reforms on health financing systems. In many countries, the introduction of subsidized schemes has increased the fragmentation of health financing, causing inefficiencies and weakening coordination. As seen above, governments have created both noncontributory and subsidized contributory schemes, often while maintaining the financing of
national health services. This practice creates fiscal tension that hampers the scaling up of insurance schemes, the introduction of new provider incentive systems, and the strategic purchase of services. Often, the new schemes are administered by new organizations with their own administrative and operational procedures and information systems, which cause coordination challenges and inefficiencies. Even when subsidized schemes are created within national health services, these challenges occur. In cases where benefit packages are distinct, the proliferation of different schemes hampers the portability of insurance coverage.

Fragmentation has also created complex financial incentives for employers, workers, and the self-employed to enroll in different schemes. In Mexico, employers have an incentive to encourage staff to join either the noncontributory or partially subsidized schemes of the Ministry of Health, called jointly Seguro Popular, or the voluntary scheme of the IMSS, since neither of these schemes requires an employer contribution (figure 3.4). The incentives for employees and the self-employed vary, depending on their income. Based purely on health insurance costs, those in the lowest three income deciles wanting to minimize their contributions would have an incentive to enroll in the Seguro Popular. Those in the fourth through the ninth deciles would have an incentive to enroll

Figure 3.4 Contributions to the IMSS and Seguro Popular, 2008

Source: Authors’ calculations based on Mexican Ministry of Health data (for Seguro Popular) and IMSS data (for IMSS).
financing for universal health coverage in lac

in the mandatory IMSS scheme; and those in the last decile, to enroll in the voluntary IMSS scheme. In practice, the situation is more complex, since firms’ decisions about whether to be formal or informal will also take account of tax obligations, while workers’ choices will also factor in the benefits packages of the different schemes. Further complications arise since membership in the IMSS schemes is linked to mandatory membership in other insurance programs.

Fragmented health insurance systems could potentially create incentives that undermine enrollment in contributory SHI and encourage informality. The problem is not new. In most LAC countries, for many years, national health services have offered an alternative to contributory SHI. However, alternative subsidized insurance schemes that offer better benefit packages than the NHS might increase the incentive to evade contributory SHI. The incentive is likely to be especially marked for those with income levels close to the cutoff point for eligibility to the noncontributory schemes.

In the case of noncontributory health insurance programs, there is a need for more evidence about their effects on informal work. In 2010, Mexico’s subsidized health regime, Seguro Popular, was offering net benefits that were higher than those of the formal health insurance regime operated by the IMSS. This practice might be expected to increase the likelihood that individuals would take informal sector jobs and reduce IMSS affiliation. The available studies, however, find no significant decrease, thus far, in affiliations to IMSS health insurance in urban areas. In rural areas, IMSS coverage has been slightly reduced (from 14.0 percent to 11.2 percent). Overall it is estimated that nationwide, the displacement effect of Seguro Popular has reduced IMSS coverage by 0.7 percent of the population. This reduction must be set against the increase of 7.1 percent coverage provided by Seguro Popular, giving an overall net gain in coverage of 6.4 percent of the population (Parker and Scott 2008). However, the balance may change in the medium and long term, when the displacement effects of Seguro Popular may be greater. In Colombia, some employers reportedly have begun to require workers to obtain health insurance through the noncontributory scheme before they will hire them, but there is no clear evidence about the size of such effects (CIDER 2007). Overall, the evidence base for understanding this sort of interaction effect in LAC remains limited. Further research is needed to better understand the negative side effects on informality of noncontributory health insurance options, as well the design features that could help minimize them.

The Distributional Effects of LAC’s Health Financing Systems

Redistribution is an important dimension of LAC’s health financing systems, with patterns depending on the sources of revenue coupled with
rules about program access (pooling) and mandates. Revenue sources include payroll taxes (paid by employers), earnings-related social security contributions (paid by employees), risk-related or flat premiums (paid by the insured person), general revenues (funded mainly from taxes on natural resources, income, and consumption), and out-of-pocket payments for services (paid by users). Choices about the revenue sources of different programs determine the subsidies (or taxes) that different individuals receive (or pay).

In LAC’s publicly funded systems, there is redistribution in favor of those with higher health costs (such as families with young children and old people), at the expense of those with lower costs (such as young men). This redistribution is the case in national health service systems as well as SHI systems, which, unlike private insurance systems, do not charge differentiated, risk-rated premiums based on the cost of insurance. It implies that people of working age normally pay more than the cost of their health needs (when they can afford to do so) to offset the subsidies they might have received as children and which they expect to receive when they are old.

In LAC’s publicly funded systems, there is often also redistribution in favor of the poor, which, however, can be offset by high levels of regressive out-of-pocket expenditures. General tax revenues used to finance noncontributory health insurance or national health services in LAC tend to be highly progressive, as the beneficiaries are mainly poor. The earnings-based contributions used to fund SHI are also often progressive, in that they favor members who earn less. However, in contrast, subsidies from general taxation to cover SHI system deficits are normally regressive (because the beneficiaries as a whole are not poor). Out-of-pocket health expenditures—the residual costs not covered by pooling—tend to be higher, relative to income, for poor people. This is because the poor have less access to pooling arrangements. As a result, they forgo health care (therefore, their combined public and private expenditures on health are lower); at the same time, they pay for part of their health care privately. In contrast, the better-off often have very comprehensive insurance and face correspondingly lower out-of-pocket expenditures.

General taxation is a major source of health financing in LAC and is the main redistributive mechanism. When general revenues are used to finance health services for the poor and for informal workers, they are a progressive income subsidy. However, since NHS services are open to all, the progressive impact of NHS financing depends in many cases on the scope and quality of care being inferior to that of SHI programs. Otherwise, everyone would seek to use the NHS. Unfortunately, such differentiation cannot easily be limited to nonmedical aspects of health care (such as the hotel quality of hospital rooms); the quality of medical care is also usually inferior. But targeting based on inferior quality can push open NHS systems toward a low-quality equilibrium, which is
not an acceptable policy outcome. An alternative way to focus subsidy resources on the poor is to use means-tested targeting. This has been done by noncontributory insurance schemes, which target the poor and informal workers and exclude those enrolled in contributory SHI. In Colombia, 90 percent of noncontributory health insurance goes to the poorest 60 percent of the population (DNP 2006). However, it is not always easy to avoid inclusion errors. For example, survey data suggest that over half of the enrollees in Mexico’s noncontributory SHI do not qualify for the program (Scott 2006).

Funding from payroll taxes and earnings-related social security contributions normally implies implicit redistribution in favor of the poorer members of the scheme. In most SHI schemes in LAC, higher earners pay more, even though their health needs are no greater. However, this effect is limited by earnings ceilings in the contribution formulas. Sometimes, such ceilings are set very low. For example, the earnings ceiling in one Mexican SHI plan is US$90 per month. In addition, better-paid workers tend to have access to better-quality services. As a result of such factors, some high earners might be net gainers and low earners might still lose out.

The use of payroll taxes and social security contributions that are transparently reallocated to pay for the health care of poorer people is unusual in LAC. Colombia is evidently the only country that has such a subsidy. The contributory SHI program collects an explicit tax of 1.5 percent of pay, earmarked for the noncontributory health insurance schemes. This tax constitutes more than 35 percent of the funding for the noncontributory insurance, which covers 40 percent of the population; the remainder comes from general taxation. As will be discussed in chapter 7, such financing mechanisms increase the tax wedge and can contribute to reduced employment and increased informality.

The use of general tax revenues to finance the overall deficits in SHI systems can be highly regressive. Many of LAC’s contributory SHI schemes are battling to manage their deficits, which arise from limited contributions, virtually unlimited benefits packages, and inefficiencies (discussed in the next section). Governments have often had to cover the deficits. In some instances, this practice has been institutionalized in the form of regular subsidies. In Mexico, for example, the government contributes an annual subsidy of about US$220 per family enrolled in SHI. Given the coverage of SHI in LAC, this practice is highly regressive.

Weak information systems can hamper the effective use of general revenues to enhance redistribution. In LAC, most information systems cannot identify beneficiaries across programs, and they normally identify households rather than individuals. As a result, individuals can benefit from several different programs at the same time. In Mexico, it is estimated that 925,000 families (about 5 percent of the total insured population) are enrolled in at least two of the three main social health insurance programs. All these systems receive government subsidies (the so-called
The annual cost of duplicated subsidies is estimated at US$200 million (authors’ calculations based on ENIGH 2006).

**Efficiency**

The efficiency of a health system is largely independent of its revenue collection mechanisms. The same strategies can be implemented to increase efficiency in social health insurance systems and national health services. In general, these strategies involve reducing costs or improving quality (including access), or both. The mechanisms for improving efficiency can be grouped into two broad categories: (1) creating incentives for financing agents and providers, and (2) strengthening the planning and coordination of the health system. The sources of inefficiency in both NHS and SHI systems are rooted in vertical integration. The absence of competition and choice makes it difficult for the financing arm of the system to contract with providers on a favorable basis. Horizontal fragmentation compounds the system’s inefficiencies by requiring duplicated capacity and creating other planning and coordination challenges.

In fragmented health systems, inefficiencies are perpetuated by the poorly coordinated reform efforts that arise from weak regulatory frameworks and institutional platforms. In Mexico, for example, the General Health Law does not provide a single framework for accrediting health facilities, and standards are different for national health services and each social health insurance scheme. Only recently has the minister of health reinforced the role of the Council for General Health as a coordination body for the health system, and differences in health service infrastructure between systems remain an impediment to setting common standards.

Efficiency gains are a potential source of funding for improving services. Cross-country benchmarking of per capita health spending and health outcomes suggests that there is ample scope for these. For example, in most LAC countries, infant mortality remains relatively high, given the level of spending on health (the observation points are above the fitted curve) (figure 3.5). The economic crisis of 2008–09 has focused attention on exploiting these potential efficiency gains.

In an effort to improve efficiency, in the 1980s and 1990s, many governments decentralized health provision and contracted with private service providers. Decentralization aimed to move decision making closer to users. By granting greater autonomy to service providers, especially hospitals, policy makers hoped to strengthen accountability and give managers nonfinancial incentives to improve service delivery (Homedes and Ugalde 2005). Some reforms also allowed contributory SHI systems to privatize their health service networks and contract with private providers to give consumers more choice and create financial incentives for providers to increase productivity and quality (Fiedler 1996).
More recently, several LAC countries have separated health financing from service provision. Separation can take place within the same organization, or different organizations can take charge of financing and service provision. It opens up opportunities to introduce financial incentives for public providers to enhance their performance. It also potentially allows insurers to contract with different public providers, eliminating wasteful duplication of facilities and offering the benefits of economies of scale. More broadly, it opens up opportunities for financing agencies to decide what, how, and with whom to contract to enhance system performance; this approach is known as strategic purchasing (Busse et al. 2007). In LAC, the separation of functions has been most successful in contributory SHI systems. In the Dominican Republic, for example, the former Institute of Social Security was transformed into a health risk administrator, and its service units were transformed into a public health provider network.

Overall, however, the separation of financing and service provision remains an unfinished agenda. Few countries have undertaken such reforms, and even in those that have, funding is often still allocated.
directly to providers, with no performance monitoring or competition for contracts. For example, in the Dominican Republic, the reform created a new financing agency for the noncontributory health insurance system, but the Ministry of Health still provides regional health services with most of its budget. Likewise, the public hospitals in Colombia and state health systems in Mexico are all still funded by the central government. Most of these public providers have neither the capacity nor the autonomy to respond to potential incentives from pay-for-performance arrangements and competitive contracting. Provider autonomy is hampered, above all, by a lack of control over human resource functions. For example, in the Dominican Republic, management functions have been transferred to the Regional Health Services, but the payroll is still managed and controlled by the Ministry of Health (Vujicic, Ohiri, and Sparkes 2009).

Purchasing strategies could be better aligned with sector objectives. The strategic purchase of services to enhance provider incentives and make more efficient use of existing service delivery capacity remains uncommon. Most financing agencies offer public providers blanket, “one-size-fits-all” contracts. For example, under the noncontributory health insurance subsystem (Seguro Familiar de Salud) in the Dominican Republic, the National Health Insurance Agency contracts first with all of the regional health services to provide health care to its enrollees. In addition, financing agencies typically pay for primary care on a per capita basis and for secondary and tertiary care on a fee-for-service basis. This arrangement encourages providers to promote demand for more expensive care, which runs contrary to the strategic objective of strengthening primary care. Moreover, purchasers rarely use prospective budgets or case-based payments.

The lack of strategic purchasing between coexisting schemes has broad ramifications for health system performance. It results in widespread duplication of infrastructure and high levels of idle capacity. The flip side of the coin is the paradox that families may live near a health facility but have no access to its services. In 2007, approximately 5 percent of children in Mexico living close to a facility lacked adequate access to health services, because their families were not affiliated with the insurer running that facility (Secretaría de Salud 2008).

Efficiency in service delivery is also hampered by the failure to meet accreditation standards. Accreditation certifies that facilities have complied with minimum quality requirements and gives them a nonfinancial incentive to meet those standards. It is commonly a formal precondition for competing for public funds and contracts. However, accreditation mechanisms in many countries are underdeveloped, and minimum quality standards have only recently been established. Furthermore, providers often do not meet minimum quality standards. In Mexico, Seguro Popular requires health facilities to be accredited, but, in 2008, only 31 percent of all facilities providing services to the program’s target population met...
the accreditation criteria (Secretaría de Salud 2008). In the Dominican Republic, the level is even lower—approximately 21 percent (World Bank 2008a). Information about accreditation is often poorly disseminated, and standards are often not enforced. In Colombia, many purchasers contract with nonaccredited providers at lower prices than those of accredited providers (Castano 2008).

Efficiency in service delivery is also hampered by fragmented patient information systems that have not been computerized. Different provider networks commonly use different formats to collect patient information, such as medical histories and test results. Without computerization, it is difficult to transfer patients’ medical records between facilities, even within the same scheme. The lack of an integrated patient information system leads to the repeat of services and further hampers the sharing of service delivery infrastructure between systems.

Some countries have gone beyond the separation of financing and service delivery to introduce competitive health insurance models. As discussed earlier, these models fall into two main categories. Under the competition model, insurers compete for enrollees on the basis of premiums and benefit packages; this model can be seen in Chile. Under the managed competition model, health risk administrators compete for enrollees on the basis of the quality of care that they offer. They receive a fixed per capita allocation out of a central government fund and provide a standardized benefit package to enrollees. Commonly, health risk administrators are also permitted to offer complementary benefit packages for which they can set premiums. Examples of this model include the contributory SHI schemes in Colombia and the Dominican Republic (Castano 2008; World Bank 2008a). In some cases, competition has been introduced to open up closed insurance agencies to more users, thus improving equity and efficiency. For example, in Argentina, over 300 obras sociales catered exclusively to particular groups of workers. In the 1990s, reforms required them to offer health insurance to all formal sector workers, a change that introduced choice and competition on the basis of premiums and packages (Cavagnero et al. 2006).

In contrast to competition between health service providers, there is no evidence that competition between insurers has increased the efficiency of health systems, in LAC or elsewhere. Indeed, evidence from Germany and the Netherlands suggests that the reverse might be the case—that is, the gains from improved purchasing do not outweigh increased transaction costs (Gresz et al. 2002; Schut, Gresz, and Wasem 2003; Zok 1999). This lack of impact seems to be due to client and insurer behavior. Studies suggest that only a small fraction of the population switches providers in the insurance market. Moreover, those who do change providers tend to be young, healthy, and well educated. Instead of competing through improved health service quality and costs, most insurance and purchasing agencies have focused on improving their administrative services.
**Financial Sustainability**

The financial sustainability of health systems, that is, the balance between revenues and costs, is usually delicate. Health systems are usually pay-as-you-go systems, with negligible reserves. For example, in 2007 the Mexican Institute for Social Security earmarked less than 0.2 percent of its income as a reserve to balance annual fluctuations in the demand for services, and Mexico’s Seguro Popular earmarks only 1.0 percent of the budget for this purpose (CNPSS 2008). When SHI or NHS organizations run out of money, they have to negotiate budget adjustments or bailouts, borrow against their future budget allocations and revenues, or (in the last resort) suspend services.

Several factors affecting financial sustainability of health systems have already been discussed. They include the system’s mandate, organizational and institutional arrangements, and revenue collection arrangements. The size and composition of the benefit package, service quality, and implicit or explicit rationing mechanisms all affect costs. Organizational and institutional arrangements affect the behavior of financing agencies and providers, as well as the transaction costs of the system, and thus influence efficiency. On the revenue side, the mix of revenue sources and collection arrangements determines funding levels.

Decisions about mandates and financing levels are often taken ad hoc and in isolation from one another. Mandates should reflect a societal consensus about an appropriate level of care, be aligned with health sector priorities, and take account of the cost-effectiveness of interventions. In practice, however, although political constitutions often establish broad rights to health care, system mandates remain vague. In response, courts sometimes intervene to clarify constitutional or other legal rights, often in ad hoc decisions not linked to budgetary mandates (World Bank 2008c). The result is that implicit rationing must be used to square ambitious intent with limited financing. Few systems have actuarial procedures in place for assessing the financial impact of uncertainty and risks surrounding health needs, treatment-seeking behaviors, and cost structures. Instead, financing decisions for NHS systems are often driven by political opportunity cost considerations in the context of national budget negotiations. For SHI systems, they are also sometimes affected by concerns about the impact of payroll taxes on labor costs and competitiveness. However, the financing constraints of many contributory SHI systems are soft, since they can access bailouts funded with general tax revenues.

Health cost inflation has not been a major problem for the financial sustainability of LAC’s health systems in recent years. In the Organisation for Economic Co-operation and Development (OECD)—in particular, the United States—there is constant upward pressure on health spending from new, often high-cost technologies and increases in drug prices. In addition,
demographic change (aging) leads to an increasing prevalence of chronic noncommunicable diseases, which can be costly to treat. A further factor is the high income elasticity of demand for health services: it increases as living conditions improve. As a result of such factors, cost inflation in health services tends to outstrip both the retail price index and nominal gross domestic product (GDP) growth. However, this phenomenon is not particularly marked in LAC. Over the past 10 years, health inflation in Colombia and Mexico averaged between 1 and 2 percentage points above general inflation but was below nominal GDP growth (figure 3.6).

Population aging also threatens to diminish the revenue base of LAC’s health systems. In most countries in LAC, population aging will increase

---

**Figure 3.6 Health Inflation Rates versus Nominal GDP Growth and General Inflation Rates in Selected Countries**

*Graphs showing health inflation rates versus nominal GDP growth and general inflation rates for Mexico and Colombia from 1999 to 2008.*

(continued next page)
dependency ratios, reverting recent reductions that were linked to falling fertility rates. From 2005 to 2009, the dependency ratio was declining in Chile, Cuba, and Bolivia. However, projections show that in Chile and Cuba, it is now set to leap upward, and should quickly approach levels of high-income countries such as France (figure 3.7). Payroll-financed schemes will be affected by this process, since a smaller proportion of the insured population will be working. So will NHS systems, since they draw their funding from general taxation, which is levied mainly on the economically active population. In both cases, the contributions of
those working will need to increase in order to finance the health services for the growing share of the population that is not working.

Finally, the bundling of social protection packages can also threaten the financial sustainability of a health system, unless contributions are linked to benefits and there is accounting segregation. For instance, when funding for health and old-age income insurance is pooled, each must be individually sustainable to avoid threatening the sustainability of the other. Before 1995, the IMSS used to pool funds for the health insurance and pension systems, and the contributions to the pension system were constantly used to fund the recurring deficits of the health and maternity insurance programs. One study projected that the IMSS, in its entirety, would start running a deficit by 2004 (Marier and Mayer 2007). Reforms starting in 1995 separated the funding pools for health insurance and pensions, and policy was changed to ensure each system’s financial sustainability. Despite these changes, the financial sustainability of IMSS continued to be compromised by the pension benefits enjoyed by its own employees. IMSS had to use its reserves to cover the deficits. In response, in 2004, IMSS introduced savings accounts for new employees, which will help it to regain its financial sustainability.

Figure 3.7 Projection of Dependency Ratios in Selected Countries

Source: Authors’ calculations based on population projections from the World Bank Human Development Network.
The Way Forward

Given the diversity of LAC’s health systems, there is no single reform path to achieve universal coverage. However, the principles and challenges are the same for all countries. The aim is to ensure that all individuals participate in pooling arrangements that facilitate their physical and financial access to a socially agreed-upon bundle of health services. There are two main structural challenges: first, promoting coherence so that care for different population groups is not provided under different rules, which undermines equity and distorts labor market incentives; and second, separating financing and provision, which are often vertically integrated within the same entity (to the detriment of efficiency). The fundamental issues to decide are these: (1) What is the “mandate” of the health systems? What health conditions are to be treated and what preventive and curative services are to be provided, and to whom? (2) How is the system to be financed? What should be the sources of revenue? How should the pooling of resources be organized? What role should subsidies play? (3) How should health services be provided, and how should the financing agencies relate to the providers? What role will the public and private sector play in the operation of health networks and in the provision of preventive and curative services?

Given the challenges of implementing large-scale, structural reforms, an alternative approach is to move existing systems gradually to the desired paradigms. This “third way” focuses on functional rather than organizational reforms and is characterized by incremental improvements rather than by a “big bang” approach or the alternative of doing nothing. It is concerned with three areas of policy: (1) standardizing benefits to ensure access to adequate health services for all, (2) strengthening risk-pooling and improving revenue collection and subsidy systems while avoiding adverse labor market outcomes, and (3) using resources more efficiently. This section lays out options in each of these areas, identifying some obvious choices and discussing critical trade-offs.

Standardize Benefits to Ensure Access to Adequate Health Services for All

Standardized benefits are critical to giving users of all systems access to adequate care. In the past, most NHS beneficiaries had no explicit entitlements to any particular service. In recent years, some noncontributory health insurance schemes have started to define precisely what is covered, using positive and negative lists. Because of budgetary constraints, these schemes have begun by offering limited benefits compared with those of contributory SHI systems. In this case, the recommended policy is to gradually expand the package until it provides the desired set of
comprehensive benefits, and to negotiate budgetary space so that financing is expanded in line with the benefits. It is also necessary to better define the rights and limitations of the insurance contracts of the contributory SHI systems, whose benefit packages are typically vague or, in competitive models, unequal.

Standardized benefits should be aligned with health sector priorities. The challenge is to find a balance between the dual objectives of improving health outcomes and protecting people against the financial consequences of ill-health. To maximize health outcomes, the rules should prioritize cost-effective interventions that address common conditions, based on burden of disease analyses. However, to protect affiliates against the impoverishing effects of catastrophic expenditures, benefit packages need to include high-cost interventions that typically address less frequent conditions. The trend in LAC and other regions is toward a mandate of basic, cost-effective health services. This development is partly due to limitations in the capacity to universally provide complex health interventions; it is also partly due to the importance of preventive, maternal, and child interventions for improving human capital outcomes and to their status as “merit goods.”

An alternative way of managing the trade-off is to establish a separate fund for catastrophic illnesses. For example, in addition to Seguro Popular, which covers primary and secondary care, Mexico has established the Fund for Catastrophic Health Expenditures to finance selected, high-cost health interventions for residents without contributory social health insurance.

It is also important to overcome implicit rationing mechanisms, especially in NHS and subsidized SHI programs. Substantial pockets of the population still have no geographical access to the services to which they are entitled. Even where health facilities exist, the poor quality of care and long waiting times act as rationing mechanisms by discouraging take-up. Another limitation is the fact that many poor people do not fully understand their health entitlements. Finally, user fees or medical costs that must be paid for out of pocket create financial barriers for low-income households. Some countries have started to address these challenges through the definition of service standards and accreditation programs for health facilities. In 2002, Chile created a set of explicit health guarantees that define the care packages to which beneficiaries are entitled for eligible diseases and that set quality standards and time limits for access (box 3.3).

Standardizing benefits potentially affects affiliation and labor market behaviors. It helps to discourage individuals from choosing jobs based on associated, nonportable benefits. However, if the mandates (including service quality) of noncontributory systems begin to approximate one another under current financing and redistributive arrangements, there is a risk that the self-selection mechanisms that have historically limited the
demand for NHS services and noncontributory health insurance programs will begin to break down; with similar noncontributory systems available, more workers might try to avoid contributing to SHI.

Enhance Pooling, Improve Revenue Collection and Subsidy Systems, and Avoid Adverse Labor Market Outcomes

The prime challenge for health financing in LAC is to enhance risk-pooling. Currently, risk-pooling arrangements cover only approximately
50 percent of health expenditures. Risk-pooling is necessary because the costs of many health interventions go beyond the savings capacity of most households. Furthermore, subsidies are needed because many poor households cannot afford to pay their share of the pooled costs. Policy makers choosing from different revenue sources and collection mechanisms must ensure that households with limited or no savings capacity have access to pooling arrangements. Beyond this goal, their choice should be guided by two objectives: first, ensuring the financial sustainability of the system, and second, reducing distortions in labor markets. The main available financing instruments for pooled costs are general taxation revenue and mandatory workers’ and employers contributions. The latter can be based on earnings (in which case they build in an element of redistribution) or can be based on the cost of insurance (flat or risk-adjusted premiums).

Increasing general revenues for pooled funds for health care costs of the poor. Most countries in LAC should allocate more general tax revenues to pooled funds for the health care costs of the poor. Funding has been inadequate for systems that rely on general revenues, such as NHS and the subsidized arms of SHI systems. Although efficiency gains still have a role to play, more funding is needed to achieve satisfactory health outcomes of households with no or limited savings capacity. International comparators suggest that in most LAC countries, a reasonable target for general revenues to cover health costs for the poor would be 3 percent to 4 percent of GDP. In particular, less economically developed countries need to better target these resources. Governments often subsidize programs for the nonpoor (for example, by covering general deficits in contributory SHI systems) and should plan to reduce these regressive subsidies. In preference, they should use these funds to increase pooled financing for the poor.

One option is to channel this additional funding through NHS systems. The problem here is that universal access might imply allocating considerable general revenue to the nonpoor, which, in turn, may discourage affiliation to SHI systems and consequently distort labor markets. Countries that want the improved NHS used only by the poor could consider establishing user fees that discourage NHS use by those who can potentially access SHI programs. However, NHS user fees that are limited to those with alternative (SHI) options are difficult to implement in practice, and generalized user fees can lead to exclusion errors. El Salvador recently abolished user fees for this reason. An alternative is to have generalized user fees but to establish a fund to allow free access to the improved NHS services for those identified as poor through means testing. This model is being used in Ecuador, Bolivia, and Peru. Countries with relatively strong tax bases might be prepared to allocate considerable general revenue resources to the nonpoor, too, but in that case the logical conclusion is to absorb the SHI system into the NHS (as was
done in Brazil). If the general tax system is sufficiently progressive, the distributional effect of a universal NHS will be similar to that of an SHI system, while avoiding the negative labor market incentives beyond the effect linked to the collection of income taxes.

A second option is to channel additional funding through subsidized insurance schemes. As discussed above, many countries in LAC have developed such schemes in recent years. Examples include Argentina, Chile, Colombia, the Dominican Republic, and Mexico. These schemes have advantages over traditional NHS systems in that they offer specific guaranteed benefits and are targeted to the poor. On the downside, they can suffer from substantial errors of inclusion and can discourage affiliation to SHI and promote informality. One of their limitations has been that—because of fiscal limitations and the desire to avoid negative labor market incentive effects—they offer limited mandates. The challenge for the future is to increase their funding to allow them to improve the quality and timeliness of their services, without undermining the contributory part of the system. Countries can choose from three financing models. First, they can tightly target subsidies on the poor. Second, they can offer schemes with benefits that are similar to those of the SHI systems and that are cofinanced by user contributions and tapered subsidies, which are withdrawn gradually as incomes rise. Such schemes should be open to the population as a whole (rather than to individuals without SHI coverage), and total contribution rules should be consistent with those of the SHI systems. Third, they can subsidize a standardized, basic health package for the population as a whole.

Whichever model is used, the challenge is to minimize the resulting fragmentation. It is not normally recommendable to have multiple subsidized programs, such as an NHS system and a separate subsidized SHI system. Unless they completely replace the NHS, subsidized insurance schemes create additional branches of the financing system with their own administrative procedures, rules of access, and procedures for purchasing services. The result is increased transaction costs and often incompatible provider incentives. Countries should decide which model they will develop for subsidized access.

Reforming the financing of contributory SHI. The payroll taxes and earnings-based contributions that finance LAC’s contributory SHI schemes have several disadvantages. As seen in table 3.1, these instruments finance 30 percent of all health spending and roughly half of pooled funding in countries with SHI systems. Their first shortcoming is that they exclude workers in the informal sector. The second is that contributions are not linked to benefits. This arrangement generates nontransparent redistribution through cross-subsidies between different users within the system. Depending on their health status and on their treatment-seeking behavior, some people receive subsidies while others
are “taxed” and pay more than the cost of the services they use, which is an incentive to evasion. In addition, the linking of contribution amounts to wage levels, when insurance costs are not a function of wages, gives programs an interest in avoiding incorporating new members who have low earnings levels, because their contributions will be lower than the expected cost of the insurance. Programs have an incentive to “blink” at evasion by low-paid workers because they lose money on their insurance. The third shortcoming is that contributions are limited to active workers, so that the aging of the population will erode systems’ financial basis. Finally, earnings-based contributions increase labor costs and can reduce formal employment.

Alternative potential financing sources for SHI include cost-based premiums, earmarked taxes, and general revenues. All these options can help to reduce exclusion, to lessen the effects of population aging on financial sustainability, and to decrease the payroll tax effect on labor costs. Many SHI systems across the globe have introduced alternative financing instruments. However, few have completely replaced earnings-based contributions; they normally rely on a mix of financing instruments. The following paragraphs discuss the pros and cons of mixed approaches.

Cost-based premiums can be either risk-rated or flat, each type having different advantages and also drawbacks. Risk-rated premiums are calculated to reflect the average health care costs of groups with similar actuarial characteristics, such as age, gender, existing medical conditions, and previous use of health services. This approach (which is standard in private health insurance) has the advantage of reducing implicit redistribution. The drawback, however, is that the ability to pay health insurance and the cost of health care are not well correlated: families with young children and old people (whose health costs tend to be high) normally have limited earning capacity. Alternatively, premiums can be flat, based on the average costs of the plan of health benefits of all plan members. This approach implicitly incorporates an element of life-cycle consumption smoothing into the health financing system, although it does not reduce implicit redistribution.

Systems that adopt cost-based premiums need to complement them with subsidies to ensure that those with limited saving capacity can participate. As discussed above, these subsidies can be allocated based on household income, with the poorest completely exempted and others getting tapered subsidies. The downside here is the required administrative capacity and the costs of means testing large parts of a population. Alternatively, premiums could be waived for groups (such as children) who are priority recipients of health care.

Another option is to use earmarked taxes and general tax revenues to complement workers’ contributions to SHI. This option has been tried in several OECD countries. For example, concerned with high labor costs and faced by growing dependency ratios undermining the financial
sustainability of the health system, in 1991 France lowered employee contributions below 1 percent of wages and offset this decrease through an earmarked income tax (Sandier, Paris, and Polton 2004). One-third of the revenue for France’s social insurance now comes from the earmarked tax. For the same reasons, the Netherlands and Germany have started to substitute payroll and earnings-based contributions with general revenues (Lisac 2006; Sandier, Paris, and Polton 2004). Although this approach does nothing to strengthen the link between cost and benefits, it reduces disincentives for low-risk workers to enroll and for programs to enroll low-paid workers.

In LAC, general revenues have often been used to finance deficits in contributory social health insurance schemes. As discussed above, this approach can be very regressive, but it can also be hard to resist. Most recently, Colombia decided to introduce so-called “sin” taxes on alcohol and tobacco to sustain the financing of its contributory and noncontributory SHI schemes. Mexico has decided to make a virtue out of a necessity and created the “social contribution,” which is a general government subsidy to all social health insurance schemes. However, as discussed in the previous section, given the challenges faced by many LAC countries to expand access to pooling arrangements, the first priority should be to extend subsidized schemes for the poor.

All these possible financing instruments have virtues and shortcomings. For this reason, mature social health insurance systems tend to draw on a mix of different instruments. The French system combines payroll and earnings-based contributions, earmarked income taxes, and general revenues. Starting in 2011, Germany financed social health insurance from a mix of payroll and earnings-based contributions, flat rates, and general revenues. In coming years, it is likely that LAC’s SHI systems will move away from exclusive dependence on payroll and earnings-based contributions toward a broader, more strategic mix of revenue sources.

**Enforcing revenue collection and fostering affiliation.** Regardless of whether revenue comes from payroll taxes, earnings-based contributions, or cost-related premiums, there is scope for improving collection. An interesting option is to develop online information systems that allow health centers and hospitals to verify the affiliation and contribution status of clients, as has been done recently in Hungary. The facilities do not turn away people who are not affiliated or who are behind with their contributions, but they report them to the tax office (box 3.4). Other Eastern European countries are adopting similar systems. A possible drawback is that the prospect of being required to pay a backlog of contributions might discourage people from using preventive services or seeking care until their diseases are advanced. There would be a negative impact on health outcomes, and system costs might rise because of the high cost of tardy treatment. A second limitation is that if alternative private sector services
Box 3.4 Innovative Approaches to Collecting Social Health Insurance Contributions: The Case of Hungary

In 1998, Hungary introduced contributory social health insurance. All residents must enroll, and those with income must contribute 7 percent. Access to health services is open to all residents; however, an online information system available in all health facilities allows staff to verify the affiliation and contribution status of every patient. Noncontributing clients are not turned away, but they are reported to the tax office, which is entitled to collect contributions retroactively for up to five years. When clients say they have no income, the health facility contacts the social assistance program to confirm this. The system requires the use of the same personal registry numbers by the social security and tax information systems.


are available, wealthier patients could circumvent the system. The use of earnings-based contributions would give them an incentive to do so. It is too early to tell whether, and to what extent, such effects will arise.

Tackling evasion by informal sector businesses is difficult, but tax credits might help. Informal firms neither pay taxes nor make contributions to social security, and their workforce faces a high degree of social insecurity. Offering small firms tax credits or subsidies to offset the cost of enrolling their employees in contributory SHI might help solve two problems at the same time: first, it might increase coverage of health benefits among vulnerable populations, and second, because it will reduce the effective rate of total taxation, it might encourage the formalization of small businesses. This approach has been attempted in the United States. However, it is often difficult to persuade informal employers voluntarily to enter the tax net, and health finance systems that are centered on tax breaks for the purchase of insurance can lead to regressive distributions of public subsidy (box 3.5).

Use Resources More Efficiently

Most countries in LAC need to increase pooled funding for health—but there is also considerable scope for increasing efficiency in the use of existing funds. As was seen earlier in this chapter, a major problem in many NHS and SHI systems is the “capture” of funding or financing for insurance systems by their own network of providers. They receive the funding automatically, often based on historical budgets, without links to performance.
The vertical separation of health financing from service provision offers opportunities for increasing efficiency. When these two functions are carried out by separate entities, on an arm’s-length basis, it encourages the use of contracts and payment mechanisms that promote increased provider efficiency. Many varieties of contractual model exist. There is a growing accumulation of experience in Europe with arrangements that combine prospective global budgets (ex ante payments based on the type and volume of services or the size and characteristics of a covered population) with additional payments linked to service production or quality. This type of arrangement can help control costs by setting spending ceilings, promoting cost-efficient interventions, and rewarding providers for good performance (Figueras, Robinson, and Jakubowski 2005).

The separation of financing and provision will work only if providers have the capacity and decision-making authority to respond to the resulting incentives. Policy makers have sometimes assumed that changing incentives will automatically lead to improvements in performance, without asking whether providers have the capacity and autonomy needed to respond. In most public networks, providers need to be given more authority over their affairs and better training, instruments, and tools, particularly in human resource management and information systems (Mills 2007).

Separating financing from service provision paves the way for the cross-purchasing of services and improved functional integration of health service delivery systems. Many LAC countries have duplicated, overlapping

---

**Box 3.5: Using Tax Subsidies to Promote Health Insurance Coverage and Formality: The U.S. Experience**

The U.S. health system is largely based on private insurance provided by employers. Sixty-two percent of Americans had employer-based health insurance in 2006. This system is supported by several types of heavy subsidies from the tax system—including tax credits, exclusions, and deductions—to promote health insurance coverage. Employers receive a full federal corporate income and payroll tax deduction for their contributions to the health coverage of their employees. Such subsidies cost the government over US$150 billion per year in federal corporate income tax losses. This approach promotes generous insurance packages (so-called “Cadillac plans”) and has contributed to increases in the cost of health plans more generally. Moreover, it discriminates against the unemployed and informal sector workers, who have no work-related insurance, and thus makes health access for the rich and the poor more unequal.

networks owned by different financing or insurance systems (such as NHS and SHI entities). The cross-purchasing of services across provider networks would immediately increase beneficiaries’ access to services and would also increase capacity utilization. It would be facilitated by standardizing contracting and payment mechanisms, establishing common health information systems, and setting common standards for the accreditation of health facilities.

The principles of strategic purchasing across networks and systems can also be applied to nonpersonal services. Countries in LAC have been leaders in this area. Argentina was the first to introduce performance-based payment mechanisms for public health services (Cavagnero et al. 2006), and other countries have followed suit. The impact of these reforms has yet to be fully evaluated, but it is clear that they have increased the capacity of public health systems to deliver nonpersonal health services.

Achieving the right balance of public investment in personal and nonpersonal health services is another important efficiency issue. Introducing noncontributory health insurance schemes that focus on personal health benefits can undermine funding for nonpersonal health services, commonly provided by NHS networks. There is a need to reassess this balance in light of the new health challenges of the region, most importantly, the emergence of new and old infectious diseases (such as influenza A/H1N1 and Dengue fever) as well as the noncommunicable disease epidemic.

Finally, countries that have adopted competitive financing models may need to reassess their use. There is no evidence that these models have improved the medical quality of services or service efficiency. Indeed, evidence from Europe suggests that the reverse may be the case, that is, improved purchasing prices do not outweigh increased transaction costs. Furthermore, the systems are prone to adverse selection, leaving high-risk populations uninsured or threatening the financial sustainability of public insurance agencies.

Conclusion: Three Paradigm Shifts

Pursuing a “third way” to achieve universal coverage will require important paradigm shifts in LAC’s health systems. This chapter began by emphasizing the diverse histories and path dependencies of LAC’s health systems. Reform choices will ultimately depend on levels of economic development, the strength of tax systems, administrative capacities of health systems, and, most importantly, the social preferences of the region’s populations. Nevertheless, the analysis of this chapter has highlighted three paradigm shifts that are relevant to guide reform processes.

The first critical paradigm shift involves governments’ guarantee of adequate and explicit benefits for all. This shift will improve equity, health
outcomes, financial protection, and labor market mobility. The pursuit of adequacy will necessarily involve the removal of barriers to access of all sorts: physical, financial, educational, and cultural. It will also be defined by political choices about the type of compulsory mandate and the corollary decision about the public funding of the pooled health costs of those who cannot afford to pay them.

The second paradigm shift involves the gradual replacement of payroll and earnings-based contributions as the primary financing mechanism of mandatory social health insurance. This shift will facilitate the expansion of social health insurance, reduce the associated negative impact on formal employment, and strengthen their financial sustainability. Funding alternatives include cost-based premiums, earmarked taxes, and general revenues. Each of these alternative revenue sources has virtues and shortcomings, so social health insurance systems should draw on a mix of different financing mechanisms, including payroll and earnings-based contributions, where advantages reinforce each other and disadvantages are mitigated.

The third paradigm shift involves strengthening the arm’s-length purchasing of services. This shift will give providers incentives to operate efficiently. Moreover, the cross-purchasing of services between networks will increase access to services and improve the productivity of service providers. It will also increase consumer choice and enable them to keep the same provider when they change insurers.

This “third way” is less radical than structural reforms abolishing the pluralistic nature of LAC’s health systems completely, but implementing it successfully will still require a broad social and political consensus. Offering a viable way forward to reinvigorate the social contracts that led LAC countries to enshrine health as a constitutional right, it will strengthen health systems so that they meet health care needs fairly and under reasonable resource constraints.

Notes

1. See chapter 1 for a discussion of risk-pooling versus savings to insure against a given risk.
2. The grouping proposed here corresponds to the emphasis of this study on the consequences of horizontal fragmentation. For more detailed classifications of health systems in the region, see Londoño and Frenk (1997) and Mesa-Lago (2008).
3. Between 1995 and 2000, public spending on the NHS was Mex$516 per capita per year, while the contributory SHI systems run by the Mexican Social Security Institute spent Mex$2,562 and the Social Security Institute of Public Workers spent Mex$3,128 per capita per year (Parker and Scott 2008).
4. This problem does not arise in the same way in integrated systems. In that case, studies suggest that the distinction between increases in payroll taxes as opposed to other forms of taxation is not very important (Wagstaff 2007).
5. For more on the evolution of Chile’s minimum health guarantees, see box 3.3).
6. The net benefit of an insurance program is defined as the expected value of the benefit minus the cost of the contribution. In noncontributory programs, by definition, net benefits equal gross benefits.
7. In contrast, pure risk-rated premiums imply that there is no redistribution of any sort. Each person pays the actuarially estimated cost of his or her own plan.
8. The rule states 25 minimum salaries, which is the equivalent of about US$90.
9. This is on top of contributions of 12 percent of pay for formal sector workers’ own health insurance.

References


Knaul, Felicia Marie, Héctor Arreola-Ornelas, Oscar Méndez-Carniado, and Martha Miranda-Muñoz. 2006. “Preventing Impoverishment, Promoting Equity


Latin America and the Caribbean (LAC) constitute a heterogeneous region. That heterogeneity is evident in the way old-age social protection is provided. Over the past 30 years, there have been numerous pension reforms that have modified the pension system landscape. The earliest of these reforms focused mainly on increasing fiscal sustainability and reducing fragmentation, while more recent reforms have increasingly focused on extending coverage—particularly old-age benefit coverage—through various types of instruments, including both contributory and noncontributory systems. Although common elements are evident across pension systems and reforms in the region, there is also considerable variation, which is driven by a number of specific factors related to each country’s economy, institutions, and political constraints.

Despite these important reforms, old-age income security in the region continues to face these serious challenges: (1) coverage remains low and has been stagnant over the past decade; (2) systems are not well adapted to a labor market with an increasingly mobile labor force, which affects entitlements and pension savings; (3) the redistribution of income that takes place is generally not progressive; (4) excessive within-risk and between-risk institutional fragmentation affects labor mobility, equity, and administrative costs; (5) several of the remaining pay-as-you-go (PAYG) systems still face uncertainty in terms of their financial sustainability; and (6) the design of the pay-out phase, competition, administrative charges, and portfolio management of many funded schemes is still being worked out. The recent financial crisis has also raised questions about the security of current systems and doubt as to their ability to withstand large financial and labor market shocks.

This chapter provides an overview of old-age income protection policies in LAC countries. It highlights achievements and also areas where further reforms will be required to make social protection more effective and inclusive. The chapter builds on past regional studies, recent country
reports, and the general literature on pensions and adopts a broad perspective, considering both contributory and noncontributory programs (universal or targeted). The focus is on issues related to coverage and the adequacy of benefits, redistribution, incentives, and the financial sustainability and institutional organization of the region’s old-age protection systems. The chapter expands the work to date in two directions: it addresses (1) how to devise policies to expand coverage, including the design of noncontributory systems (or retirement income transfers); and (2) how to improve the horizontal integration of the pension system to make its different components more coherent.

The chapter is organized in four sections. The first section takes stock of current systems and recent reforms. The second section develops an integrated framework for expanding coverage. The third section discusses ways to make systems less fragmented and to promote labor mobility. The last section presents some conclusions.

Taking Stock of Current Systems

Governments usually establish public pension systems to reduce myopia and poverty. The concept of myopia refers to the tendency of individuals to fail to plan for the future and undersave while young, only to regret this behavior later. Of course, some individuals may simply not have the means to save enough for retirement during their active years and fall into poverty in old age. Therefore, governments set up mandatory pension systems to meet two core objectives: first, to ensure that individuals continue to receive a given share of their preretirement income (consumption smoothing); and second, to ensure that all individuals have sufficient income during their old age (adequacy function). Some systems also aim to redistribute income as a secondary social objective.3

To achieve these objectives, governments have taken very different approaches. Some countries offer defined benefit (DB) pensions, others defined contribution (DC) pensions, and yet others flat benefit transfers for all. Some countries rely on PAYG financing, others have fully funded systems, and others use general revenues or a combination of funding mechanisms. There are also differences in the management and institutional organization of the systems. Some countries have an integrated system that is centrally managed by the public sector, while other countries have many separate systems and rely on decentralized private management.

There is no one design that is superior to all others in all cases, but whichever design is chosen, it should meet a set of six core principles (Holzmann, Dorfman, and Hinz 2008). First, the system should aim to reach universal coverage of the elderly population, while ensuring that benefits are adequate to allow for a decent standard of living during old
age. Second, the system should be equitable in the sense that it does not discriminate between citizens. Third, the system should be financially sustainable and affordable. This principle implies that future benefit commitments can be financed out of current and future revenues and that the resulting tax burden can be supported by the economy. Fourth, if the system redistributes income, the redistribution should be transparent and progressive. Fifth, the system should minimize distortions in the economy, particularly in the labor market. Finally, the most efficient administrative arrangements should be adopted.

This section starts by describing the institutional organization of the various pension systems in LAC and then evaluates their performance with regard to the six principles outlined above.

Rules and Institutions

Given the wide variation in the design of the region’s pension systems, it is useful to classify them into three categories based on (1) how risks are distributed, (2) how the system is financed, and (3) how the system is organized or structured and managed. The distribution of risks is mainly related to the type of benefit formula that the system uses. The two extremes are flat benefits, which are guaranteed in real terms by the government and cannot change in response to any shock, and DC systems, in which the value of the pension depends on how much money individuals have saved, the rate of return on those savings, and life expectancy at retirement. In the middle of this spectrum are DB systems, in which the government guarantees a given share of the individual’s preretirement income, conditional on how much the individual has contributed. In terms of financing, there are three main alternatives: (1) funding current pensions through payroll taxes and social security contributions (PAYG financing), (2) funding pensions through individual savings (fully funded systems), and (3) funding pensions out of general revenues. Finally, regarding organization and management, there are three issues (not mutually exclusive) to consider: (1) whether the system is integrated (one system for all) or not, (2) whether its management is centralized or decentralized, and (3) whether its management is public or private.

Distribution of risks. Individuals in pension systems are subject to risks involving the labor market, finances, inflation, and life expectancy. Labor market risk refers to the possibility that, at a given point in time, an individual may have a job that does not generate enough income to contribute to the pension system or that is not covered by the pension system. As discussed in chapter 2, in LAC countries, labor market risk is high, and, as a result, many workers have low contribution densities. Thus, labor market risk is relevant to both DB and DC pension systems. Financial risk is associated with fluctuations in the rate of return on assets in which a worker’s savings are invested. This risk affects DC systems more than
DB systems because DC pensions depend on the value of these assets at retirement. Inflation risk is the possibility that inflation will reduce the real value of pensions over time, and this is relevant to both DC and DB systems, mainly affecting the pay-out phase. Finally, life expectancy risk affects individuals in systems where the value of the pension at retirement depends on how long the worker is likely to live.

The creation of pension systems in LAC during the 20th century was a response to an assessment by policy makers finding that too much risk was borne by individuals or families. The early systems and most reforms introduced until the mid-1980s aimed at further shifting some of the risks to the state by mandating the payment of benefits to the elderly regardless of their life expectancies and regardless of fiscal or financial trends. However, this policy began to be considered too big a burden on some government budgets and eventually gave way to some of the reforms of the 1980s and 1990s.

The reforms of the 1980s and 1990s introduced DC components into pension systems, thus shifting some risk back onto workers. In some countries, there were attempts to spread these risks among cohorts (as in the case of annuities) or even across generations (by using book valuation principles for some assets). The shift was never completed, though. In several cases (including in Argentina and Uruguay), systems became truly “multi-pillar,” and workers were required to participate in both DC and DB schemes. In other countries, the state continued to offer some basic guarantees (including a minimum pension) as a way to take some risk off the shoulders of participants.

Today, there is considerable heterogeneity in the region in how risk is distributed across the pension system, and countries can be categorized into three main groups. Some countries have pension systems that transfer most of the risks to workers (albeit with some collective protection); this group includes Peru and El Salvador. At the other extreme, there are countries such as Brazil and Venezuela, where most of the risks are borne by the state. In the middle, there are countries such as Chile, Costa Rica, and Uruguay, where the distribution of risk between individuals and the state is more balanced (table 4.1).

The most recent reforms, enacted after 2005, have emphasized the importance of addressing labor market risks. During the 1990s, reforms tended to focus on financial and demographic risks, while only a few countries (Brazil being the most visible) adopted reforms that protect workers from labor market risks by creating rural or informal workers’ pension schemes. In most countries, mandatory pension systems actually introduced stringent vesting periods. Originally introduced to contain costs, these vesting periods can also prevent some workers from receiving an old-age pension (and possibly reduce workers’ incentives to contribute). Moreover, as discussed in chapter 2, there is evidence that many workers have short contribution densities. Chile introduced reforms in
Table 4.1 Distribution of Risks between the State and Individuals in Pension Systems

<table>
<thead>
<tr>
<th>Most risk borne by the state (no DC pillar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina (2009)</td>
</tr>
<tr>
<td>Brazil</td>
</tr>
<tr>
<td>Ecuador</td>
</tr>
<tr>
<td>Guatemala</td>
</tr>
<tr>
<td>Haiti</td>
</tr>
<tr>
<td>Honduras</td>
</tr>
<tr>
<td>Nicaragua</td>
</tr>
<tr>
<td>Paraguay</td>
</tr>
<tr>
<td>Venezuela, RB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk shared by workers and state (DC pillar, with true multipillar scheme or strong minimum pension scheme)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina (1994–2008)</td>
</tr>
<tr>
<td>Chile</td>
</tr>
<tr>
<td>Costa Rica</td>
</tr>
<tr>
<td>Panama</td>
</tr>
<tr>
<td>Uruguay</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Most risk borne by workers (DC pillar, with no or small minimum scheme)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
</tr>
<tr>
<td>Colombia</td>
</tr>
<tr>
<td>Dominican Republic</td>
</tr>
<tr>
<td>El Salvador</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
<tr>
<td>Peru</td>
</tr>
</tbody>
</table>

Source: Authors’ compilation based on Mesa-Lago 2008b and Goldschmit 2008.

2008 in part to deal with this problem. Because the problem is a common one, other countries are likely to follow Chile’s example.

Another risk-related issue that will require further attention from policy makers across the region is pension indexation policy. Countries use a variety of methods to index pensions, basing them on prices, wages, social security revenues, or some combination of these. In Uruguay, for example, benefits are indexed to workers’ wages. However, until recently, the improvement in financial conditions had allowed the social security
administration (Banco de Previsión Social) to give higher than average adjustments to pensioners with low benefits. Brazil and Colombia have indexed minimum benefits to the minimum wage. In 2008, Argentina passed a bill that indexed pensions to a combination of wages and social security revenues (both contributions and earmarked taxes); the indexation has been performed biannually since 2009. In Chile, annuities paid from individual pension accounts are price indexed. Most countries with a DB scheme, however, tend to rely on discretionary indexation (usually managed by the ministry of finance) to ensure fiscal sustainability. The problem with discretionary indexation is that it exposes retirees to the risk of inflation and the pension system as a whole to the risks of unplanned adjustments to the value of pensions.

The recent financial crisis has also raised concerns regarding the balance between financial and labor market risks in current systems. As discussed above, during a financial crisis and a recession, DC fully funded (DC-FF) schemes can suffer from the loss in asset values, while DB pay-as-you-go (DB-PAYG) systems can be vulnerable to reductions in employment and wages. Countries that rely exclusively on DC-FF systems, even when minimum pension guarantees exist, can expose plan members nearing retirement to excessive financial risks. In the DB-PAYG systems, on the other hand, the financial position of the fund can deteriorate (thus requiring additional fiscal support), but those close to retirement are not likely to be affected. Unemployed workers would be affected in similar ways in both DC-FF and DB-PAYG systems (see box 4.1).

Financing mechanisms. There are two aspects of old-age income support programs that are relevant to financing arrangements. The first aspect is whether their resources come from general revenues, payroll taxes (paid by employers), or social security contributions (paid by employees). The second aspect is whether current revenues finance the benefits of current retirees (PAYG schemes) or whether they accumulate to finance future benefits (funded schemes).6

In contributory systems, the financing mechanism determines the rate of return that individuals receive on their savings. In a system financed exclusively on a pay-as-you-go basis, the sustainable equilibrium rate of return on contributions is more or less equal to the growth rate of the covered wage bill—or the long-term growth rate of the economy. In a fully funded system, the rate of return depends on the composition of the portfolio of financial assets, and a well-diversified portfolio can generate a higher average rate of return on contributions than a PAYG scheme, albeit with a higher risk. One justification for diversifying sources of financing, therefore, is to shift the balance between returns and risks in favor of returns.

The financing mechanism also affects both the redistribution of income within and across generations and incentives in the labor market. Within
Box 4.1 The Financial Crisis and Pension Systems

Losses in asset values between December 2007 and December 2008 reported by LAC pension funds were considerable, ranging across the region between 8 percent and 50 percent (Dorfman, Hinz, and Robalino 2008). As the crisis unfolded, reactions by governments, analysts, and citizens varied from country to country (Mesa-Lago 2010). In some extreme cases, like that of Argentina, the crisis gave authorities a reason to go ahead with a policy reform that had been under consideration for a while, and the funded pillar of the pension system was closed down (Mesa-Lago 2009). In most other cases, the reaction was less dramatic, although governments have been carefully monitoring the situation. What has been, so far, the actual impact of the crisis on pension systems, and what can be done to mitigate risks in the future, in both the case of funded and PAYG systems?

Active workers who contribute to funded pillars should not be dramatically affected by a financial crisis. Given that pension funds invest their assets in financial markets, a decrease in returns in these markets admittedly can result in lower or negative returns for active workers during the crisis. However, workers should not focus just on short-term trends in evaluating their situations. For example, in Chile, where contributors choose among five different funds, real returns during 2008 went from 2.78 percent in the fund with the most conservative portfolio to −40.30 percent in the most volatile one. However, it is important to note that the less conservative fund had had high returns in previous years. In fact, over the lifetime of this fund (since 2002), the accumulated real returns amounted to 4.1 percent. While the actual result for each contributor will depend on his or her contributions profile over the whole period, it is clear that no dramatic losses have occurred. Doing the same exercise with other funds and in other countries produces similar results.

Workers who are about to retire may consider themselves to be in a difficult position, given their options. If at the time of retirement they buy a nonadjustable annuity, then their future benefit may be lower than they had expected. This situation does not seem to be a massive problem, however, partly because many workers who were about to retire had already got their accumulated funds in more conservative portfolios and partly because the actual number of cases is small. In Chile, approximately 0.6 percent of contributors retire each year, while in other younger schemes, the figure is even lower.

Those who have already retired are also protected from volatile market fluctuations if they have already bought annuities, but they are exposed to higher risks if they choose to stay in a scheduled withdrawal scheme. Most retirees tend to select the first option, but some beneficiaries may (continued next page)
Box 4.1 (continued)

have experienced a reduction in their benefits since mid-2008. Although most of them had probably benefited from high returns in previous years, a sudden drop in benefits has negative effects on their welfare. Supervising agencies across LAC have been analyzing this problem and have suggested adjustments, including the possibility of temporarily “borrowing” from the system’s reserves to smooth out variations in monthly benefits or moving toward a compulsory annuitization model, where annuities are bought in installments over several years.

In the case of funded systems, there is further room to shield retirees from the impact of account fluctuations immediately before retirement by, for example, introducing age-based, life-cycle portfolios that require low- and middle-income workers to switch part of their balances to less risky investments as they get closer to retirement. Default age- and earnings-related asset allocations are also important in light of the inertia of contributors. These could be combined with programs that phase the transition to the benefit payout process either through phased withdrawals or phased annuity purchases that are sufficiently spread before and after the worker’s retirement date to limit the impact of short-term declines in asset values and fluctuations in interest rates that will affect the cost of annuity contracts.

In the case of PAYG systems, the challenge is financial sustainability. These systems can be affected by the crisis if revenues fall as a result of lower employment or wages, and if expenditures grow because more workers take early retirement. Schemes that have sustainability problems and have small cash surpluses or low levels of reserves may be at risk of defaulting on pensions if the government does not intervene. Looking forward, ensuring the sustainability of PAYG systems will require reviewing benefit formulas and eligibility conditions to ensure long-term equilibrium (see chapter 7) and having an appropriate buffer fund to deal with unforeseen macroeconomic and demographic shocks.

Contributory systems, any redistribution is limited to the members of the plan, under these conditions: (1) general revenues are not involved in the financing, and (2) the system does not create unfunded liabilities that need to be financed by the government (and therefore by generations of workers both inside and outside the system) in the future. Most of the DB-PAYG systems redistribute income across generations and between plan and nonplan members. Much of this redistribution can be regressive. Noncontributory systems, on the other hand, are usually financed by general revenues and tend to produce a progressive redistribution of income.

As for the effects on the labor market, payroll taxes increase the tax wedge (that is, the difference between the wages that workers take home
and employers’ labor costs) and can reduce employment levels and encourage informality. Depending on how contributions and benefits are linked, social security contributions (paid by employees) can also contain a tax element (implicit) that affects the tax wedge (see chapter 7).

In Latin America and the Caribbean, financing mechanisms are heterogeneous. All countries finance pensions through payroll taxes and social security contributions. These range from 31 percent in Brazil and Colombia down to 3 percent in Honduras. Rates for self-employed workers are normally much higher than those for employees, as they include the employer’s part as well as the employee’s. Self-employed workers’ need to assume both parts of the contribution can be a major disincentive for them to enroll. Almost all of the countries also draw on general revenues (the only exception being Paraguay), mainly to finance noncontributory programs (table 4.2). Regarding funding levels in the contributory system, all of the countries in the Caribbean have preserved PAYG systems, whereas on the mainland, half of the countries have PAYG systems and half have either FF systems or systems that mix elements of PAYG and FF systems. Among those countries with multi-pillar systems, the size of the pillars varies. In Colombia and Uruguay, the contribution rate is distributed more or less equally between PAYG and funded pillars (as was also the case in Argentina prior to the 2008 reform). In Mexico and Panama, on the other hand, the funded pillars receive two-thirds of the contribution rate.

Institutional arrangements. An important characteristic of pension systems in LAC is their fragmentation. In nearly every country in the region, contributory pension systems are designed to cover salaried workers in the private sector. Civil servants are sometimes included in the same program, but in other cases, their benefits are managed directly by a government agency and are paid from the general budget with no explicit contributory system. Some countries require the self-employed to contribute to the systems, although the enforcement of this requirement is usually weak. Several countries have also implemented noncontributory systems, which have a wide variety of different participation rules. Most countries have some type of benefit that offers a regular income transfer to workers who are partially or fully excluded from the pension system (see table 4.3).

This institutional fragmentation, however, is not accidental but the result of important historical developments. In the early years of the 20th century, countries in the Southern Cone started developing special schemes for particular occupational groups following the Bismarckian approach. Thus, beginning at their inception, these pension systems were highly fragmented, providing small privileged groups with generous benefits. In the 1940s, a second group of countries in the region adopted social security schemes influenced by the Beveridge Report, which was published in the United Kingdom in 1942. These countries established
Table 4.2 Financing Mechanisms in the Main Pension Systems

<table>
<thead>
<tr>
<th>Country</th>
<th>Contribution rates, main system (percent)</th>
<th>General revenue taxes used?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employee</td>
<td>Employer</td>
</tr>
<tr>
<td>Argentina</td>
<td>11.0</td>
<td>11.0–16.0</td>
</tr>
<tr>
<td>Bolivia</td>
<td>12.2</td>
<td>0</td>
</tr>
<tr>
<td>Brazil</td>
<td>8.0–11.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Chile</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>Colombia</td>
<td>7.8</td>
<td>23.3</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2.9</td>
<td>7.1</td>
</tr>
<tr>
<td>Ecuador</td>
<td>6.0–9.0</td>
<td>1.0–3.0</td>
</tr>
<tr>
<td>El Salvador</td>
<td>6.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Haiti</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Honduras</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>6.3</td>
<td>15.0</td>
</tr>
<tr>
<td>Panama</td>
<td>7.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Paraguay</td>
<td>9.0</td>
<td>14.0</td>
</tr>
<tr>
<td>Peru</td>
<td>13.0</td>
<td>0</td>
</tr>
<tr>
<td>Uruguay</td>
<td>15.0</td>
<td>7.5</td>
</tr>
<tr>
<td>RB</td>
<td>1.9</td>
<td>4.8</td>
</tr>
</tbody>
</table>


Note: n.a. = not applicable.

<sup>a</sup> Percentage of total contributions from workers participating in funded scheme.

<sup>b</sup> General revenue taxes should be used only for a transitional period.

National social security institutions with coverage limited initially to the main urban areas. Before these national systems were created, specific occupational regimes were established for the armed forces and civil servants. In the 1950s, 1960s, and 1970s, the Caribbean and Central American countries adopted retirement benefit schemes following the principles that govern defined benefit social insurance. Some of the Caribbean
schemes were established originally as provident funds. Over these three decades, some of the countries that had established social insurance extended coverage to rural areas. Finally, in the 1980s and 1990s, 10 countries adopted structural reforms that transformed their pension systems into schemes that partially or completely replaced defined benefit PAYG with defined contribution fully funded mechanisms. Meanwhile, noncontributory benefits targeted to the elderly poor were expanded in several countries.

Thus, although the Beveridge Report advocated the integration of social protection programs, there was little coordination in the management
of social security systems in LAC countries. The countries that first introduced pension systems (Argentina, Brazil, Chile, Costa Rica, and Uruguay) found themselves running a multiplicity of programs with no central coordination or even supervision. Chile had 160 programs of social insurance in 1979 (90 that offered old-age, seniority, and survivor pensions); Uruguay had more than 50 programs in 1967 (10 that offered pensions); and in Costa Rica, 10 independent pension programs for public employees were created even after the introduction of the national social security system. The next group of countries to adopt pension programs (Bolivia, Colombia, Ecuador, Mexico, Panama, Peru, and Venezuela) produced somewhat less fragmented systems (Panama had only one national program), though Colombia had more than 1,000 social insurance programs, Bolivia had 51 pension programs, Mexico had 7, and Venezuela had 13. The latest group of countries to adopt pension programs has the most unified systems. There is one program in Nicaragua, but El Salvador and Guatemala have three public pension programs and Honduras has seven. Extensive fragmentation has resulted in high administrative costs, as well as serious problems of control, supervision, and portability. In some countries, on the other hand (Argentina, Brazil, Chile, and Uruguay), the process of unification and standardization that took place in the 1960s, 1970s, and 1980s reduced the number of institutions, or established a central agency to take charge of the administration—or at least the coordination and supervision—of pensions, or did both.

In short, the result of more than a century of old-age income social protection in LAC is a variety of schemes with different objectives, forms of coordination, and degrees of effectiveness in terms of coverage and adequacy. Interest groups have played a significant role in creating and maintaining any rules that work to their advantage, even after the passage of reforms that were supposed to integrate systems. Initiatives aimed at coordinating institutions and schemes have occurred at different stages in various countries. For instance, in Argentina, major reforms unified and integrated the system in 1968 and 1994, and similar reforms were passed in Chile in 1979 to 1981 and in Bolivia in 1996. These cases show that integration is a long process, with advances usually made only in incremental stages.

There are also important differences in the administration and management of the region’s pension systems. In those countries that have preserved DB-PAYG, the system is completely administered by the public sector, although some countries (for example, Brazil and some Caribbean countries) have allowed supplementary privately administered occupational pension plans to develop. Those countries that introduced DC-FF systems, on the other hand, have a combination of public and private administration, while countries with multiple pillars have a variety of types of coordination.
Coverage and Adequacy

The coverage of the active population by contributory pension systems in the region varies according to income level, but it is generally low. As discussed in chapter 1, on average, only 30 percent of the labor force participates in mandatory pension systems in LAC, and low-income workers and those living in rural areas are less likely to be covered across the region. Also, there is a strong correlation between a country’s per capita income and its coverage rates. To a large extent, coverage rates are explained by the structure of the economy and of labor markets as well as the distribution of income, factors that are not significantly influenced by the pension system. Countries with a large agricultural sector or informal sector or with a large share of low-income or poor workers tend to have lower coverage rates (Forteza, Lucchetti, and Pallares 2009).

At the same time, several countries in the region have achieved high coverage of the elderly. To a large extent, this coverage seems to be the result of introducing noncontributory programs. Thus, some of the countries with the highest coverage rates (such as Argentina, Brazil, and Chile) are also the countries that have large noncontributory schemes. However, it is important to note—and not surprising—that total expenditures on pensions are a weak predictor of old-age coverage (see figure 4.1). Depending on the generosity of the benefits offered, countries can have

![Figure 4.1 Old-Age Coverage and Public Expenditures on Pensions](image)

Source: Authors’ calculations.
Note: Expenditures do not include those of funded systems.
large expenditures on contributory pensions even with low coverage. The correlation can be further weakened when the expenditures from fully funded systems are included.

Among those covered by contributory pension systems, the level of benefits varies widely across countries. This can be seen in figure 4.2, which shows the results of a simulation to estimate gross replacement rate (the ratio between the pensions and retirement and preretirement earnings) for average full-career workers with 40 years of contributions for various pension systems around the region, taking into account the recent reforms. Replacement rates vary between around 30 percent in Mexico to over 100 percent for some cases in Uruguay. The average replacement rate is around 70 percent. These replacement rates also vary considerably by level of income as a result of minimum pensions and ceilings on covered earnings.

In terms of how pension systems affect poverty, much seems to depend on the level of development of noncontributory systems. There is some evidence that countries with high coverage of the elderly have lower poverty rates (see panel a of figure 4.3). Also, high coverage of the elderly reduces relative poverty rates—that is, reduces the poverty rate of the elderly relative to the poverty rate of the rest of the population (see panel b.

**Figure 4.2 Gross Replacement Rates at Age 60**

[Diagram showing gross replacement rates at age 60 for various countries and pension systems.]

*Sources:* Forteza and Ourens 2009; World Bank Pensions Database (for Costa Rica, Dominican Republic, El Salvador); World Bank 2008 (for Brazil).

*Note:* LOS = length of service.
old-age income protection programs

203

of figure 4.3). In general, poverty rates are lower for the elderly than for other age groups in countries with well-developed pension systems such as Argentina, Brazil, Chile, and Uruguay. In countries with weaker systems, there is not much difference between old-age poverty rates and overall poverty rates. At the same time, there is only a weak correlation between public expenditures on pensions and old-age poverty rates. Much depends on the composition of these expenditures and, in particular, the size of the allocation to noncontributory programs because, as discussed below,

Figure 4.3 Old-Age Coverage and Poverty

Source: Authors’ calculations.
there is strong evidence to show that expenditures on these programs have contributed substantially to reducing poverty rates among the elderly (Bertranou, Solorio, and Van Ginneken 2002; Bertranou, Van Ginneken, and Solorio 2004).

Analyses suggest that old-age transfers have had a significant effect in reducing old-age poverty in LAC. Calculations from household survey data for Argentina, Brazil, Chile, and Uruguay show that the overall poverty rates are noticeably higher than old-age poverty rates. This difference implies that pension systems with high coverage help to eradicate poverty almost completely among the elderly (Gasparini and Tornarolli 2006). The largest impact is in Brazil, where only 3.7 percent of people older than 60 are poor, 47.9 percent of whom would be poor without their pensions (Gasparini and Tornarolli 2006). The next largest impact is evident in Argentina, where poverty among the elderly is only 4.5 percent, while without old-age social security transfers the rate would be 39.5 percent. Chile and Uruguay also exhibit very low poverty rates among the elderly (1.5 and 0.6 percent, respectively), but the pension systems contribute less to this outcome than in Brazil and Argentina (only around 20 percentage points). The impact of pension systems on poverty is lower in most other LAC countries (with the exception of Costa Rica, Mexico, Panama, and Venezuela), but this is mainly because their pension systems have very low overall coverage.

There is also evidence showing that the current noncontributory arrangements are not necessarily the most efficient way to reduce poverty. In the case of Brazil, for instance, most researchers conclude that pension transfers, especially the rural pension program, have been a key factor explaining the substantial decline in poverty rates. These transfers also help to explain why Brazil has one of the lowest poverty ratios in the old-age population in Latin America. At the same time, researchers have concluded that Brazil’s redistributive pension programs are not as cost-effective as they could be and that poverty would decline further if resources were reallocated to better-targeted programs. The proportion of old people in poor families is small, which implies that noncontributory pensions may not be the best way to reduce general poverty, given that most of these pension benefits are not shared within families. Despite large expenditures on redistributive pensions, poverty ratios among children and teenagers in Brazil remain higher than the LAC average (World Bank 2007a).

Redistribution and Incentives

Public pension systems usually redistribute income both within and between generations. Within-generation distribution can happen if the system in question has progressive contribution or benefit rules (for example,
if higher-income workers have proportionally higher contributions, as in Colombia, or if benefits are calculated according to a declining replacement rate, as in Uruguay). Within-generation distribution can also occur if the system has minimum benefits or taxable income ceilings for contributions. Of course, if some or all benefits are financed from sources other than contributions (such as general revenue taxes), then the distributive effect of the system will depend on the distributive effects of these taxes. Between-generation redistribution is more common in PAYG systems. Depending on the system’s design, new cohorts of plan members tend to receive lower rates of return on their contributions than older cohorts. Also, when pension liabilities cannot be financed out of future contributions (as in insolvent PAYG systems), resources are being redistributed from future generations (including low-income workers outside the pension system) to the current generation (including high-income workers).

Redistributive arrangements, whether implicit or explicit, can affect the behavior of individuals and groups. Pension schemes that involve large transfers from active workers to retirees can constrain labor force supply and encourage early retirement. Schemes that require large contributions from employers and employees can reduce labor demand and encourage informality. However, policy makers should not simply reject redistributive arrangements, since well-designed schemes can minimize the impact of negative incentives. In some cases, redistribution can actually improve labor market outcomes, including reducing informality.

Measuring redistribution. Distributive effects are usually difficult to measure empirically. Problems with measurement include a lack of reliable data, frequent changes in regulations that make it very difficult to compare the outcomes of different generations, and significant differences between the rules and regulations of pension systems and what actually happens in practice. Nevertheless, various authors have made conceptual and methodological contributions toward measuring redistributive effects. Some of the early analysis in the late 1970s showed that the combination of low coverage (with a bias toward excluding the poor, the unemployed, and the informally employed) and the use of general revenue funds to finance the systems resulted in regressive distribution (Mesa-Lago 1978). In models for Argentina and Brazil, analysts found evidence of intergenerational transfers (toward older generations), as well as a small regressive effect within generations in Argentina and a progressive effect (even after differences in mortality were considered) in Brazil (Rofman 1995a, 1995b).

Some recent work has found evidence of regressive redistribution in funded systems. By estimating the “money’s worth ratio” implicit in Chile’s retirement annuity market, Rocha and Thorborn (2007) found that, for example, higher-income retirees receive a better deal than those
who retire with a lower balance in their individual account. This finding suggests that, implicitly, the savings of low-income workers subsidize the pensions of high-income workers, although the differences do not seem to be significant.

There is also some evidence that redistribution can be regressive in the case of PAYG systems, particularly when life expectancy differences are taken into account. Redistribution can be measured by the implicit internal rate of return (IRR) on the contributions that different individuals receive. Calculations for some of the LAC countries have shown a considerable degree of implicit redistribution, with IRRs varying by income level but in a nonlinear way (Forteza and Ourens 2009). Thus, in countries such as Brazil, Ecuador, and Paraguay, low-income workers receive lower IRRs than middle- or high-income workers. Workers with steep wage histories (that is, whose earnings increased rapidly during their work history) also receive higher rates of return than those with flat wage histories (see panel a of figure 4.4. At the same time, a few extra years of life expectancy can make an important difference in most systems analyzed (see panel b of figure 4.4). Low-income workers, who might be expected to have shorter life expectancies, would then be penalized. Yet calculations for several Caribbean public pension schemes have demonstrated that most systems offer higher IRRs to workers with lower lifetime incomes than to workers with higher lifetime incomes (World Bank 2010). For example, in Guyana, workers earning a quarter of the average insurable wage receive IRRs more than 8 percentage points higher than those earning four times that much. In this case, the pensions of the poorer workers would be more than five times higher relative to their contributions than the pensions of the better-off workers.

Assessing incentives. The impact of the pension system on incentives is also difficult to measure. In most cases, it is possible to assess whether a given negative incentive exists. For instance, if individuals who retire late receive lower IRRs on their contributions, then it would appear that an incentive to take early retirement exists. Clearly, from a policy point of view, the key question is how empirically relevant the incentive effect is and whether it needs to be corrected. In particular, policy makers need to find out whether its cost is reasonable relative to other social benefits. Nonetheless, there are instances—as in some cases of incentives for early retirement—where the existence of the incentive is difficult to justify on social grounds (in other words, when the distortion is ad hoc), and the distortion can be corrected without affecting social benefits. This section discusses the effects of the pension system on the labor supply, retirement age, informality, and preretirement salaries and incentives to manipulate contributions.

There is some evidence showing that pension systems reduce labor force participation rates among older workers. In countries with relatively
developed social security systems such as Argentina, Chile, and Uruguay, the employment rate of the elderly is the lowest in the region. In these countries, the average share of older people (aged 60 and over) who are employed is around 25 percent (the lowest being Uruguay with 17 percent). In contrast, the highest rates can be seen in poorer countries with no extended pension systems, in other words, those with low pension systems.
coverage such as Bolivia, Guatemala, Haiti, Honduras, and Paraguay. Figure 4.5 depicts the negative relationship between the labor force participation of the elderly and pension coverage for LAC. Clearly, there are other factors that explain lower participation rates. For instance, although Bolivia and El Salvador have similar contributory pension coverage, their old-age labor participation rates differ by almost 25 percentage points. Similarly, countries with similar participation rates for the elderly such as Brazil and Panama (about 30 percent) have large differences in pension coverage, with Brazil’s coverage almost double that of Panama. Nevertheless, the correlation between coverage and labor force participation is not negligible.

Some data also show a negative correlation between access to a pension and labor force participation. For instance, there is evidence in the case of Brazil that receiving a pension significantly reduces the marginal probability of elderly people being in the labor force (Gasparini and Tornarolli 2006). Having other sources of nonlabor income also reduces this probability, but this effect is less important because pensions represent the main source of nonlabor income in many countries. In addition, in most cases, having other household members who receive income decreases the likelihood of elderly people being in the workforce, presumably because these household members provide them with economic support.

In the case of Brazil, there is also evidence showing that generous pension transfers can considerably reduce the labor supply of adult workers (de Carvalho Filho 2008). As a result of the 1991 reform of the rural pension, there was an increase of 25.4 percentage points in the number of rural workers aged 60 to 64 receiving pension benefits. Significantly, the

---

**Figure 4.5 Old-Age Coverage and Labor Force Participation**

![Figure 4.5](image)

*Source: Authors’ calculations.*
proportion of rural workers aged 60 to 64 who “did not work in the week of reference” increased by 12.56 percentage points, a greater increase than for urban workers of the same age during the period immediately before and after the reform. In addition, “total hours of work in all jobs” for rural workers of the “affected age” decreased relative to those for urban workers by 5.8 hours per week during the period immediately before and after the reform.

In general, however, the effects of pension transfers depend on how the program is designed (including the size of the transfer) and on the local context. In the case of South Africa, for instance, most recent studies have shown that noncontributory pensions have actually increased labor supply. This increase occurs because increasing the income of the elderly allows other adult members in the household to search for jobs and even migrate.

Pension systems also affect retirement ages by influencing incentives to delay or advance retirement. There are various factors that ultimately influence retirement decisions, including minimum and mandatory retirement ages and vesting periods. However, benefit formulas play an important role as well by affecting the value of the pension at different retirement ages (Bodor, Robalino, and Rutkowski 2008). Delaying retirement imposes both costs and benefits. The costs mainly consist of delaying “leisure.” The benefits, on the other hand, include maintaining higher earnings and making possible a larger pension in the future. Hence, depending on how their pensions grow as a result of their additional contributions, individuals have more or less of an incentive to delay retirement.

In Chile, for instance, judging by the large number of early retirements taken in the first years of the new system, it seems that the penalties being applied were not tough enough. Workers could retire early as long as their accumulated savings provided for a replacement ratio of 50 percent or higher and a pension that was worth 110 percent of the minimum pension. Studies have shown that by 2003, 18 percent of women retired early and that their average retirement age was 54. In turn, 60 percent of men retired early with an average retirement age of 56. Therefore, women were taking retirement, on average, six years early and men were doing so nine years early. On average, each year of early retirement costs 7 percent of a pension, so workers have been retiring with significantly smaller pensions than policy makers had originally expected. While this trend may reflect a strong preference by older workers in Chile to retire early, it was also heavily influenced by the intense marketing strategy launched by the sales forces of the annuity providers. To reduce this supply-induced demand for early retirement, a new law was passed in 2004 that increased the entitlement requirements. It is also possible that workers in Chile retired early to mitigate unemployment risks, particularly after the 1999 Asian crisis, when unemployment increased considerably among workers older than 50. The government responded to increased unemployment by
introducing unemployment insurance in 2002. As a result, interactions between different social protection programs became an issue; these interactions are discussed below.

In the case of PAYG systems, there is also evidence that, in many countries, provisions for early retirement are too generous and that delayed retirement is often penalized. A useful indicator for measuring the extent of these implicit subsidies and taxes is again the internal rate of return on contributions. In DC schemes, annuities in the pay-off phase generally pay the same IRR regardless of the worker’s age at retirement. In DB systems, however, workers who retire early often receive higher IRRs than those who retire late (see figure 4.6).

Clearly, even when benefit formulas are actuarially fair, individuals may still prefer to retire early. This preference has been demonstrated

---

**Figure 4.6 Change in Internal Rates of Return between the Ages of 60 and 70**

![Bar chart showing the change in internal rates of return between the ages of 60 and 70 for various countries and retirement systems.](image)

*Source: Forteza and Ourens 2009.*

*Note: LOS = length of service.*
in several population and affiliate surveys that collected information in countries like Chile, where actuarially fair benefits dominate the pension landscape, but early retirement is widespread. In general, other things being equal, early retirement is positively correlated with the likelihood of working after retirement, with formal employment during the worker’s active life, and with a preference for future versus present consumption. It is negatively correlated with preferences for consumption over leisure and aversion to risk. Thus, some have argued that in high-income countries, where aging is reducing the size of the working-age population, governments should consider subsidizing delayed retirement by implicitly increasing the IRR on contributions (see Robalino, Vodopivec, and Bodor 2009).

The design of pension systems also affects informality and contribution densities. Recent studies have argued that informality is not always the result of exclusion from the formal sector and that some workers, after assessing the expected costs and benefits, deliberately choose informal work (Perry et al. 2007). As discussed in chapter 7, the social insurance system can distort these relative benefits and costs and thus promote informality, which also implies reducing contribution densities. Other things being equal, pension systems give workers an incentive to choose informality if (1) contribution rates are perceived as unaffordable or as high relative to benefits (in other words, there is an implicit tax), or (2) contributing to the pension system reduces other forms of retirement income transfers (in other words, there is a positive marginal tax rate on minimum pension guarantees or social pensions). This issue has not been analyzed in depth in most countries. However, where such analyses have been done, they have yielded some evidence that the pension system in question may indeed contribute to reduced contribution densities.

Behavioral models show that minimum pension guarantees offered as “top-ups” on the contributory pension can, in theory, reduce contribution densities. If governments choose to “top up” contributory pensions when they fall below a minimum level, then any increase in the contributory pension reduces the subsidy by the same amount. In essence, there is a 100 percent marginal tax on additional pension income. As a result, low-income workers likely to retire with pensions close to the minimum have no incentive to make further contributions at the margin, because any additional contributions would not increase their expected pensions. Some simulations based on behavioral models have shown that introducing a minimum pension in the form of a top-up (in other words, 100 percent effective marginal tax rate) might lead to significant reductions in contribution densities and retirement ages depending on the level of the transfer relative to average earnings (Piggot, Robalino, and Jimenez-Martin 2009). For instance, other things being equal, a pension equivalent to 42 percent of an individual’s earnings (as in the case of the average worker in Brazil) would reduce contribution densities by
up to 30 percentage points and the retirement age by up to seven years. A more modest minimum pension, equivalent to 25 percent of average earnings, would reduce contribution densities by less than 10 percentage points and retirement ages by less than two years in most cases. The simulations also show that moving away from top-ups toward a system with gradual taxes would reduce the marginal tax rate and might increase contribution densities. At the extreme, a uniform benefit—meaning that the marginal tax rate would be zero—might increase contribution densities but would make the aggregate cost of the transfer larger and possibly fiscally unsustainable.

A recent study argued that, in Chile prior to the 2008 reform, the design of the minimum pension guarantee partly explained the observed low contribution densities (Valdés-Prieto 2008). In those days, the poverty prevention pillar in Chile was based on two components: a means-tested assistance pension (the Social Assistance Pension Program, or PASIS) and the minimum pension guarantee (MPG) for individuals who contributed for at least 20 years to the individual capitalization scheme but were not able to finance a minimum amount for their retirement. The PASIS gave low-income workers an incentive to contribute only to the point where the contributory pension surpassed 50 percent of the minimum pension. After this point, the PASIS dropped to zero, becoming, in essence, a very large marginal tax on additional pension income. Similarly, the MPG gave workers an incentive to contribute only until they reached the point of eligibility (20 years). Additional contributions thereafter would have not increased the value of the total pension (contributory pension plus subsidy) paid by the contributory system. This arrangement implied a 100 percent marginal tax on additional pension income and gave workers a strong incentive to take informal sector jobs (despite the potential loss of productivity) in order to save mandatory contributions to the pension system and avoid paying implicit taxes on pension subsidies. Although, to date, there have been no rigorous impact evaluations of this effect, general statistics suggest that it was significant. The coverage of the PASIS increased from 7.7 to 18.6 percent between 1992 and 2003, a period during which the value of the MPG and the PASIS increased considerably relative to economy-wide average earnings.

In Brazil, there is also some evidence that the pension system affects contribution densities (and retirement ages), although the effects depend on income levels (Robalino, Vodopivec, and Bodor 2009). For those with incomes that are more than 75 percent of the average, the pension system seems to reduce contribution densities. This reduction occurs because high implicit rates of return on contributions give workers an incentive to delay retirement but at the same time reduce the incentive for them to take formal sector jobs. In other words, the higher rates of return have an income effect that allows workers to contribute less (and in fact save less)
for retirement. Among low-income workers (those with earnings equal to or below 50 percent of the average), there is more variation in responses. In around one-third of cases, retirement ages fall and contribution densities increase. For the majority, contribution densities remain more or less unchanged and retirement ages increase.17

In general, how the pension system in a given country affects informality depends to a greater or lesser extent on the degree of integration between formal and informal labor markets in that country. In (low-income) countries where labor market segmentation is prevalent and workers do not tend to move from one sector to the other, the effect of old-age income protection transfers on participation in the formal sector is limited. In countries with more integrated labor markets (middle-income countries), where workers are free to choose between the formal and the informal sectors, there are likely to be more incentives for workers to choose informality. In addition to the cases of Chile and Brazil discussed here, it has been suggested that in Mexico noncontributory arrangements also give workers an incentive to choose informal work (Levy 2008).

Finally, the design of pension systems can also affect compliance with payment of contributions. Although this effect is difficult to measure, DB pension formulas that do not include all salaries in the calculation of the pension give workers and employers strong incentives to manipulate wage reports. This type of formula breaks the link between contributions and benefits. If pensions are calculated based only on the last few salary levels (say the last five), then workers have little incentive to report the full level of their salaries early in their careers. Younger workers, in collusion with their employers, may therefore underreport their wages and thus avoid paying the full amount of their contributions. Meanwhile, older workers have a strong incentive to inflate the value of their wages just prior to their retirement. In general, the shorter the period of earnings used in determining benefits, the stronger the incentive for such manipulation (Barr and Diamond 2006).

Financial Sustainability

Several factors have historically put pension systems in the region at risk of becoming financially insolvent and requiring increasing transfers from central government or changes in benefit formulas or eligibility conditions. In fact, one of the main reasons why structural pension reforms were needed in Chile in 1981 and in other Latin American countries in the 1990s was the growing pension liabilities of PAYG schemes. The main problems underlying this lack of financial sustainability were inadequate funding rules, the failure to make the necessary parametric adjustments to maintain the financial balance, the widespread evasion of social security contributions, low returns on the investments of reserve
funds, high administrative costs, and excessively generous defined benefit rules (ECLAC 2006).

Today, pension expenditures constitute a significant outlay regardless of the type of financing mechanism used. Public spending on old-age income security programs varies from around 3 percent of gross domestic product (GDP) in countries with smaller programs (such as Colombia, Peru, and the Central American countries) to as much as 10 to 12 percent in countries with large systems (such as Brazil and Uruguay). This spending grew during the 1980s and early 1990s and has been stable since then. Interestingly, there is no clear differentiation between spending in countries that have introduced a funded scheme and spending in those that continue to have PAYG schemes. Of course, countries with funded schemes ought to be able to reduce their expenditures over time, but the process is slow and will probably take many years. For example, more than 25 years after its original reform, Chile still spends more than 5 percent of its GDP (financed by general revenue funds) on pensions, including benefits from the old scheme, minimum benefit guarantees, recognition bonds, and special programs such as the military pension.

The structural reforms that introduced a funded component have tended to increase long-term fiscal solvency, but short-term fiscal pressures have caused some problems for governments. First, in some cases, inadequate planning (and management) of transition costs put excessive short-term pressure on national treasuries. These problems were exacerbated by the continuing need to finance certain special groups of beneficiaries in some countries, such as the military in Chile and Bolivia and civil servants in Peru and Mexico. In some cases, countries have managed to control some of the costs of these special programs by introducing parametric reforms such as increases in the age of retirement, vesting periods, and higher contribution rates, and by allocating earmarked taxes to finance social security. However, these adjustments have often been ad hoc or discretionary and represent only temporary fixes.

Most PAYG systems that remain have sustainability problems, and are transferring liabilities to future generations. This process can be seen by looking at the IRR on contributions. In general, PAYG systems that pay an internal rate of contributions above the expected long-term growth rate of the economy (3 to 4 percent) may face sustainability problems in the future (Robalino and Bodor 2009). Unfortunately, these rates are paid by most nonreformed DB-PAYG systems in the region, and particularly in the Caribbean (figure 4.7). The implication is that these systems are accumulating pension liabilities that cannot be covered by future contributions revenue. If there is no default on payments, future generations, whether they are covered or not, will have to pick up the bill.

At the same time, policy makers need to consider the financial sustainability of noncontributory programs. As discussed in the next section, these programs have been expanding in response to the limited coverage of
contributory systems. So far, most of the programs seem affordable, in part because the benefits that they offer are modest. Nevertheless, the aging of the population is expected to increase the costs of these programs. Their long-term financial sustainability will therefore depend on how the level of the transfers and eligibility conditions evolve over time. These issues are discussed in the next section.

A Framework for Expanding Coverage

As discussed in chapter 1 and earlier in this chapter, the coverage of pension systems across the region remains low. On average, less than 40 percent of the labor force is covered by the mandatory systems. At the same time, only 4 out of the 17 countries for which data are available in the region provide protection to more than 50 percent of their elderly through a contributory pension system. In 9 countries, coverage is less than 25 percent, which reflects the inability of these programs to fulfill their original goal—to protect the incomes of the elderly.

To a large extent, low coverage rates reflect the structural characteristics of the LAC economies, including large informal sectors, small industrial sectors, and large shares of the population that can be classified as low-income or poor and therefore cannot afford to enroll in standard contributory systems. Nonetheless, public pension systems—and social insurance
programs in general—have failed to adapt to these structural realities. When they were created, policy makers made the implicit assumption that the formal sector would naturally expand with the progress of economic development and rising per capita incomes. Unfortunately, this expansion has not happened.

In acknowledgment of this problem, policy makers in several countries are considering ways to expand access to pension systems. These can be grouped into two categories: (1) those focused on improving incentives to enroll in the contributory system using both “carrots” (better services and administration, simplification of rules, and lower implicit taxes or contribution subsidies) and “sticks” (better regulation and enforcement); and (2) those designed to overcome the constraints faced by low-income individuals and the poor by creating noncontributory systems—or, more generally, budget-financed retirement income transfers. Both types of policies are discussed in this section.

**Policies to Expand Participation in Contributory Systems**

Participation rates in contributory systems are especially low in the region. Uruguay, Costa Rica, and Chile are the only countries where more than 60 percent of the labor force contributes regularly to the pension system. Coverage rates are even lower for lower-income groups. Only Uruguay and Costa Rica have coverage levels higher than 50 percent among workers in the lowest income quintile, and 12 out of 18 countries for which data are available have rates below 10 percent.

Over the past 20 years, several initiatives have been taken with the aim of expanding coverage but without sufficient continuity and proper evaluations. These initiatives have tended to involve changing enforcement practices, relaxing rules and requirements, and modifying incentives. Unfortunately, these policies have usually been dropped when their impact is deemed insufficient, but without any formal impact evaluation. In Argentina, for example, multiple incentives programs have been introduced and then closed since the 1980s; Colombia’s Solidarity Fund was similarly abandoned. It is possible that the apparent lack of success of these policies may have resulted from the combined effects of adverse macroeconomic and institutional trends.

The main challenge, not surprisingly, has been to ensure that medium-sized and small employers, as well as workers in the agricultural sector, pay their contributions. The enforcement of social security contributions from large employers is usually adequate because these firms are more visible than smaller firms and have fewer chances to evade taxes. However, there are two pervasive problems with small employers, self-employed workers, and casual workers in the agricultural sector. The first problem is that inspections to check if these employers and workers are making their mandatory contributions are too expensive in relation
to the amount they are likely to yield. The second problem is that the productivity levels of many small employers are too low for them to be able to afford the mandatory contributions and the associated transaction costs (see also chapter 7). Thus, enforcement campaigns are usually more successful during positive macroeconomic cycles when firms are making more money and can afford to make the required contributions, and are less successful when macroeconomic trends are weak. The experience in Uruguay and Argentina during recent years, when stronger enforcement strategies were applied in a context of macroeconomic growth, seems to support this assertion.

Several governments in the region have adopted policies to simplify administrative procedures (mostly to facilitate enrollment) and to reduce contribution rates, but results have been mixed. The objective of these policies has been to reduce transaction costs and payroll taxes, particularly for small firms and independent workers. A good example of these policies is the *monotributo*, a flat monthly payment required from small firms and self-employed workers in lieu of income taxes and social security contributions, which has been instituted in several countries in the region, including Argentina, Brazil, and Uruguay. The success of this strategy has varied. While many contributors that would otherwise have stayed in the informal sector joined the program, there seem to be cases of leakage—that is, some mid-size firms that could and should contribute under the regular system take advantage of the program to reduce their total tax payments. The other problem is that reducing contribution rates without changing benefits generates unfunded liabilities within the system that threaten its financial sustainability. In addition, the type of redistribution that this policy produces is implicit and nontransparent.

A parallel approach has been to introduce explicit or implicit incentives for workers and employers to contribute to the pension systems. For example, in the 1990s, many policy makers argued that the introduction of DC fully funded schemes would give workers a strong incentive to contribute, since these contributions would be directly linked to benefits and since workers would feel a sense of ownership of funds. In some countries (for example, Colombia and Mexico), the government offered to match the pension contributions of low-income workers with public funds in an attempt to attract them to participate in the system (see the following section for more detail); but again, none of these countries has succeeded in dramatically increasing coverage. In fact, a look at the coverage level of contributory programs in the region in the past 15 years shows that participation has been very stable, declining in times of economic hardship and increasing when the economy has flourished. These trends are similar for most countries regardless of the specific policies that they have adopted to increase participation in the contributory schemes.

The lesson seems to be that improving incentives to enroll in the contributory pension system will not be sufficient to close the coverage gap.
If well-implemented and coordinated, the three approaches mentioned in this section (better enforcement, lower transaction costs, and a closer relation between contributions and benefits) can have some impact, particularly during positive economic cycles. Nevertheless, their potential to “solve” the coverage problem is limited. One important constraint is the fact that, in most countries of the region, there are large population groups with limited or no savings capacity. As discussed in the next section, this means that there is a need for well-designed noncontributory programs.

**Policies Based on Budget-Financed Retirement Income Transfers**

A broad consensus seems to be emerging on the role that budget-financed retirement income transfers can play in closing the coverage gap. These transfers can take place upon retirement, upon reaching a certain eligibility age, or during the worker’s active life. In the literature, the first two cases are referred to as ex post interventions, and the last as an ex ante intervention (see figure 4.8). Among ex post interventions, there are two main types: (1) transfers that are not linked to a worker’s contribution history, often called social pensions; and (2) transfers that guarantee a minimum pension within a mandatory contributory pension system, most often conditional on a given contribution history or vesting period. Social pensions can be universal or means tested. Universal pensions—also referred to as basic pensions—are paid to all individuals who meet a minimum eligibility age, sometimes with restrictions on residency. Means-tested pensions are also conditional on a maximum level
of income (pension income or a broader definition) or asset holdings, or both. Minimum pensions are always tested on pension income or, more precisely, on the value of the contributory pension. Finally, among ex ante interventions, the most common programs are matching contributions. These are transfers that are given to individuals conditional on their contributions to a given pension plan.

Most countries in the region have had some type of retirement income transfer for years. For instance, all LAC countries with contributory systems have minimum pension guarantees. Several have, in addition, adopted universal or means-tested social pensions. Mexico and Colombia also have experimented with matching contributions.

However, several design problems have reduced the effectiveness of the programs. The transfers have been usually very small, and the programs have had unclear access rules. Only in recent years have these programs begun to operate as formal social protection systems with more transparent regulations regarding access and benefits. Moreover, the programs have often been designed and implemented with no reference to or coordination with the contributory pension schemes. This fragmentation distorts incentives for beneficiaries and can increase costs because of overlaps in coverage. Some programs, such as the Brazilian social and rural pensions program, are fiscally costly, and there are concerns about its effects on labor markets (see above). Finally, there is also the question of whether it is efficient and equitable to subsidize all pensions ex post (in other words, use social pensions) or whether savings can be achieved if subsidies are provided ex ante (in other words, through matching contributions), at least to those individuals with some savings capacity.

This section discusses options for designing retirement income transfers to expand the coverage of the pension system, using as a reference the experiences of three countries in the region—Chile, Bolivia, and Argentina.

Chile’s integrated and well-targeted income transfer for old age. What makes the case of Chile interesting is that, before the reform, the system was already effective and highly integrated, but policy makers wanted to expand its coverage and increase its impact in a carefully planned way. Before July 2008, there were two main programs dealing with old-age poverty in Chile—the minimum contributory pension guarantee, which provided a floor for pensions in the case of individuals who contributed for at least 20 years, and the Social Assistance Pensions Program for poor individuals with no pension entitlements. A strong motivation behind the July 2008 reform was concern over declining contributory coverage that was being replaced by an increase in noncontributory coverage. In fact, according to data from the CASEN (Encuesta de Caracterización Socioeconómica Nacional) survey, contributory coverage for people aged 65 and over had declined from 67.1 percent in 2000 to 63.7 percent in 2006.
(Rofman, Lucchetti, and Ourens 2008). To compensate for this significant decline, noncontributory benefits had increased steadily (see figure 4.9).

The 2008 reform replaced the minimum pension and the social assistance pension program with a single means-tested pension. The new scheme guarantees that all elderly people in the three lowest income quintiles receive a basic pension, regardless of their contribution history. This new program provides old-age and disability subsidies financed by general revenues and will be implemented gradually. Thus, during the first year, those in the lowest two quintiles will be covered. Individuals who have made no contributions are entitled to the Basic Solidarity Pension (PBS) at age 65 if they fulfill the income and residence requirements. Individuals who made contributions but are going to receive a pension below a certain threshold are also entitled to the Pension Solidarity Complement (APS) if they meet the same income and residence requirements, but the PBS is reduced in proportion to the level of the contributory pension.19

The new system is expected to increase both incentives for workers to join the formal sector and contribution densities.20 The integrated approach reduces incentives in favor of informal work because contributions are not taxed at a 100 percent marginal rate (see previous section). The new system also guarantees that individuals in the first three quintiles will receive a pension at least equivalent to the PBS, regardless of where they work or whether they contributed. If the benefits had been designed as a top-up (as was the case with the old minimum pension), low-income

---

**Figure 4.9 Chile’s Contributory and Noncontributory Benefits, 1990–2009**

![Bar chart showing Chile's contributory and noncontributory benefits from 1990 to 2009.]

**Source:** Authors’ calculations based on Rofman, Lucchetti, and Ourens 2008.

**Note:** Data for 2009 are projected; the diagonal division of the bar reflects the tapered withdrawal of noncontributory benefits under the new rules.
individuals would have had a strong disincentive to contribute, since their retirement income would not have increased with the number or amount of their contributions. However, with the design that was chosen, total old-age pensions increase monotonically with self-financed saving. In other words, every dollar a worker saves always increases his or her retirement income.

**Bolivia’s universal income transfer.** Bolivia adopted a different approach that focused exclusively on achieving universal coverage but ignored issues related to integration and overlaps in coverage. In 1996, motivated by very low levels of coverage in the contributory system, the government of Bolivia introduced a universal pension for the elderly. Initially the program was to be financed through a funded scheme, with assets consisting of stocks of partially privatized utilities and oil companies. While the program has gone through several changes in the last decade (including its targeting mechanisms, financing mechanisms, and name), the principle of achieving universal access for the elderly has been maintained.

The universal character of the program has allowed Bolivia to expand coverage very rapidly. During the 1990s, less than 20 percent of the population aged 65 years or older was receiving a pension. By 2000, however, this share had increased to 70 percent. The system was reformed in early 2008 to include all those over the age of 60 and to increase the level of benefits. It is estimated that, today, close to 90 percent of the elderly in Bolivia receive a basic pension (see figure 4.10). The associated costs of the pension system represent 1.3 percent of GDP.

**Figure 4.10** Bolivia’s Contributory and Noncontributory Benefits, 1990–2009

![Figure 4.10](image)

*Source:* Author’s calculations based on Rofman, Lucchetti, and Ourens 2008.
However, the cost raises concerns about the sustainability of the program and its impact on poverty. As shown in figure 4.10, since no restrictions were imposed on those already receiving benefits from the contributory pension system, a majority of contributory pension beneficiaries ended up with overlapping protection. This overlap would be fine if it simply benefited those with the lowest earnings or if the government faced no budgetary constraints. However, given that a substantial share of the subsidies benefits middle- or high-income individuals, and that the government does face budgetary constraints, the universal transfer may not be reducing poverty as effectively as targeted programs would—particularly if, due to administrative problems, the poor are less likely to access the “universal” scheme. Such access problems certainly seem to be happening in Bolivia. Nearly all the beneficiaries of contributory pension schemes have been receiving benefits from the universal scheme, but one-tenth of the elderly have not been receiving those benefits, even though they are qualified.

A recent study has argued that well-targeted programs can be more equitable and more effective in reducing poverty than universal programs in middle- and low-income countries operating under fiscal restraints (Grosh and Leite 2009). The main argument contends that, when a government is on a fixed budget, a universal program can provide only a minimal transfer for all, and this transfer may not be enough to pull the poorest among the elderly out of poverty. Therefore, in this situation, society would be better off targeting the program so that the larger transfers go to fewer individuals—those with the lowest incomes—to ensure they do not fall into poverty. The same study argued that an effective mechanism for targeting the low-income elderly is a proxy means test, which has been used very successfully in conditional cash transfer programs (see chapter 6). The current version of the proxy means test has the potential to produce large exclusion errors when applied to the elderly, but the study argues that this problem can be addressed by refining questionnaires and estimation methodologies.

Argentina’s quasi-noncontributory system for today’s elderly. Since 2006, Argentina has also moved toward a de facto universal noncontributory program, but in an ad hoc way that seemed not fully thought through. By the early 1990s, Argentina had a large contributory program that reached almost 80 percent of the elderly. It also had a very small noncontributory scheme that reached around 3 percent of the elderly. Coverage in the contributory program fell throughout most of the 1990s as a consequence of deteriorating labor market conditions and stricter vesting rules in the program. Meanwhile, the noncontributory scheme had a quota system that limited the amount of the benefit that could be paid regardless of the number of qualifying applicants, an arrangement that created a queue to access the program. These restrictions were lifted
in the early 2000s, and the number of beneficiaries nearly doubled by 2006 (see figure 4.11).

A major reform was introduced in 2005 as part of a generous debt relief program for workers who were in arrears on their contributions. More than 2 million men and women older than the minimum retirement age were allowed to apply for contributory benefits regardless of their past contributions and regardless of their current status (in other words, a survivor’s pension beneficiary could also apply). Thus, anyone older than the retirement age could immediately apply for a benefit by claiming self-employed years for which contributions were still owed. The elderly person would then be allowed to pay off pending contributions in installments that could never be higher than 20 percent of the benefit and that would be automatically subtracted from the monthly pension. In practice, the program allowed everyone older than 65 (or 60 in the case of women) to retire. By mid-2009, almost 90 percent of the elderly population was receiving a pension benefit.

The end result is a system that has completely blurred the line between contributory and noncontributory pensions and has created implicit subsidies that are potentially regressive. Thus, while some beneficiaries contributed throughout their entire working life, others never contributed at all (thus, their benefits could be considered to be noncontributory), and many contributed only in some years and completed the vesting period through this program. All three groups may include low- and high-income workers,

---

**Figure 4.11** Argentina’s Contributory and Noncontributory Benefits, 1990–2008

![Bar chart showing percentage of contributory, noncontributory, and both types of benefits from 1992 to 2008.](chart)

*Source:* Author’s calculations based on Rofman, Lucchetti, and Ourens 2008.

*Note:* Data for 2008 are represented with shading to indicate that separating contributory from noncontributory financing is not possible.
and the distributive impacts of this reform are very difficult to assess, but it seems likely that some implicit transfers are going from low-income workers who contributed to those who did not. The program has also created a form of moral hazard against formal sector participation and contributions because it suggests that the government will intervene and grant retirees a pension whether they contributed or not during their working lives. More importantly, the program has created a system in which those who contribute can end up being taxed by those who do not. Finally, because entry to the program was open only for a limited time (until mid-2007), it allowed most potential beneficiaries to access the pension system but did not solve the problem of future generations who will reach retirement age without the required minimum years of contributions.

Policy Insights

Noncontributory programs can play a very important role in reducing the coverage gap, particularly where this gap is large. All countries in the region that now have extensive coverage of the elderly have relied on noncontributory arrangements. Bolivia is a very good example of how quickly coverage can expand through this type of program. Reforming contributory systems can expand access to some extent but is unlikely to close the coverage gap.

There is no invariable recipe for designing noncontributory systems; policy makers need to make choices in response to local conditions. Two important factors are how far a country is from its desired coverage level and what institutions are available to move the country toward that level. In the case of Chile and Uruguay, where the coverage of the elderly by the contributory system was already high, using targeted programs to fill the gap might be appropriate. Countries with high coverage also tend to have higher levels of income and more integrated formal and informal markets than the regional average, and thus tend to be most concerned about setting the right labor market incentives. In Bolivia, where the gap in the coverage of the contributory program is large, a universal benefit system might be a reasonable response, though the benefits would necessarily have to be low to ensure sustainability, and this restriction curtails their impact on social welfare. Even the Argentine approach, granting contributory benefits to those who did not contribute, might be a possibility if the program focused on current retirees (not future generations) and if there is certainty that those currently not covered are the lowest earners.

There are, however, a few principles that apply in most cases.

Integration. Whatever strategy is adopted to increase coverage, the design and implementation of reforms will be more problematic if a system is fragmented. Integrating contributory and noncontributory components helps to expand coverage by facilitating access to benefits. Some countries
have started moving in that direction in recent years. For example, Chile’s reform is a very interesting example of an effort to expand coverage in an integrated way; the new model provides a continuum of benefits from those that are fully contributory (and completely self-financed) to those that are fully noncontributory (and completely financed by general revenue taxes). Costa Rica has also integrated contributory and noncontributory pensions. While these experiences are not necessarily replicable in every country in LAC, this approach to integration is an interesting practical example at a time when other countries in the region are analyzing their policy options (see chapter 7).

Transparency in the allocation of old-age subsidies within and outside the contributory system. An issue related to integration is the need to improve the management of implicit and explicit subsidies both within and outside the contributory system. Because public resources are limited, it makes sense to focus the redistributive power of the pension system on those individuals who need the benefits most. This focus implies ensuring that benefits from the contributory programs are defined on the basis of past contributions, ending any implicit subsidies, and instead using limited public resources to supplement the benefits of workers with limited or no savings capacity—again, as in Chile. Even if this choice is not made, policy makers should at least assess the degree of redistribution that exists within the contributory system, identify the beneficiaries, and calculate the costs.

Targeting to increase allocative efficiency. Resources that finance noncontributory pensions carry an opportunity cost because they are reallocated from other expenditures that may have higher social rates of return (such as prenatal care, early childhood development, and basic infrastructure). Assessing the extent of this opportunity cost is a very difficult and probably elusive task, but countries facing tight fiscal constraints and the continuing need to improve their basic human development indicators are unlikely to be able to make efficient allocations to finance social pensions. In this case, universal arrangements are unlikely to significantly reduce poverty. Therefore, it might be better to use proxy means tests to target benefits to the elderly poor (Bertranou, Solorio, and Van Ginneken 2002; Bertranou, Van Ginneken, and Solorio 2004).

There are also a few open questions regarding the integration of noncontributory pension systems and social assistance programs and the use of ex ante versus ex post transfers. For the first question, the issue is whether countries should ever consider making special transfers for the elderly, or whether it makes more sense to use the general safety net system (assuming one exists) to meet their welfare needs. This issue is discussed in more detail in chapter 7, but the answers are not straightforward. Using the general safety net system can be less costly and probably more equitable. Yet there remain situations where special institutional arrangements for the elderly would be needed, for example (1) when the elderly
face a significantly higher risk of poverty than the rest of the population or represent a significant share of the poor, (2) when social assistance programs do not exist and are unlikely to be adopted for reasons of political economy, and (3) when informal institutions discriminate against the elderly and a direct transfer would empower them. These three cases are obviously not mutually exclusive and would need to be assessed on a country-by-country basis.

On ex ante transfers, some recent work suggests that it may be possible to use them for individuals with limited savings capacity, thus reducing long-term expenditures on social pensions (Palacios and Robalino 2009). The experiences of high-income countries with matching contributions and those of middle- and low-income countries with conditional transfers suggest that financial incentives can change workers’ behavior and increase contribution densities in social security. The uncertainty is how high the take-up rate or matching elasticity is likely to be in low- and middle-income countries. If elasticity is too low, then the amount of matching grant required would be too high to make a difference and, therefore, not efficient. More empirical analysis is needed to come up with specific policy recommendations (see chapter 7 for further discussion of this issue).

Integration and Coordination

This final section identifies and comments on some promising approaches to making systems more integrated, particularly within each kind of risk, to increase efficiency and equity. The first approach is to increase the portability of pensions as a way to counter the fragmentation of old-age income protection programs. The second approach is to increase the harmonization of public and private sector schemes. The current lack of harmonization is a major source of inequality within pension systems and a threat to their financial sustainability.

Facilitating Portability as a Policy Response to Fragmentation

Many federal countries with several subnational pension schemes are considering pension portability as a policy response to fragmentation. Pension portability ensures that workers who switch jobs are able to preserve their pension rights. Currently, inadequate portability in many pension schemes results in significant losses for workers changing jobs. This arrangement has an adverse effect on equity and on the adequacy of the workers’ eventual benefits, but it also is likely to constrain labor mobility—and, therefore, labor productivity growth.

Policy makers are paying more attention to the policy of pension portability as the region strives to become more integrated. In the case of the
Caribbean, as early as 1996, Caribbean Community (CARICOM) member countries signed an agreement regarding the portability of social security entitlements that included provisions to facilitate the movement of workers between countries in the region. The main goal of the CARICOM Agreement on Social Security is precisely to prevent workers migrating within the Caribbean from losing their pension benefits.

The literature distinguishes at least four sources of portability losses: vesting losses, final wage losses, back-loading losses, and penalty losses. Vesting losses occur if a worker leaves a job before completing the vesting period and the scheme repays none of his or her contributions. Final wage losses can occur in defined benefit pension plans where benefits depend on the level of a worker’s salary just before retirement. They affect workers who held multiple jobs over their working life and contributed to multiple pension programs; benefits for these workers reflect the low “final” salaries for early jobs as well as later higher final salaries, and they are likely to be less than benefits from a single program reflecting one relatively high final salary. Back-loading losses occur because some defined benefit pension schemes have increasing accrual rates, meaning that workers’ pension rights grow slowly during their first years in the scheme and start growing faster as they become more senior. Under this scheme, workers who switch jobs accumulate lower pension benefits. Finally, penalty losses occur when pension schemes take on workers’ contributions that have accumulated in other schemes but require them to pay a penalty. Some programs penalize workers who retire abroad by reducing the pensions paid to retirees who have left the country.

All of these losses related to the lack of portability can have a negative impact on labor mobility. Workers may choose to change jobs less often than they might otherwise do because they do not want to incur any portability losses, and this tendency increases labor rigidity in the economy. In fact, some research has shown that firms providing occupational pension schemes tend to have lower worker turnover rates, though there has been some recent criticism of these findings on the grounds that it is difficult to control for unobservables that may affect turnover. These unobservables might also explain the presence of the occupational scheme in the first place. However, there is little disagreement about the lack of portability between mandatory public systems adding unnecessary constraints to labor mobility. In addition, there is some evidence, although still limited, that labor force mobility is associated with higher labor productivity growth (see chapter 5).

It is important to note that the portability of statutory pension rights is at least as important as harmonization to facilitate labor mobility. Indeed, the greater labor mobility in Europe that has been seen in recent years seems to have been facilitated mostly by the international coordination of pension programs rather than the harmonization of national pension policies. Harmonization is neither necessary nor sufficient to eliminate
portability losses. It is not sufficient, because even identical (in other words, perfectly harmonized) pension schemes can still impose losses of pension rights on workers who switch jobs.

**Harmonizing Pension Schemes for Civil Servants in Federal Countries**

One of the important challenges in all countries in LAC is to harmonize the various pension schemes for civil servants and private sector workers. In fact, internationally, civil service pension schemes are gradually being integrated into national systems, even though this process is often politically contentious. More than half of all Organisation for Economic Co-operation and Development countries have already integrated their public and private sector pension systems. Those that have not yet done so are in the process of harmonizing the rules for all pension schemes. As in LAC countries, the reasons behind this trend are fiscal concerns and the desire to facilitate labor mobility. However, the political economy of these changes has not always been easy, because civil servants’ schemes have traditionally been more generous than national schemes. Although this generosity may have attracted high-quality candidates to the civil service, it has been an expensive way to do so. Also, in developing countries, civil servants are often an important voting constituency and effective pressure group, which means that they have tended not only to get a pension scheme before other groups of workers, but also to get better conditions (for instance, higher benefits and an earlier retirement age).

It is interesting to examine how Brazil and Mexico have moved toward more integrated pension systems. The two countries have traditionally had a large number of independent, local pension schemes with no central regulatory and coordinating authority. This arrangement put a large fiscal burden on national and local budgets and threatened to crowd out other public expenditures. In the past few years, policy makers in both countries have made it a priority to increase coordination and harmonization while moving gradually toward an integrated national pension system. It is clear that this is not an easy task and that the change will not happen overnight. However, it is useful to examine some of the motives behind these reforms in Brazil and Mexico and the steps that have been taken. In these two countries, policy makers believe that greater integration of pension systems will widen access to benefits, make pensions more portable, and promote labor mobility throughout the economy. They also believe that by reducing coverage overlaps, this process may make public sector pension schemes more financially sustainable.

Mexico has recently introduced reforms to integrate its pension scheme for federal civil servants with the general scheme for private sector workers, which is organized as individual fully funded accounts that are administered by private managers. Mexico has numerous public sector pension
schemes. In addition to the federal government’s civil social security system (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, or ISSSTE), schemes are operated by various public sector enterprises and entities, such as the military, IMSS (Mexican Institute for Social Security), PEMEX (the national oil company), CFE (the federal power company), state and municipal governments, and public universities. Out of a total of 31 states, 29 states have their own legislation governing social security and operate their own pension scheme for public sector workers. In practice, state pension schemes have largely tended to replicate the structure and procedures of the ISSSTE.

In 2007, the Mexican Congress passed legislation that reformed the ISSSTE, changing it from an unfunded defined benefit scheme to a funded defined contribution scheme. The DC funds will be managed for the first three years by the pension fund manager PENSIONISSSTE and will be fully portable to the private sector scheme administered by private pension fund managers. This reform has been a major step toward integration. However, some concerns remain, one of the most important involving governance. Although PENSIONISSSTE will be subject to all the regulations that govern private pension fund managers and will be supervised by CONSAR (Comisión Nacional del Sistema de Ahorro para el Retiro, the supervising agency for private pension funds), the new law specifies that PENSIONISSSTE is not subject to the oversight of CONSAR with regard to several institutional aspects, including corporate governance.

Progress has also been made in Brazil toward the harmonization of national and subnational schemes, and this is expected to curb future pension expenditures while making the system fairer and more equitable. Brazil has two different pension regimes for its public and private sector workers, which are regulated partly by the constitution and partly by federal law that defines the scheme’s broad parameters. Starting in 1998, as part of an effort to improve fiscal equilibrium both at the federal and the subnational level, reforms were passed to repeal the generous benefit formula, introduce a minimum retirement age and vesting period for civil servants, and impose sanctions on subnational governments for noncompliance with these new conditions.

While a major parametric pension reform implemented in 1999 reached only private sector workers, a 2003 constitutional amendment finally harmonized the rules of the schemes for private and public sector workers. The amendment imposed stringent retirement rules on public sector workers, and it allowed the introduction of an overall benefit ceiling, subject to the creation of a complementary pension fund.

It has been possible to implement the reform at the subnational level with some enforcement mechanisms and the provision of technical assistance from the federal government. Subnational schemes have to satisfy the basic parameters and rules of the federal law and the constitution. The federal government issues a certificate to each state indicating that
it complies with the law, and this allows them to gain access to federal grants and guarantees. A fiscal responsibility law also limits the wages and pension expenditures of subnational governments. Meanwhile, the federal government has been developing a nationwide information system that covers all of the states, thus making it possible for the federal government to monitor the performance of subnational pension schemes and estimate their future liabilities.

The experience of Argentina suggests that the fiscal impact of integration—at least during the transition period—needs to be carefully evaluated. As part of the structural reform implemented in 1994, Argentina managed to unify almost half of its civil servant subnational pension funds at the federal level, with 10 out of 24 subnational pension funds being transferred to the national pension system. Unfortunately, the process contributed to a national fiscal crisis because the federal government assumed the actuarial deficits of the provinces but made no savings in other parts of the budget or at other government levels to compensate. This example shows that integration policies can have unforeseen consequences if they are not well designed.

Conclusions

This chapter has provided an overview of pension systems in Latin America and the Caribbean, focusing specifically on coverage and adequacy of benefits and on systems’ security, financial sustainability, redistributive effects and incentives, and institutional organization. It has emphasized that pension systems in the region are heterogeneous but also that they face some common challenges. Probably the number one priority at this point is to expand the coverage of the pension system while reducing institutional fragmentation, which is a source of inequities and potential inefficiencies. At the same time, some of the most innovative reforms that are necessary to address these challenges are already being passed in several countries. The hope is that the experiences of these innovators will serve as examples to help other countries design and implement policies that will strengthen their pension systems. These policies will ideally be part of an integrated, multiyear package of reforms to increase the effectiveness of the whole social protection system.

Some of the main insights from the chapter can be summarized as follows.

Expanding coverage will necessarily involve the coordination/integration of contributory and budget-financed retirement income transfers, the latter being designed to reach individuals with limited savings capacity and the long-term poor. It will be important for contributory systems to continue increasing incentives for small and medium-sized businesses and the
self-employed to enroll. They can do so first by removing any legal constraints that keep these groups from enrolling, and second by intervening to improve the quality of services and facilitate affiliation and the payment of contributions, including through an income-based schedule of flat rates. In order not to compromise the financial sustainability of the contributory system, it will then be necessary to ensure that pension benefits have a stronger actuarial basis in relation to contributions made in the past (in the case of DB systems), a measure that could also result in higher compliance by contributors.

In the case of retirement income transfers, the challenge will be to design programs that are equitable and sustainable and that minimize labor market distortions. The chapter has suggested that coordinating the design and implementation of noncontributory and contributory systems would be the best way to proceed. In particular, it recommends designing social pensions and minimum pension guarantees to reduce effective marginal tax rates on formal work and to improve redistribution. The chapter has also argued that, given the existence of budgetary constraints, targeted programs may be a better option than universal programs, particularly in those countries that are still facing challenges in improving their basic human development indicators.

Finally, there are still two key open questions that policy makers need to consider. One is how to coordinate the design of social pensions with the design of other social assistance programs. The other is whether to use ex ante transfers to stimulate long-term savings among low-income workers in order to reduce the long-term costs of social pensions.

It is important to increase financial sustainability and security of contributory systems. This chapter has shown that there are several alternatives for structuring the public pension system that relate to the allocation of risks between plan members and the sponsor, financing mechanisms, and institutional and management arrangements. Regardless of the design, however, there is a need to reduce the tax burden of the pension system and the risks that it transfers to individuals.

Financial sustainability is mainly a problem for DB systems, which are financed on a pay-as-you-go basis. Therefore, policy makers should review the benefit formulas and eligibility conditions to ensure that the implicit rates of return paid to contributions are similar for all participants and that these rates are sustainable (in other words, close to the growth rate of the wage bill of the covered population). As discussed above, these reforms are also necessary to expand the pension system and to make redistribution more transparent and equitable.

In terms of security, in the case of both DB and DC systems, indexation policies should be reviewed to remove authorities’ discretionality and to ensure that retirees are well protected from inflation risks. Also, vesting periods should be eliminated or substantially reduced to widen access to benefits given the existence of substantial labor market risks and the prevalence of short contribution densities.
Finally, in the case of the fully funded DC systems, the recent financial crisis has also emphasized the need to reduce the exposure of plan members to financial risks. Risk could be lessened by implementing default age portfolios for individuals close to retirement and making the arrangements for the pay-out phase more flexible.

There is also ample room to improve horizontal equity and increase economic efficiency by making pensions more portable and by harmonizing the benefits of parallel plans. This chapter has suggested that integration, as opposed to fragmentation, makes systems more efficient, effective, and equitable. Integration is not an objective by itself but a powerful way to attain old-age income protection goals. Integration would increase coverage by making it easier to identify coverage gaps and to improve the targeting of noncontributory benefits. It would also make pensions more portable and expand access to contributory benefits. At the same time, integration could improve governance not only within old-age income protection programs but also across the social protection system (see chapter 7). Several different promising approaches have been taken in the region toward integration, including the efforts to facilitate portability in the Caribbean, the harmonization and coordination of civil servant pension schemes in federal countries such as Brazil and Mexico, and the integration of contributory advance funding schemes with the noncontributory programs in Chile.

Notes

1. Mesa-Lago (2009) provides a detailed typology of recent reform efforts. He distinguishes between structural reforms (those that radically transform a public scheme, for example, through a shift from defined benefits to defined contributions, the introduction of funding, and the use of private agents) and nonstructural or parametric reforms, which aim to financially strengthen a public system by increasing the age of retirement or the contributions, by reducing the benefit, or by a combination of both of those changes.

2. See, for instance, Gill, Packard, and Yermo (2004), Holzmann and Hinz (2005), and World Bank (2010). Also see Mesa-Lago (2008a).


4. The reform in Brazil reduced the minimum eligibility age for old-age benefits for rural workers (from 65 to 60 for men, and from 65 to 55 for women), increased the minimum benefit paid to rural old-age beneficiaries from 50 to 100 percent of the minimum wage, and extended old-age benefits to rural workers who were not heads of households, thus expanding coverage to many married female rural workers. Because the minimum pension is not means tested and there are no conditions regarding contribution histories (no vesting period), it generates a pure income effect.

5. See Piggot and Sane (2009) and Mesa-Lago (2008a).

6. Except for those in Bolivia, Chile, and Peru, where only workers contribute, LAC pension systems (whether DB or DC) are financed jointly by employers’ contributions (averaging slightly over 6 percent of the wage) and workers’ contributions (averaging about 8 percent for DC and 4 percent for DB systems).
7. Because of the difficulty of validating incomes, self-employed contributions are sometimes levied on presumed wages, for example, the minimum wage.

8. This table presents contribution rates of the main system in each country. In Argentina, Brazil, Ecuador, Haiti, and Uruguay, there is a range of contribution rates among a range of schemes.

9. The Beveridge Report, *Social Insurance and Allied Services*, which came out in the United Kingdom in 1942, proposed a social security plan that integrated social insurance, social assistance, and voluntary supplementary insurance. The report identified several principles, including the unification of administrative responsibility, the comprehensiveness of benefits, and a flat rate contribution.

10. See Mesa-Lago (2008a).

11. Coverage figures have been standardized using population surveys (Rofman, Lucchetti, and Ourens 2008).

12. This study was one of the first to tackle the issue of distributional effects.


15. To get an early retirement annuity, the pension fund should be large enough to get a benefit at least 150 percent of the minimum pension.

16. Barr and Diamond (2006) discuss the conditions under which actuarial benefits will generally not minimize labor market distortions, given the presence of other distortions. In general, given that pensions aim to relieve poverty and redistribute income, they unavoidably distort the labor market.

17. The first group consists of individuals who prefer to delay retirement and have “naturally” low contribution densities. The implicit subsidies in the pension system give these people an incentive to enroll and contribute. They can then also afford to retire earlier. The second group, on the other hand, prefers to retire early. Because of the subsidies, however, there are incentives to delay retirement, but contribution densities cannot decline much to meet eligibility conditions.

18. See Holzmann and Robalino (2009) for a discussion of the factors that explain low coverage rates and emerging strategies to address them.

19. The disability program provides benefits under similar conditions but for individuals between the ages of 18 and 64. Once disabled individuals reach the age of 65, they are eligible for old-age solidarity benefits.

20. See Rofman, Lucchetti, and Ourens (2008) for an analysis of the recent reforms.


22. See Grosh and Leite (2009) for an extensive discussion of this issue.


25. Mesa-Lago (1978) clearly identified this as a common feature in several Latin American countries 30 years ago.


27. The existing benefits of current retirees will be fully honored by the federal government, while future generations of workers will obtain their benefits from individual savings accounts. The current generation of workers may choose to stay in a gradual adjusted defined benefit scheme or to move to the new defined contribution scheme that includes an acknowledgment bond for past services. In Brazil, new rules apply to civil servants who have joined the public sector since the legislation was enacted.

28. For instance, the federal government has issued guidelines for the actuarial valuations to make them comparable across states as well as guidelines for investment and governance. In states with weak pension administration, data gathering
has been accompanied by initiatives to enhance record keeping on affiliates and pensioners.  
29. Other pension-related factors that contributed to the fiscal imbalances were the reduction in employers’ contributions and the transition costs of partially transforming the national pension scheme from being pure PAYG to being fully funded. Therefore, the high cost of the provincial pension fund transfer by the conversion of implicit into explicit debt was not the only factor contributing to the 1998–2001 fiscal crisis.

References

FIAP (Federacion Internacional de Administradoras de Fondos de Pensiones). 2008. Informe Semestral 25. FIAP, Santiago, Chile.
Forteza and Dorfman. 2007.


Managing Labor Market Risks

This chapter is concerned with two sets of social protection policies aimed at managing labor market risks. The first set is referred to here as *income protection policies* (IPPs). Within the conceptual framework discussed in chapter 1, the main objective of these policies is to mitigate the impact of adverse income shocks related to job loss (consumption smoothing). The focus is on risk-pooling, savings, and income redistribution. The second set is referred to as *active labor market programs* (ALMPs), which, within the conceptual framework, are essentially interventions to promote human capital and reduce labor market risks. Most ALMPs are designed to counter market failures that constrain access to jobs and thus amplify the risks that individuals face in the labor market. This chapter emphasizes three types of market failures: (1) a lack of skills, both technical and “soft” or life skills; (2) job search constraints, including poor signaling and capital constraints for the self-employed; and (3) a lack of aggregate labor demand.

IPPs and ALMPs have an important role to play in overcoming the main labor market challenges identified in chapter 2. The first challenge is the combination of a very mobile labor force that alternates between working in the formal and informal sectors, and the substantial risk of unemployment, particularly for low-income workers. This challenge necessarily involves rethinking and expanding current IPPs to protect individuals and households from income shocks, as well as developing ALMPs to facilitate the job search process. Second, most countries in Latin America and the Caribbean (LAC) have a large share of unskilled workers and a shortage of skilled labor in certain sectors. The solution to this problem over the medium term is to increase the internal and external efficiency of the education system. In the meantime, however, interventions are needed to make unskilled workers more employable and to retrain those whose skills are no longer in demand. The third challenge is that the labor force in most countries will continue to grow rapidly, with an increase in the share of young people in the labor market. This trend
implies that, other things being equal, young people will continue to face higher unemployment risks than their older counterparts (even if their periods of unemployment are shorter) and be more likely to be employed in the informal sector. Thus, ALMPs that focus on young people, particularly unskilled and low-income young people, will also need to be considered. Fourth, a substantial share of new jobs across countries seems to consist of low-productivity jobs, mostly in the informal sector. By facilitating labor mobility between sectors, making workers more employable, and making job searches more effective, IPPs and ALMPs can both contribute to the creation of more and better-quality jobs. Clearly, these interventions need to be part of a broader policy package that includes policies to maintain macroeconomic stability and promote a business environment conducive to investments, economic diversification, and innovation. From the social protection point of view, some of these policies should aim to promote flexible labor regulations on hiring and dismissal procedures, while keeping tax wedges at affordable levels.

To date, much has been written about IPPs and ALMPs, particularly in the context of Latin American countries, including a recent World Bank report on employment and growth (Pagés, Pierre, and Scarpetta 2008, chaps. 7, 8). Although rigorous analyses of the actual impact of these policies across countries are difficult to find, there is a solid—general—understanding of their weaknesses and strengths. For instance, several reports have documented the rigidities imposed on firms by hiring and dismissal procedures associated with severance pay and have recommended policies centered on workers’ income protection as opposed to job protection. The often disappointing performance of ALMPs in dealing with the market failures that they were supposedly designed to counter has been widely documented (especially in the developed world), and various suggestions have been made about programs that might produce better results in particular circumstances (Betcherman, Olivas, and Dar 2004).

Nevertheless, several challenges and policy questions remain. Regarding IPPs, even countries that have introduced reforms have failed to address four core weaknesses of their current systems: (1) low levels of coverage, (2) opaque and possibly regressive income transfers, (3) financial insolvency, and (4) various distortions of labor demand and supply, including incentives for informal sector work. This failure has shown that the solution is not as simple as scrapping severance pay and introducing unemployment insurance (both risk-pooling mechanisms); the devil is in the details. The same is true of ALMPs. It is important to identify what initiatives have worked best in practice in addressing specific market failures, but the bigger challenge is to define which specific features of the design and implementation of those programs made the difference. Equally important is the need to decide how limited resources should be allocated among competing programs.
This chapter extends the previous work in three directions. First, it updates the assessment of current IPPs and ALMPs. In the case of IPPs, the chapter analyzes the mandate of the various income protection programs across the region and discusses issues related to coverage, the adequacy of benefits, financial sustainability, incentives, and income redistribution. In the case of ALMPs, the chapter presents an inventory of programs in the region and summarizes the main issues that need to be addressed to increase their effectiveness based on the results of recent impact evaluations as well as the experiences of countries outside LAC. Second, the chapter proposes a policy framework to gradually expand the coverage of IPPs and ALMPs and to make them more effective. The framework emphasizes the need to separate the insurance and redistributive functions within IPPs and to coordinate and exploit synergies among IPPs, ALMPs, and other components of the social insurance system. Finally, the chapter discusses issues related to the implementation and institutional organization of the policy framework, which are often missing in policy discussions.

The chapter is organized in four sections. The first and second sections discuss IPPs and ALMPs, respectively. The third section discusses coordination between these two types of programs and their institutional organization and administration. The conclusions of the chapter are summarized in the fourth section.

Income Protection Policies

At the micro level, policies to manage the risk of income loss in the labor market can be grouped into two categories: those that determine the allocation of risks across individuals and those that affect the level of risk facing individuals. The first group involves savings and risk-pooling arrangements, while the second mainly consists of regulations governing hiring and dismissal procedures. All countries in the region have adopted a combination of these two types of policies.

Saving arrangements involve various forms of unemployment individual savings accounts (UISAs) that are disbursed to workers in the event that they become unemployed or their labor contract is terminated; thus they are often referred to as fondos de cesantía (termination funds). In all cases, the risk of unemployment rests with the individuals. In other words, when unemployed, workers have only their savings to count on to smooth their consumption.

There is a wider variety of risk-pooling arrangements, including unemployment insurance (UI), severance pay, advanced notice, and unemployment assistance. All have in common the fact that the risk of unemployment is distributed across many individuals. In the case of UI, employers and workers pay a premium to an insurance fund, and the risk
is distributed among all of the plan’s members (who usually consist of workers enrolled in the general social security system who also contribute to pension programs and health insurance schemes). In the case of severance pay, advance notice, and unemployment assistance, workers pay no premiums up front (either their employer or the government picks up the bill when individuals become unemployed), but the unemployment risk is still pooled. Severance pay is a transfer to the employee at the time of his or her dismissal and is usually determined by the length of the worker’s tenure in the job. Advance notice is an implicit transfer prior to dismissal, in which employees who will be dismissed are given a certain period of time to look for jobs while being paid regular wages. Thus, in the case of severance pay and advance notice, risk-pooling takes place within the firm. Finally, unemployment assistance is a flat transfer from the government to unemployed individuals that is conditional on their meeting certain administrative conditions (such as having contributed to social security, being active in looking for a job, or undergoing training) and sometimes on their being subjected to a resource or means test. In this case, the risk is pooled across all taxpayers.

There are two important observations to be made about this classification. First, savings and the various forms of risk-pooling arrangements are not mutually exclusive, and, in fact, all countries combine at least two of them (see table 5.1). The other observation is that regulations on hiring and dismissal procedures can be combined with any of the savings or risk-pooling arrangements. Often, rigid hiring and dismissal procedures are used in conjunction with severance pay or advance notice, but this is only because they tend to come together in the labor code of most countries. Thus, the often-used slogan “moving from job protection to income protection” does not mean moving from severance pay to unemployment insurance. It means making hiring and dismissal procedures more flexible and then finding an efficient combination of savings and risk-pooling arrangements, which may well include severance pay (or a dismissal tax on employers). Hence, from the employers’ side, it is important to distinguish between policies that affect decisions regarding the reallocation of labor inside the firm (hiring and firing) and policies that affect direct labor costs by mandating explicit or implicit contributions to savings or risk-pooling arrangements.

With this idea in mind, this section reviews current income protection policies in Latin American countries and develops a framework to improve their design. Unlike previous analyses, the assessment is not presented by program. Instead, it has been organized to address three questions: (1) do risk-pooling and savings arrangements combined adequately protect workers in the face of job loss; (2) what are the potential effects of current programs on individual behavior and labor supply; and (3) what are the potential effects of these programs, plus regulations governing hiring and dismissal procedures, on labor demand?
### Table 5.1 Income Protection Systems

<table>
<thead>
<tr>
<th></th>
<th>Severance pay</th>
<th>Advance notice</th>
<th>Unemployment insurance</th>
<th>UISA</th>
<th>Regulations on hiring and dismissal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Brazil</td>
<td>Dismissal tax</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chile</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Colombia</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Honduras</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Mexico</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Panama</td>
<td>Yes</td>
<td>No</td>
<td>—</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Peru</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>—</td>
<td>Yes</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Source:* Velásquez Pinto 2005.

*Note:* — = not available. In Mexico, there are no proper UISAs, but individuals are allowed to withdraw benefits from their pension accounts in the case of unemployment. In Ecuador, there is only limited unemployment benefits protection, in the form of a benefit for workers dismissed when close to retirement, to bridge them to pension age.

**Coverage and Adequacy of Income Protection Systems**

One of the main problems with current IPPs is their limited coverage, which is even lower than that of the other components of the social insurance system. Chapter 1 showed that at any given point in time, most social security systems in the region cover, on average, 30 percent of the labor force. In those countries that have implemented UISAs, coverage is
below that of the pension and contributory health systems—16 percent in Colombia, 22 percent in Chile, and 17 percent in Panama.

Regarding severance pay, coverage is usually limited to workers with open-ended contracts, and, as was discussed in chapter 1, coverage rates are usually below 35 percent of the labor force. Yet the share of the unemployed who actually receive benefits seems to be quite low. For instance, in Argentina, only 2.5 percent of the unemployed are covered by severance pay. There is a partial correlation between coverage and income in that workers with lower incomes tend to have lower coverage rates than those with high incomes (see figure 5.1). Workers in the middle (third quintile), however, appear to have even lower coverage.

Regarding the adequacy of benefits, a review of countries’ statutory rules shows that the mandates of the income protection programs vary widely in different countries. The review compared the benefits that the “average” worker would receive in different countries in the case of job loss. The period of analysis was, in most cases, 48 months, which, as mentioned in chapter 2, is the average duration of employment in formal jobs in those countries for which data are available. The mandate is expressed in terms of the number of months of salary that the individual is entitled to receive in the case of unemployment, as a function of the vesting period.

Two distinct patterns of social insurance for income protection can be identified (see figure 5.2). Many countries have a relatively modest mandate, extending over a four-year period, with benefits ranging between two and four months of salaries. In these countries (Bolivia, El Salvador,

Figure 5.1 Coverage of Severance Pay in Argentina

Source: Authors’ calculations based on labor force survey data in PME 2008.
Figure 5.2 Mandates of the Income Protection Systems

(a. Argentina)

(b. Bolivia)

(c. Brazil)

(d. Chile)

(continued next page)
Figure 5.2 (continued)

e. Colombia

f. Ecuador

Time span of comparison with other countries

Accrued rights (number of months of salary)

Accrued rights (number of months of salary)

Accrued rights (number of months of salary)

Accrued rights (number of months of salary)

h. Guatemala

Number of months of employment

Number of months of employment

Number of months of employment

Number of months of employment
Severance pay

i. Honduras

j. Mexico

k. Nicaragua

l. Panama

(continued next page)
Sources: Authors’ calculations based on benefit formulas and eligibility conditions as described in Jaramillo and Saavedra 2005 (for severance pay), Velasquez Pinto 2005 (for unemployment insurance), and World Bank 2008.
Guatemala, Honduras, Mexico, Nicaragua, and Paraguay), severance pay is the only IPP that has been implemented. Within this group, Mexico and Paraguay stand out, the first because of its relatively more generous mandate (over four months) and the latter because it has a less generous mandate (less than two months).

Other countries give their income protection systems a more generous mandate (over six months of benefits) and have combined severance pay with risk-pooling or savings arrangements, or both. Chile, Colombia, Panama, Peru, and Uruguay provide benefits of up to eight months of salaries. For these countries, the mandate of the severance component is not very different from that of the countries in the first group; the extra benefits accumulate gradually through individual savings accounts (in the first four countries) or come as a top-up through the UI system (in Paraguay). Chile is a special case. Although the social protection system in Chile includes a UISA component, benefit payments in the case of job loss take the form of gradual withdrawals that simulate payments under a classic UI system. Therefore, the UISA benefits in the chart for Chile are not paid in addition to the UI component. The individual account is simply there to finance the system’s liabilities with the individual—the other source of funding is contributions from employees, employers, and the government to a solidarity fund.

The other countries in this second group have more generous mandates that range between seven months and one year. In Argentina, benefits can be paid up to eight months, in part as a result of a “generous” unemployment insurance system. Construction workers, however, are also eligible for individual accounts and thus can receive benefits equivalent to close to one year of their salaries. The income protection system in Brazil can offer up to 10 months of salary, albeit with a more modest severance component; this takes the form of a dismissal tax of 40 percent of the assets that the worker has accumulated in the UISA account. The other two special cases are Ecuador and República Bolivariana de Venezuela. Ecuador stands out because its income protection system has a very long-term mandate (over one year of salaries) but offers modest protection over the short term. This arrangement occurs because the individual savings accounts and the unemployment insurance kick in only after the worker has made 48 and 60 months of contributions, respectively. Venezuela, on the other hand, emerges from the review as the system with the largest mandate, with benefits of up to 16 months of salary. The severance pay component is modest relative to those of other countries, and the UI component is less “generous” than the Argentine UI, but the mandatory contribution to the individual accounts is twice that of the other countries.

In most countries, however, unemployment benefits build up only gradually over time (which can be a problem for new entrants to the labor market), and there can be discontinuities in coverage. The group most
obviously affected by this feature of the income protection systems is young people entering the labor market for the first time, but any worker reentering employment has little or no coverage for the first few months. Indeed, among all of the countries that have no unemployment insurance, benefits provided after the first year of employment are seldom more than one month of salary. Clearly, on average, the likelihood of job loss during the first year is small. In the case of Brazil, for instance, only around 14 percent of workers fall into this category, but, as discussed in chapter 2, the likelihood of job loss for low-income and low-skilled workers can be much higher.

A related issue is that, in contrast with UI benefits, severance pay and individual account balances are paid as a one-time lump sum (except in Chile). Workers starting a new job thus start to accumulate benefits from the first day. Depending on how the unemployed workers manage this lump sum of capital, they may not have enough income protection during their period of unemployment.

Another crucial limitation of the existing systems in the region relates to the severance pay component, which carries a high risk of default. The issue is that severance pay arrangements are unfunded. Employers are not mandated to provide for the liabilities that they assume when they hire workers, which, as will be discussed in the next section, can be considerable. There are two concerns associated with this limitation. One is that employers dismissing workers for economic reasons may at the same time face liquidity constraints that force them to default on their obligations (Holzmann and Vodopivec 2011). Another is that, even when liquidity constraints are not an issue, some employers, particularly in small enterprises, may choose to evade their obligations. Evasion is a rational response when litigation is unlikely, as it is if (1) the workers in question have low levels of education that limit their knowledge of the law, (2) high transaction costs give low-income workers a disincentive to litigate, or (3) corruption exists in the legal system.

High transaction costs also give both employers and employees an incentive to agree on lump sum payments below the minimum value required by the law. This type of agreement can create the optimal equilibrium when enforcing the contract would require the involvement of judges and courts that would considerably delay the payment of any compensation. Employees might prefer to settle for lower amounts if they could be paid immediately. The higher the discount rates of employees, the greater the likelihood of this outcome.

There are also concerns about the design of the UISA component, in that the funds are usually not allocated explicitly to finance unemployment benefits. In many cases, workers can use the funds to finance the purchase of a house or to pay for education. The fewest restrictions on the withdrawal of UISA funds exist in Peru, to the point where workers consider deposits from employers to be a mandatory top-up to their salaries during
MANAGING LABOR MARKET RISKS

the months of May and December, which is when contributions are made. The fact is that, in all countries, UISAs have two interrelated functions: mandating precautionary savings to smooth consumption in the case of unemployment (which could also be extended to permanent disability) and stimulating savings to finance certain investments (presumably as a way to circumvent some failure in the credit market). However, as will be discussed later, even if a rationale existed for this additional mandate, it is unclear that it should be part of an income protection program.

A final, and general remark, is that the design of most IPPs today appears to be ad hoc, with no clear objectives and rules to define the mandate of the various components. To a certain extent, current designs reflect path dependence. Systems that primarily provide severance pay appeared first, accompanying other sets of regulations and standards introduced through labor codes, often conceived as part of a culture that emphasized job security. These were important advances for workers and came to be considered as acquired rights. Subsequent, and relatively recent, reforms driven by the need to make labor markets more flexible (see the discussion in the next section) often “over-imposed” new components on the original severance pay schemes. The end result is a set of income protection systems that give too much protection to some workers and little or no protection to others. As discussed below, this ad hoc design can also prompt distortions in labor supply and savings decisions.

Potential Impact on Behavior and Labor Supply

Like other social insurance programs, income protection systems affect workers’ behavior. Indeed, any type of transfer paid after dismissal or during periods of unemployment—severance pay or unemployment insurance—affects workers’ bargaining power, reservation wages, the opportunity cost of leisure, and job search efforts. This section focuses on three unintended consequence of these effects: (1) increases in the duration of unemployment spells, (2) higher turnover rates, and (3) changes in workers’ relative preferences for formal versus informal sector work.

Job search and the duration of unemployment periods. Lump sum payments, like severance pay, can reduce workers’ incentives to extend the duration of their unemployment relative to their monthly payments, but the three effects are still present. The literature, nonetheless, has mainly focused on the effects of UI.

At the micro level, the concern is about the effects of transfers on the efficiency of the matching process and the duration of the period of unemployment. In principle, having an unemployment insurance system can give workers more flexibility and make their job search more efficient, thus leading to shorter unemployment spells and better matches. However, these effects tend to be more a function of placement and training.
services and programs than of the benefits per se. At the same time, transfers can increase reservation wages and reduce the opportunity cost of leisure and, therefore, reduce workers’ job search efforts. As a result, the length of their periods of unemployment can increase.

In its focus on the effects of UI, the literature shows that, in general, increasing the generosity of benefits has some negative effects on the length of unemployment spells and has no noticeable effects on the quality of matches. Estimates of the benefit elasticity (the percentage change in duration of the unemployment period resulting from a 1 percent increase in the benefit) range between 0.2 and 0.9, while the duration elasticity ranges between 0.4 and 0.5 (World Bank 2004). Overall, these effects seem to be relatively modest. For instance, if the duration of the baseline unemployment period is three months, increasing benefits by 10 percent would prolong the unemployment period by around two to eight days. Increasing the duration of the benefits by one month would add two to three weeks.

There is also evidence that UISAs can increase job search efforts relative to UI and thus shorten the duration of unemployment periods. This effect occurs simply because savers can keep for the future any savings that they do not use to finance their consumption while unemployed. As discussed above, any unused balance that remains in the worker’s UISA when he or she retires can be taken as a lump sum or used to increase the value of the pension. The most recent evidence of the positive effects of UISAs comes from Chile, where, other things being equal, workers with higher balances in their individual accounts also have shorter periods of unemployment (Van Ours, Reyes Hartley, and Vodopivec 2009).

The only evidence for the region comes from Brazil, and the results are inconclusive. The first study that addressed this question by exploiting changes in regulations in 1994 found that UI had no significant effects on the duration of unemployment periods except in transitions from unemployment to self-employment. In this case, higher UI benefits were associated with shorter periods of unemployment, suggesting that UI benefits may have been helping to finance a new business. The study also found no evidence that UI had a positive impact on wages or on the probability of finding a formal sector job. So the increase in reservation wages associated with UI did not translate into better jobs.

The most recent study of workers in metropolitan areas found some weak evidence that the presence of UI and of the dismissal compensation fund FGTS (Fondo de Garantia por Tempo de Serviço, the Brazilian UISA) slightly reduces the probability of exiting unemployment through informal sector jobs, but there was no evidence of a major impact on the duration of the spell (Margolis 2008). Other things being equal, it seems that workers who receive only FGTS benefits behave in similar ways to workers who are eligible for three, four, or five months of unemployment benefits. In essence, the joint unemployment benefit package may increase
the duration of the unemployment period because workers take more time to find a “good match” (and probably spend less time on matches with little potential), but the additional benefits provided by UI on top of those already available through the FGTS seem to have little influence at the margin.

**Higher turnover rates.** All transfers, by reducing the opportunity cost of labor, can cause workers to make less effort in their jobs and thus can lead to frequent dismissals and higher turnover. Nevertheless, the same studies showing that job search effort increases under UISAs show that on-the-job effort increases as well. The reason is the same—workers can keep their savings instead of having to use them to finance consumption during periods of unemployment.

However, UISAs can also increase turnover as workers attempt to cash in their savings. There are three main situations when these attempts can occur. The first situation is when individuals find the amount of precautionary savings imposed on workers by the government too high and try to find ways to evade it. Workers may turn to UISAs if they cannot borrow (their access to credit may be constrained by imperfections in the capital market) or if borrowing rates are higher than the rate of return on the individual accounts. The second situation is when another consumption smoothing mechanism exists (such as UI), which would reduce the value of the worker’s precautionary savings. In this situation, redundancy may provide workers with an incentive to cash out their savings. The third situation is when rates of return on savings are below the market rate. In this case, workers would be better off moving the money in their UISAs elsewhere to avoid having to pay an implicit tax on them.

In Latin America, there is some evidence that the Brazilian FGTS does give people an incentive to invent fake dismissals in order to receive unemployment benefits (World Bank 2002). One of the reasons for this is the low rate of return on savings. FGTS funds represent around 0.5 percent of gross domestic product (GDP), and most investments go to housing and sanitation projects. In the case of housing, the FGTS provides subsidized loans to plan members, which represent 65 percent of the portfolio. A priori, there is little rationale for having the FGTS engage in this type of activity instead of simply helping individuals to replace their income during periods of unemployment. The current policy not only reduces the rates of return on FGTS investments but may also increase administrative costs. In fact, the rate of return on FGTS savings has consistently been lower than the market rate. Thus, at the end of 2008, the Brazilian equivalent of the federal funds interest rate, the so-called SELIC rate, was close to 6.25 percent (real), while the annual real interest rate paid by FGTS was around 3.00 percent per year (World Bank 2008).

Another reason for higher turnover may be the simultaneous existence of UI. There is anecdotal evidence that unemployed workers use their
FGTS benefits up front to make extra purchases of relatively expensive consumption (or capital) goods rather than to smooth consumption. It would seem that UI benefits are used for consumption smoothing.

Nevertheless, a high turnover does not seem to be a structural problem of UISAs but the result of bad design. The incentives for workers and employers to invent fake dismissals can be reduced if the mandate for precautionary savings is modest, if there are no redundancies between UI and UISAs, and if investment policies generate rates of return on contributions that are above market rates.

**Formal versus informal work.** Chapter 2 showed that individuals transition in and out of the social security system throughout their active lives. Some of these transitions depend on factors outside their control (for example, when firms close down, when new technologies are introduced that change the composition of the labor force, and when companies undergo economic restructuring). Nevertheless, individuals can also make choices that influence these transitions. Because it is very difficult to enforce the mandate to contribute to the social security system, some individuals may choose to take informal sector jobs and contribute for shorter periods of time during their careers, based on their assessment of expected costs and benefits. As will be discussed in chapter 7, factors that influence workers’ choices and thus determine contribution densities include (1) their expected net earnings in the formal and informal sectors, (2) the value of the bundle of social security benefits (such as unemployment and pension benefits) that they expect to receive (Perry et al. 2007), and (3) the benefits that they would receive if they were to remain outside of the social security system (Levy 2008).

Other things being equal, unemployment benefits can represent a tax on formal work for some and a subsidy to others. The cost to a worker of participating in the unemployment program is equal to his or her contributions, which usually represent a given share of his or her earnings. The benefits that the worker can expect, on the other hand, depend on the unemployment risks facing that worker and on the level of benefits provided by that particular UI program. The contributions of high-income groups are higher than those of low-income groups, while high-income groups’ expected benefits (relative to their earnings) are likely to be lower (assuming that their risk of becoming unemployed is lower). Thus, the contribution rate for these workers includes an implicit tax that, other things being equal, can make working in the formal sector unattractive to them.

Both UI and UISAs can also increase the net earnings of informal sector workers. Even when contributions are directly proportional to benefits, unemployment benefits reduce the earnings gap between formal and informal jobs. In other words, individuals could be working in the informal sector while receiving unemployment benefits, a situation that, as discussed
later, is very difficult to prevent. Other things being equal, the possibility of working in the informal sector while receiving unemployment benefits may prompt a larger share of workers to opt for informal jobs than for formal sector jobs.

However, the empirical evidence on this issue is very limited; one study of Brazil suggests that much depends on the design of the unemployment benefit program (Robalino and Zylberstajn 2009). Using simulations, the study showed that, for a large range of preferences, the unemployment insurance system tends to reduce contribution densities (in other words, creates incentives for informal sector work) among high-income workers and to increase them for low-income workers. The FGTS, on the other hand, increases the contribution densities of all workers, in part because it constitutes a pure transfer from employers to employees. The study did not explore the joint effect of unemployment insurance and the FGTS. Nevertheless, it showed that, depending on how they are designed, unemployment benefits can either promote or discourage informal work.

**Potential Impact on Labor Demand**

There is by now a vast literature looking at the impact of labor administrative regulations and labor costs on labor markets. The aim here is not to provide a comprehensive overview of this literature but to summarize its main findings and policy messages.

*Impact of administrative regulations.* In addition to regulating the levels of payroll taxes and severance pay, most governments also regulate contracts, rules that favor the hiring of certain groups, and conditions for firing. If any of these rules constrain the efficient management of human resources within a firm, they can negatively affect turnover and productivity growth. Employers operating under firing restrictions are often unwilling to create new jobs, thus reducing overall employment levels. The evidence at the international level on the effects of government regulation on the labor market is mixed, but a few messages have emerged that are worth noting.

Employment protection seems to decrease overall employment rather than increase it. Restrictive regulations can lead to less firing during bad times but also to less hiring during good times. The net effect depends on the relative importance of these two factors, but the international evidence generally shows that employment protection reduces net employment. In Latin America, the evidence is mixed. Some studies have found no significant effects, but this is probably due to unobserved heterogeneity (Heckman and Pagés 2004). There is evidence that regulation has had negative effects in Argentina (Mondino and Montoya 2004) and Peru (Saavedra and Torero 2004) but not in Chile (Pagés and Montenegro 1999) or Brazil (Paes de Barros and Coerseuil 2004).
Nevertheless, there is good evidence showing that regulations aimed at protecting workers’ job security reduce turnover, lead to the creation of fewer jobs, and may slow down productivity growth. In Latin America, the Marquez index of job protection is correlated with workers having long job tenure, and low turnover has been observed in Colombia, Brazil, and Peru (Kugler 2000; Gonzaga 2003; Saavedra and Torero 2004). The evidence also suggests that the flow of workers into and out of jobs remains high in all countries in the region irrespective of the level of employment protection, which suggests that these flows are more influenced by the creation and destruction of firms than by hiring and firing (IDB 2004). There is some evidence from Colombia that lower job turnover leads to lower job creation (Kugler 2000) and from Chile that regulations have reduced the demand for unskilled workers (Montenegro and Pagés 2003; Pagés and Montenegro 1999). The international evidence also indicates that lower job turnover leads to higher unemployment rates (Addison and Grosso 1996; Elmeskob et al. forthcoming; Lazear 1990). Finally, there is growing evidence that tight labor regulations can negatively affect productivity growth by increasing the cost of labor adjustments and reducing the incentives that firms have to innovate and adopt new technologies.\textsuperscript{16}

Restrictions on hiring and dismissal procedures vary from country to country in LAC but, in general, do not seem to be a major problem for the efficient working of labor markets. Table 5.2 summarizes some of the key firing procedures in the region. In all countries except Bolivia, it is legal to make workers redundant. In a few countries, the employer must notify a third party about the dismissal, but only in Panama, Paraguay, and Peru does the third party need to authorize the dismissal. Retraining is mandatory only in Ecuador and Peru. The most common regulations are priority rules that apply to dismissal and reemployment, which constrain employers’ decisions about who and when to dismiss. In general, enterprise surveys in the manufacturing sector do not flag labor regulations as one of the major constraints that firms are facing.

**Impact of labor costs.** Nonwage labor costs related to income protection in LAC are more likely than administrative regulations to have a distortionary effect in the labor market. The insurance equivalent cost of severance pay can range between 3.4 percent of wages (Paraguay) and 8.5 percent of wages (Colombia). The average for the region is 6.5 percent (see table 5.3). Severance pay can often be more expensive than unemployment insurance and UISAs. Clearly, not all firms comply with the regulations—and, in part, this failure can be explained by the costs themselves. However, those firms that do comply can face total costs related to income protection of up to 23.2 percent of the payroll (Venezuela). When other nonwage labor costs are included, it is evident that in many countries the social protection system may be seriously impeding the competitiveness of firms, depressing employment levels, and contributing to informality.
Table 5.2 General Procedures for the Firing of Redundant Workers

<table>
<thead>
<tr>
<th>Country</th>
<th>Is the termination of redundant workers legal?</th>
<th>Is third-party notification necessary?</th>
<th>Is the approval of a third party necessary?</th>
<th>Is retraining or replacement prior to dismissal mandatory?</th>
<th>Are there priority rules applying to dismissals or layoffs</th>
<th>Are there priority rules applying to reemployment?</th>
<th>How many weeks of advance notice after 20 years?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>4.3</td>
</tr>
<tr>
<td>Bolivia</td>
<td>No</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>12.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>4.3</td>
</tr>
<tr>
<td>Chile</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>4.3</td>
</tr>
<tr>
<td>Colombia</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>4.3</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>4.0</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>4.3</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>8.7</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>0.0</td>
</tr>
<tr>
<td>Honduras</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>8.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>0.0</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>2.1</td>
</tr>
<tr>
<td>Panama</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>0.0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>12.9</td>
</tr>
<tr>
<td>Peru</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Doing Business Indicators.
Note: n.a. = not applicable.
Calculations for countries for which data are available show tax wedges varying between 15 and 55 percent, with an average of 35 percent. The country with the lowest tax wedge in the region is Chile, and the country with the highest is Colombia. Colombia and Mexico are actually two of the three countries with the highest tax wedges around the world (see chapter 7). Evidence at the international level shows that

<table>
<thead>
<tr>
<th></th>
<th>Severance pay</th>
<th>Advance notice</th>
<th>UI</th>
<th>w</th>
<th>UISA</th>
<th>w</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>6.8</td>
<td>1.5</td>
<td>8.2</td>
<td></td>
<td></td>
<td></td>
<td>16.5</td>
</tr>
<tr>
<td>Bolivia</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td>Chile</td>
<td>6.2</td>
<td>0.8</td>
<td>1.6</td>
<td>0.6</td>
<td>8.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>8.5</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.5</td>
</tr>
<tr>
<td>Ecuador</td>
<td>7.3</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td></td>
<td></td>
<td>18.6</td>
</tr>
<tr>
<td>El Salvador</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td>Guatemala</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td>Honduras</td>
<td>5.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>8.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.1</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>3.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.9</td>
</tr>
<tr>
<td>Panama</td>
<td>6.4</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>14.4</td>
</tr>
<tr>
<td>Paraguay</td>
<td>3.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.4</td>
</tr>
<tr>
<td>Peru</td>
<td>8.3</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>16.3</td>
</tr>
<tr>
<td>Uruguay</td>
<td>6.8</td>
<td>13</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td>Venezuela, R.B.</td>
<td>4.3</td>
<td>2</td>
<td>1</td>
<td>16.7</td>
<td>23.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>6.4</strong></td>
<td><strong>1.3</strong></td>
<td><strong>1.3</strong></td>
<td><strong>8.4</strong></td>
<td><strong>10.8</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source:* Authors’ calculations.

*Notes:* Blank cells indicate not applicable. For severance pay, the figure reported is the insurance equivalent: the expected present value of the cost of severance pay for a given employee divided by the expected present value of wages. In the calculations here, the assumption was that the probability of dismissal was 14 percent per year (the average for Brazil for formal sector workers), that wages grow at 3 percent real per year, and that employers discount the future at an annual 4 percent real rate. The planning horizon was set at 20 years. The contribution rate for the UISAs in Argentina is a 20-year average (the contribution rate is 12 percent for the first year and drops to 8 percent the following year). For Uruguay, the contribution rates reported also finance pensions and health insurance and therefore are not included in the totals or the averages. The \( w \) refers to workers’ contributions.
high tax wedges are associated with low employment levels. This effect is particularly severe among unskilled workers (see chapter 7 for a full discussion). Thus, many countries with high tax wedges (for example, Turkey) are considering introducing policies to reduce social security contribution rates.

Severance payments can have other specific effects on dismissal and hiring rates. Severance pay (or advance notice) is a form of dismissal tax on employers. A particularity of this kind of tax is that it tends to increase with the seniority of the employee. Thus, the tax first gives employers an incentive to be especially careful when hiring their staff, implying more selectivity (which could reduce matching rates) but also perhaps reducing the number of job vacancies. A second effect is that, during the first few months of an employee’s time with the firm, the employer has more of an incentive to monitor the quality of the match. Thus, on the one hand, employers may make greater investments in training in the case of workers who show potential; on the other hand, they may take more rapid action to terminate a contract in the case of a worker’s poor performance. The dismissal tax may also force certain employers to keep employing workers who are no longer needed or who did not perform as well as expected. So the ultimate net effect of the tax is indeterminate, and the empirical evidence is inconclusive. The effect of severance payments remains an issue that needs to receive more attention.

The Financial Sustainability of Unemployment Insurance Programs

By design, unemployment insurance systems do not link benefits to contributions. As in the case of defined benefit pensions, the financial sustainability of UI systems depends on the ability of policy makers to adjust the system’s parameters in response to changing economic and demographic conditions. Most of the time, this adjustment is not an easy task: there is always resistance to reducing benefits or increasing contributions. The result can be a deterioration of the system’s financial situation that calls for support from the general budget.

Out of the four countries in LAC that have UI, financial data is available only in the case of Brazil. The UI system there is a good illustration of the types of problems that can emerge where UI is present. Even before the financial crisis, expenditures in Brazil were surpassing revenues. In fact, benefit payments had been growing at an average of 14 percent while revenues grew at only 11 percent. Expenditures in 2010 were estimated at R$18 billion. This number is likely to grow much higher given the increase in the demand for unemployment benefits observed during the financial crisis (see figure 5.3).
Guidelines for Expanding the Coverage and Improving the Performance of IPPs

As shown above, there are several different ways to design an income protection system. The question for LAC countries is how to design a system that not only can be gradually expanded to the entire labor force but that also provides adequate benefits, is fiscally sustainable, has transparent and progressive redistributive arrangements, and minimizes distortions in labor supply, labor demand, and savings decisions. This section proposes a blueprint for such a design. It starts by discussing issues related to the coverage and mandate of the income protection system and then focuses on how best to combine savings, risk-pooling, and redistribution.

Defining the mandate of the income protection system. Before discussing design issues, it is important to agree on what is a realistic role for the income protection system in LAC countries. Do countries have the administrative capacity to do more than provide severance pay? Should the income protection system be limited to workers with open-ended contracts in the formal sector, or is it possible to extend coverage to those with temporary contracts and even to any worker who enrolls?

On the first question, most countries in LAC seem to have the institutional capacity to develop some form of unemployment benefit system to replace severance pay. Internationally, the likelihood of any country
implementing unemployment insurance or UISAs depends on the level of the country’s income. This is because, in general, as income increases, institutional capacity also increases. Also, richer countries are more likely to have addressed other more pressing policy issues (for example, in education and health) and thus can turn their attention to issues related to income protection. Countries usually introduce unemployment benefits when their per capita income crosses the threshold of a middle-income country. Most of the countries in Latin America fall into this category, but, more important, even low-income countries such as Bolivia have already gone through complex structural reforms of parts of their social insurance system. Therefore, a country’s per capita income should not necessarily prevent it from abandoning severance pay.

Moreover, the complexities involved in developing IT systems and managing individual records are not specific to UI or UISAs. The same issues arise when managing defined benefit pension systems or conditional cash transfers. The main arguments against introducing either UI or UISAs are that unemployment benefits require a more sophisticated enforcement capacity to control abuses and that, in LAC countries, abuse is more likely than elsewhere given the large informal sectors that exist in these countries. This section and the next, however, will show that there are various ways to control moral hazard that do not require complex administrative arrangements, even when informal sector work cannot be monitored. Therefore, it is difficult to argue from an administrative point of view against moving from severance pay to a system based on a larger risk pool—at least if it covers the same population of workers (those in the formal sector).

A more difficult question is whether unemployment benefits can be extended beyond the pool of workers with open-ended contracts in the formal sector. These workers are already part of the social insurance system and are considered a stable and predictable group. Workers with short-term contracts and workers outside the formal sector, on the other hand, are more mobile, face higher unemployment risks, and can be more difficult to monitor for administration purposes. At the same time, as shown in chapter 2, workers in the formal sector are not an isolated group lacking interactions with and experience of the informal sector. And, in fact, if stability were the norm, then there would be little need for income protection for these workers in the first place. The real social benefit of income protection systems arises from the coverage of individuals with limited savings capacity (such as unskilled self-employed workers and wage earners in small firms, including informal ones) who face high unemployment risks and have few resources with which to self-insure.

This chapter argues that, if the insurance and redistributive functions of the income protection system are separated, the gradual expansion of coverage is possible. In such a system, the benefits received by any individual would have two parts: (1) the part coming from his or her own savings or an
actuarially fair premium, and (2) the part coming from government transfers (subsidies) allocated to workers on the basis of their income. The first part would be nonredistributive and thus would reduce contingent liabilities for the government and minimize incentives for workers to abuse the system. The second part, on the other hand, would be targeted to individuals with limited savings capacity and would be conditional on having contributed to the system. This separation would make it possible to regulate the redistributive component more tightly in order to control costs and reduce moral hazard. The idea of combining UI and UISAs with unemployment assistance is not new, but UI is not actuarially fair (there is implicit redistribution) and UISAs may be too expensive. The next section will propose certain innovations to achieve this separation in an affordable way.

In terms of the mandate of the system, it is desirable to start with modest objectives and to avoid giving policy makers discretion over how the mandate evolves over time. The mandate is usually determined by four parameters: the replacement rate (insurance function), a minimum benefit (adequacy function), a ceiling on covered earnings (which implies a maximum contribution but also a maximum benefit), and the duration of the benefit. Together they determine the level of workers’ benefits relative to their earnings for various levels of income. The minimum benefit increases the replacement rate for low-income workers. The ceiling on covered earnings, on the other hand, reduces the replacement rate of middle-income and high-income workers. The rationale is that the latter are more able to diversify their savings and insurance arrangements outside of the mandatory system. Moreover, forcing high-income workers to pay contributions on their full earnings would impose on them levels of precautionary savings that are too high (an implicit tax) and that could induce them to evade the system or increase turnover.

There is, of course, no universal standard for setting the levels of these four parameters. Countries make different choices that ultimately reflect their social and cultural preferences as well as their political and economic constraints (see figure 5.4). However, it is important (1) to make choices based on an understanding of the nature of unemployment shocks and their impact on earnings, (2) to start with a conservative mandate that can then be gradually expanded if considered necessary (this is desirable given the uncertainty about how the program will affect workers’ behavior), and (3) to link the minimum level and the ceiling of the benefit to real variables that measure standards of living in the economy. This last practice is necessary to reduce discretion and uncertainty about how the mandate of the system will evolve over time. Targeted benefits, minimums, and ceilings should not be defined in absolute terms or linked to the minimum wage—which is itself subject to policy makers’ discretion. The best alternative would be to define these parameters as a function of economy-wide average earnings or per capita GDP. Thus, when standards of living in the economy increase, the mandate of the system expands accordingly.
Designing the income protection system. As discussed above, the key to the design is to separate the insurance and redistributive functions of the system. The insurance function is the raison d’être of the system. The redistributive function, on the other hand, is necessary to extend coverage to individuals with limited savings capacity. It is better to make these redistributive arrangements explicit so that their costs and incentive
effects can be controlled (see chapter 7 for a detail discussion of this issue). Thus, the idea is not to add “assistance” to an unemployment insurance scheme (as many have proposed) but to extract the implicit assistance that is already embedded, improve its design, and expand its coverage.

What is proposed here is a system that combines a savings component with a redistributive component that is explicit and well targeted. In principle, policy makers could also consider combining actuarially fair unemployment insurance with an explicit redistributive component. The traditional unemployment insurance system, for instance, could be made more actuarially fair by charging premiums based on both income (given the high correlation between income and the risk of unemployment) and unemployment histories, but this approach would be very difficult to implement and probably politically impossible. The alternative of combining individual savings with redistribution is more transparent and more appropriate for dealing with the considerable uncertainty about transfers’ influence on workers’ behavior and about moral hazard. Chile has implemented the system that is the closest to this vision (see box 5.1). Issues related to the design of the redistributive and savings components are discussed next.

**Box 5.1 Unemployment Benefits in Chile: Savings with Explicit Redistributive Arrangements**

In October 2002, Chile introduced a new, innovative UI program that combines social insurance with self-insurance. Unemployment contributions are split between individual accounts and a common solidarity account, which is partly financed by the government. Both workers and employers pay contributions. In doing so, employers reduce their severance obligations, so severance pay is partly replaced by the new UI program. The new program is effectively a funded program, with individual accounts managed by a freestanding administrator selected through a competitive bidding process. To stimulate reemployment, recipients first draw resources from their own accounts and then, only after these are depleted, from the solidarity account. Withdrawals from individual accounts are triggered by the worker leaving the employer, regardless of the reason. Withdrawals from the common fund are triggered by the depletion of resources in individual accounts, if the claimant satisfies the usual conditions of continuing eligibility under UI (such as not working and being available and searching for a job), but withdrawals are limited to two every five years. The level of workers’ benefits is dependent on their past earnings with the replacement rate that declines with income.

*Source: Robalino, Vodopivec, and Bodor 2009.*
In designing the transfer, policy makers need to decide on the targeted population group, the level of the benefit, its duration, and the administrative conditions for eligibility, as well as on whether to impose a resource test, and whether the transfer is ex ante or ex post. The last is not an issue of design that is commonly discussed but it is important. The transfer does not have to be state dependent; it can occur after the worker becomes unemployed (ex post transfer) or before the worker becomes unemployed (ex ante transfer). There might be circumstances in which ex ante transfers generate better incentives for work. Design issues in each of these categories are summarized below.

**Targeted population.** It is important not to base eligibility for the transfer on the worker’s type of occupation or economic sector or on whether the individual has a formal or informal job. As discussed before, doing so distorts relative net earnings between sectors—in particular, the formal and informal sectors—and can be inequitable. Other things being equal, a transfer that is designed for only informal sector workers makes informal sector work more attractive and can reduce the share of formal sector workers (see also chapter 7). Moreover, as discussed in chapter 2, individuals move into and out of the formal sector, which would mean that they would sometimes lack coverage under a program based on occupations or sectors of employment.

**Benefit level and duration.** The level of the transfer should be set to the minimum possible and start with the shortest duration. There are, of course, trade-offs between these two parameters in that a lower transfer can be paid for longer. What matters in terms of design is the present value of the transfer given the maximum duration. As with the overall mandate of the income protection system, it is difficult to define what an adequate minimum would be, but the larger the transfer, the higher the risk of moral hazard, the higher the cost of the program, and the less likely it is to be financially sustainable. Transfers equal to or below the minimum wage could be considered, lasting, at least initially, no longer than two months. In all cases, policy makers should conduct a careful assessment of the potential costs before implementing the transfers, and there should be careful monitoring and evaluation of the impact of these subsidies.

**Administrative conditions for eligibility.** When the transfer is modest and the duration limited, any administrative and control issues become less important. Nevertheless, it is necessary to invest in systems to ensure that recipients are properly monitored, that their unemployment was involuntary, that the vesting period—or alternatively the minimum required number of contributions for eligibility—was respected, and that the recipients are actively looking for work (even if they are working in the informal sector)\(^{19}\) or, if necessary, are engaged in retraining.

**Resource test.** The benefits of having a resource test seem to outweigh the costs. The main benefit is that, for a given level and duration of transfer, a resource test reduces fiscal costs; for a given budget it makes it possible
to concentrate resources on those who need them the most. The cost is that the resource test introduces a marginal tax rate for individuals close to the eligibility line, which can reduce their incentive to seek formal work or to work at all. However, this problem can be addressed if the transfer is modest and if it declines gradually with the worker’s level of income (see chapter 7).

**Ex ante versus ex post transfers.** In principle, ex ante interventions can give workers more of an incentive to work and can reduce the economic cost of the system, but whether ex ante or ex post is finally preferable is an issue that still requires empirical evidence and more thinking. The argument is as follows. Ex post transfers (say, a minimum benefit paid for two months after the balance in the individual account has run out) impose a tax on individuals who have positive account balances when they get a job after being unemployed. In this situation, they would have an incentive to prolong their period of unemployment. An alternative would be to pay the transfer ex ante while the individual is still working. For instance, for each day that the worker contributes to the income protection system, the government could contribute matching funds up to a total of one or two months. This design would be more cost-effective if it were to shorten the period of unemployment. Workers would have an incentive to keep their period of unemployment as short as possible so that they could keep the transfer to fund their future consumption. The design recalls the reemployment grant used by the Employment Insurance Fund in the Republic of Korea, where individuals who find a job are allowed to keep half of their remaining unemployment benefits.

**Financing mechanisms.** Beyond funding income protection transfers from general revenues, there are good arguments in favor of using a dismissal tax. Chapter 7 makes the case for general revenues as opposed to payroll taxes—as long as coverage is broad—to reduce the tax wedge. In the case of unemployment benefits, governments could also consider a dismissal tax. This tax could be justified on the grounds that dismissals create a negative externality as employers do not take into account the resulting social costs of job loss. Therefore, it would be efficient for employers to pay a percentage of the salary of the individual who is dismissed as a tax. Revenues from the tax, however, would not go to the employee (as in Brazil today) but to a fund that helps to finance the redistributive component. In fact, in countries with UI systems, the revenue from the tax can be used to reduce the payroll tax that finances UI. In the general model proposed here, the revenue from the tax would finance the cost of the unemployment transfers. Clearly, for all of the reasons discussed in the previous section, the level of the tax needs to be carefully engineered to prevent it from having a negative impact on employers’ hiring and dismissal decisions.

In designing the savings component, three issues are key to the successful implementation of the system: (1) keeping contributions to the UISAs
Managing labor market risks

at affordable levels, (2) reducing incentives for workers to increase job turnover, and (3) providing incentives for workers to enroll in the savings component. How policy makers handle these issues will depend on the mandate for precautionary savings, the way accounts are funded, and payment and contribution collection systems.

Mandatory precautionary savings. It is important to impose a mandate that is not too large, particularly when workers face credit constraints and cannot borrow. As discussed above, when the level of precautionary savings is too high, workers have an incentive to evade the system or to fake dismissals to cash out their account balances. One month of salary after 12 months of contributions is the rate that has been set in most countries that have implemented UISAs. This rate requires a contribution rate of around 8 percent. This contribution could be lowered for low-income workers given that they would also be eligible for the transfer. It could also be reduced across the board if the UISAs were not funded (see next subsection).

Notional unemployment savings accounts. Like pensions, UISAs can either be funded or notional, but in all cases they need to pay competitive rates of return on savings. In the case of notional unemployment savings accounts (NUSAs), the accumulation of funds takes place only “on the books.” In other words, instead of being invested in financial assets, workers’ savings are invested in nontradable government debt. This approach is very similar to that of the notional defined contribution systems adopted by many countries for their pension systems. NUSAs can be a useful alternative to UISAs in countries where governance structures and administrative capacity are not adequate to guarantee the proper management and investment of workers’ savings. However, the main advantage of NUSAs is that they can reduce fiscal pressure on governments to finance the redistributive component of the system while also requiring lower contribution rates. This advantage occurs simply because, in NUSAs, the contributions of plan members can still be used to pay benefits, including those related to the redistributive component. Clearly, as mentioned above, it implies that the government is implicitly borrowing from the unemployment fund and that, at some point, it will have to repay this debt. Depending on the coverage of the system, this implicit liability can be funded through general revenues or an explicit pay-as-you-go tax.

Withdrawals. Ideally, unemployment benefits would be paid only as monthly installments, unless the accumulated capital is above a minimum level. Lump sum payments would be made only for total disability or retirement. As discussed above, allowing recipients to use the funds to buy a house or make other investments complicates the management of the system and dilutes its insurance function. It also gives workers an incentive to fake job dismissals. If policy makers wish to encourage workers to accumulate long-term savings to spend on housing or education, then other instruments/programs can be considered. That being said, when
precautionary balances go above a certain limit (to be determined by policy), workers should be allowed to cash out their savings—which is equivalent to interrupting their contributions.

Borrowing from future pension wealth. Integrating the pensions and unemployment insurance systems and allowing plan members to borrow from their future pension wealth would give them more financial flexibility and also reduce fiscal costs. In essence, this proposal would allow individuals to transfer wealth from the future to the present. In other words, those individuals for whom the mandate of the system is too high (and, therefore, welfare decreasing) would be better off if they moved their prospective pension wealth forward to the present to finance their consumption during periods of unemployment (see chapter 7). The extra flexibility would also reduce the size of the redistributive component. When workers have long periods of unemployment, they would be allowed to borrow from their pension wealth once the balance in their individual accounts and their cash transfers had dried up. They would have the option to “repay” the amount borrowed or to retire with a lower pension (adjusted for the amount of the loan). Clearly, policy makers would have to set a minimum amount of pension wealth that all individuals must have. Alternatively, unemployment transfers would be paid only after the worker had used his or her “excess” pension wealth (in other words, the amount above the minimum balance).

Collecting contributions. To reach the self-employed and workers in small enterprises, it is necessary to make current contribution collection systems more flexible. Two issues are important. First, it will be necessary to allow for lump sum payments—for instance, based on the targeted benefit that the self-employed expect to receive when unemployed and subject to a minimum (the value of the minimum transfer). Second, it will be necessary to allow for sporadic contributions, because many workers may not be able to contribute regularly or continuously. Since the unemployment benefit is indexed to the balance in the individual account, and since ex ante or ex post unemployment income transfers are indexed to the number of contributions made by the worker, the system has built-in incentives to promote contributions and reduce moral hazard.

Active Labor Market Programs

Income support policies described in the previous section tend to work better when they are complemented by effective ALMPs. ALMPs are interventions in the labor market designed to address market failures that can contribute to higher unemployment risks or longer spells of unemployment, particularly for unskilled workers and young people. International experience shows that ALMPs have limited aggregate effects, but when
properly targeted and efficiently run, they can be a cost-effective way to increase the employability of individuals and to address job search constraints.

This section discusses the role that ALMPs could play in LAC, reviews their performance, and proposes a policy framework for reforming existing programs and designing new ones. The section is organized as follows. First, it provides an overview of the barriers (or market failures) that might explain why poor people and low-skilled young people are not working, or are working in jobs that do not satisfy their needs; it also looks at the types of ALMPs that could help to overcome these problems. Second, it analyzes the current state of ALMPs in the region and then, based on an assessment of international experience with ALMPs, discusses some design issues that governments might consider to increase the effectiveness of current programs.

Typology of Constraints to Employment and ALMPs

The “active” labor market programs analyzed here have two important features that distinguish them from general policies, such as income taxes, that also affect the labor market. First, they are targeted toward the unemployed or toward low-income or low-skilled workers with little or no work experience, who have completed their formal schooling. Second, the policies are aimed at promoting employment and wage growth among this population rather than just providing income support. Therefore, the challenge that policy makers face in trying to come up with an efficient design is to identify the primary reasons why these targeted population groups have difficulty accessing labor markets or can access only low-quality jobs.

Factors that explain workers’ unsatisfactory labor market performance at the micro level can be divided into two general categories: employability and job search constraints. The main two types of employability constraints are technical and nontechnical skills mismatches. Job search constraints are mainly related to factors that limit the exchange of information between workers and potential employers. They tend to involve problems in information and access and in signaling, but can also include constraints on capital (human, social, or physical) that limit self-employment.

In addition to these specific labor market constraints, there can be transitory shocks that affect the demand for labor and that justify government interventions. Cyclical fluctuations in investment and output are the obvious example. There also can be other shocks resulting from technological change or demographic transitions that reduce labor demand for certain skills relative to the supply. These six types of constraints are described below.

Technical skills mismatch. Governments often assume that unemployment and low wages are the result of a mismatch between the specific
skills that employers require and those possessed by the potential working population. This assumption is reflected in the large public sector training institutions that exist throughout LAC and, indeed, throughout the developing world. Certainly when technical skills mismatch is the main barrier to finding employment, the public sector has a role to play in helping job seekers to get specific training, promoting the growth of a job training sector, and providing public training programs in geographical areas (or for demographic groups) not reached by the market. Public intervention may also be appropriate in terms of defraying the cost to firms of internships, apprenticeships, and subsidized training periods.

**Nontechnical skills mismatch.** General skills, defined as nontechnical skills that enhance the ability of workers to learn specific skills or to interact effectively with co-workers and clients, are another type of skills that may be in short supply relative to demand. These skills—numeracy, literacy, and so-called soft skills (that is, social skills applicable to the labor market)—are usually acquired in primary and secondary schools, which is why governments in the region make general education for all people a high priority. Thus, when the lack of nontechnical skills constitutes a constraint to the creation of good-quality jobs, the government has a strong role to play in improving the quality of general education and in providing additional training in these general skills, either through school-based or non-school-based programs.

**Job matching.** Even where many positions exist and are vacant, low-income workers and low-skilled young people often find it difficult to access them. In fact, jobs are often obtained through informal contacts (see step 5 in Banerji et al. 2010). The poor, in particular, are at a disadvantage in finding work because of their lack of social capital and of employment “networks.” However, networking is not the most efficient way of finding employment since it yields only a small sample of applicants, thus often leading to suboptimal matches. Governments could play a role in helping low-income and low-skilled workers to access accurate and up-to-date information about job openings. They could do so directly, via technology or job centers that maintain databases of job openings, or indirectly, by providing people with the resources (for example, job search stipends) to collect the information on their own.

**Signaling.** Even if the poor have the skills and training to be good employees, they may have difficulty signaling that to employers. Signaling can be especially challenging for young people: research has shown that those who have already had a job are less likely to be unemployed than those who have never worked before. A skills certification scheme may be an effective way to bridge this signaling gap.

**Capital constraints for the self-employed.** Self-employment is a choice made by many workers and is often the only available employment option
for poor people in areas with low labor demand. This is the case despite the inherent risks and difficulties involved in creating a successful business. The main barriers faced by workers wishing to become self-employed are human, social, or physical capital constraints. To address this problem, governments may need to introduce programs that provide training in the entrepreneurship and other skills needed for gainful self-employment or for microenterprise development.

*Lack of labor demand.* In situations where labor demand is low and labor supply increasing, training programs can sometimes simply transfer unemployment from well-trained to poorly trained workers. In this situation, job search limitations are no longer the binding constraint. Rather, the problem is that not enough labor is being demanded, relative to the available supply. There may be ways to increase employment by changing the costs and benefits to employers of hiring a worker. The most widely used mechanisms are (1) public work programs, which are self-targeted temporary job creation programs; and (2) wage subsidies, which involve reducing the payroll tax and the wage and severance payments of specific groups of workers to encourage employers to continue to employ them. Of these two options, only the second is discussed in this chapter, but, as the current financial crisis is making clear, the first is likely to be the most efficient (see box 5.2).

*Constraints to employment: Summary.* It is likely that poor people and low-skilled young people face all of these constraints to different degrees. Given that labor markets are tighter in some LAC countries than in others, the extent to which one constraint is more problematic than another will differ by country as well. The challenge for policy makers is to assess, ex ante, the main constraints in order to balance the various public interventions needed to alleviate them. Table 5.4 summarizes the discussion above.

**Assessing the Portfolio of Active Labor Market Programs in LAC**

This section reviews the experience of ALMPs in LAC countries and discusses their design, implementation, coverage, impact, and cost-effectiveness.

The portfolio of programs in the region is quite rich and varied, but its coverage is limited. These interventions tend not to cover those who live in rural areas or who work in the informal sector. Most programs provide skills training for young people, several following the Jóvenes model that was piloted in Chile. These programs combine vocational education with life skills training, job readiness training, and job search assistance supplemented by intensive work experience (internships) in public and private firms. In addition, a large number of programs in the
Despite recent record economic growth averaging 5 percent per year, the LAC region has not escaped the effects of the global financial crisis that is now roiling the economies of developed countries. Growth rates in LAC are declining, and, in some countries, unemployment and poverty rates are starting to increase. The example of Mexico illustrates the impact that the crisis could have on employment in the region and the labor market policy responses. The employment impact in Mexico, given the proximity to the United States and the links between the two economies, is expected to be severe. Forecasts for GDP growth range between $-1.4$ and $-0.3$ percent (IMF 2009). Although the impact on employment levels is difficult to predict, evidence shows that formal employment growth is already slowing and unemployment is likely to increase. During previous economic downturns, the unemployment rate and the share of labor in the informal sector increased (Lopez-Acevedo and Freije 2008). Young people, low-skilled workers, and low-income workers constitute most of those working in the informal sector and are the most vulnerable to the loss of a job (see chapter 2).

In this situation, labor market policies and programs can play a key role in alleviating the worst effects of the crisis on the labor market. Like most countries, Mexico has implemented labor policies that aim to provide income protection to the unemployed and to help individuals acquire skills and find jobs. These initiatives involve a combination of income protection systems and a series of ALMPs, including job search assistance, intermediation, training and retraining programs, wage subsidies, microfinance programs, and public works. The Mexican government is planning to introduce a number of measures as part of a 25-point plan presented in January 2009 to reduce the impact of the economic crisis on jobs and income. These include (1) the Temporary Employment Program (public works) in poor urban areas; (2) incentives (in the form of a cash transfer) for workers to participate in short training courses at universities and technical schools; (3) a wage subsidy or benefit for workers in the industrial sector and small and medium-size enterprises (SMEs) affected by temporary layoffs to encourage firms to maintain the size of their labor force; (4) an expansion of the services provided by the National Employment Service, including training and support to SMEs; (5) the extension of social insurance coverage for unemployed workers from two to six months; and (6) an increase in the amount that workers are allowed to withdraw from their retirement accounts (AFORES) in the event of unemployment.

There are clear trade-offs between expenditures on income protection measures, active labor market programs, and other programs. In general,
Box 5.2 (continued)

it seems appropriate to concentrate resources on those programs that benefit the most vulnerable workers and that can be scaled up rapidly. Mexico is a good example of a country that has several income protection programs and ALMPs operating now and is positioned to scale them up to mitigate the impact of the crisis.

The government of Mexico may also want to consider reducing payroll taxes, at least temporarily. This reduction could take the form of credits that postpone the payment of these taxes, or implicit transfers if benefits to workers are financed out of general revenues. This measure could reduce some of the disincentives that workers have to avoid formal employment while protecting their income, and it could pave the way for more lasting reform.

Source: Robalino, Vodopivec, and Bodor 2009.

skills training category are part of the Entra 21 initiative, a recent effort by the International Youth Foundation to train underskilled, unemployed, and disadvantaged young people in the use of information and communication technologies (see table 5.5).

Programs aimed at making the labor market work better are underdeveloped in the region. Intermediation services and skill certification and firm accreditation programs are underused, although they have the potential to help workers to access better jobs and employers to find and hire better employees. Internet-based employment services, one-stop shops for job search assistance, and national qualifications frameworks are gradually being implemented in LAC countries. On the other hand, interventions to reduce the constraints felt by entrepreneurs (such as the lack of skilled workers, sparse social networks, and the lack of access to credit) are not very common. This is despite the fact that microenterprises employ a large proportion of the labor force, mainly in the informal sector.

In the region, policy makers have chosen to introduce wage subsidies much less often than public works programs, probably because the subsidy programs are expensive and the results seen internationally have been disappointing. Nevertheless, public employment programs, which are discussed in chapter 7, have not proved to be very useful in playing an “activation” role in increasing future work opportunities, although they have been useful in providing income support.

Training programs. Skills training programs are the most common active labor market interventions for employed and unemployed people of all ages in LAC. Several overview studies of ALMPs in LAC have highlighted
the popularity of training programs over services such as entrepreneurship schemes, job search assistance, and wage subsidies. For instance, according to the Youth Employment Inventory, 56 percent of all interventions in the region provide skills training (or 88 percent if the measure includes comprehensive programs, which are a mixture of services that provide classroom training, on-the-job training, life skills, counseling, and job placement assistance to beneficiaries as well as assisting young entrepreneurs) (Betcherman et al. 2007).

During the 1950s and 1960s, Latin America and the Caribbean countries set up traditional supply-oriented vocational training systems to

Table 5.4 Employment Barriers and Ways to Overcome Them

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employability barriers</td>
<td>Technical skills mismatches</td>
</tr>
<tr>
<td></td>
<td>Access to vocational training services</td>
</tr>
<tr>
<td></td>
<td>On-the-job training, internships, and work experience programs</td>
</tr>
<tr>
<td></td>
<td>Development of training sector</td>
</tr>
<tr>
<td></td>
<td>Coverage of hard-to-reach areas and populations</td>
</tr>
<tr>
<td>Nontechnical skills mismatches</td>
<td>Access to general and life skills training services</td>
</tr>
<tr>
<td></td>
<td>Development of school and non-school-based programs</td>
</tr>
<tr>
<td>Job search barriers</td>
<td>Job matching</td>
</tr>
<tr>
<td></td>
<td>Intermediation through job centers and employment offices</td>
</tr>
<tr>
<td></td>
<td>Financial assistance for job search</td>
</tr>
<tr>
<td></td>
<td>Signaling</td>
</tr>
<tr>
<td></td>
<td>Equivalency education programs</td>
</tr>
<tr>
<td></td>
<td>Skills certification mechanisms (for example, national qualification frameworks)</td>
</tr>
<tr>
<td></td>
<td>Capital constraints for the self-employed</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurship and self-employment schemes</td>
</tr>
<tr>
<td></td>
<td>Start-up grants and loans</td>
</tr>
<tr>
<td>Insufficient labor demand</td>
<td>Private sector incentive programs (for example, wage and employment subsidies, self-employment grants)</td>
</tr>
<tr>
<td></td>
<td>Direct job creation (for example, public works programs)</td>
</tr>
</tbody>
</table>

*Source: Adapted from Cunningham, Sanchez Puerta, and Wuermli 2010.*
Table 5.5 ALMPs in Latin America and the Caribbean, Selected Countries

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Argentina</th>
<th>Bolivia</th>
<th>Brazil</th>
<th>Caribbean</th>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico</th>
<th>Peru</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employability barriers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of technical and soft</td>
<td>Proyecto Jóven, Entra 21</td>
<td>Mi Primer Empleo Digno,</td>
<td>S System, PLANFOR/</td>
<td>Youth Empowerment Service,</td>
<td>Chile Joven, Entra 21,</td>
<td>Jóvenes en Acción, SENA,</td>
<td>PROBECAT/ BECATE, CIMO/PAC,</td>
<td>Projoven, Entra 21,</td>
</tr>
<tr>
<td>skills</td>
<td></td>
<td>Entra 21</td>
<td>PNQ, Entra 21</td>
<td>Project Strong, National</td>
<td>PROFOCAP</td>
<td>Entra 21</td>
<td>CABE, Entra 21</td>
<td>CAPLAB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Youth Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Job search barriers</strong></td>
<td>Employment offices</td>
<td>Unidades Promotoras de</td>
<td>SINE</td>
<td>Job Search Services</td>
<td>SENCE</td>
<td>SENA</td>
<td>SNE</td>
<td>Red CIL/ Proempleo</td>
</tr>
<tr>
<td>Poor matching</td>
<td></td>
<td>Empleo (UPEs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor signaling</td>
<td>Lifelong Learning &amp; Training</td>
<td>SENAI (Minas Gerais)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of capital (human/social/</td>
<td>SAT, Young Entrepreneurs</td>
<td>PROGER, PRONAF, Economía</td>
<td>Small enterprise development</td>
<td>Productive Options Program</td>
<td>Mi Empresa, Jóvenes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>physical)</td>
<td>(ProMujer)</td>
<td>Solidaria</td>
<td>unit</td>
<td>(OP), SICAT</td>
<td>Emprendedores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of labor demand</td>
<td>Wage subsidies/p</td>
<td>Programa Pimeiro</td>
<td>Road Maintenance Program,</td>
<td>Apprentices hiring program</td>
<td>Empleo en Acción, PADE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>public works programs</td>
<td>Emprego, FAT</td>
<td>Beautification Program</td>
<td></td>
<td>Programa Primer Empleo,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PROFECE, Construyendo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Peru</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Authors' compilation.*

*Note: PLANFOR = Plano Nacional de Formação Profissional; PNQ = Plano Nacional De Qualificação; PROFOCAP = Programa de Formación, Capacitación y Empleo; SENA = Centro Nacional de Aprendizaje (Colombia); PROBECAT/ BECATE = Programa de Becas de Capacitación para el Trabajo; CIMO = Programa de Calidad Integral y Modernización; PAC = Programa de Apoyo a la Capacitación; CAPLAB = Centro de Servicios para la Capacitación Laboral y el Desarrollo; SINE = National Employment System; SENCE = Servicio Nacional de Capacitación y Empleo (Chile); SNE = Servicio Nacional de Empleo; Red CIL = Pro-empleo: Red Nacional de Centros de Colaboración e Información Laboral (Peru); SENAI = Servicio Nacional de Aprendizagem (Brazil); SNFT = National System of Technical Skills; CONOCER = National Council of Standardization and Certification of Labor Competences (Mexico); SINEACE = Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad de la Educación; SAT = Technical Assistance Service; PROGER = Programas de Geração de Emprego e Renda; PRONAF = Programa Nacional de Fortalecimiento da Agricultura Familiar; OP = Productive Options Program; SICAT = Comercializadora Servicios; PLANÉ = Plan Nacional de Empleo de Emergencia; EDIMO = Empleo Digno e Intensivo de Mano de Obra; FAT = Fundo de Amparo ao Trabalhador; PADE = Programa de Apoyo Directo al Empleo; PET = Programa de Empleo Temporal; PROFECE = Mujeres Emprendedoras.*
promote industrialization and the expansion of formal commerce and services. Despite some subsequent amendments, concerns over their functioning began to emerge in the 1980s. The high costs of those systems, the rigidity of the training that they offered, and the limits that they set on beneficiary groups gave rise to new approaches to training (Puerto and Sanchez-Puerta 2008).

The Jóvenes programs, which combine training with other services such as job readiness preparation and job search assistance, have yielded promising results. These programs, established in the region in the early 1990s, tend to be decentralized, demand-driven training programs that offer poor young people a comprehensive package of workplace internships preceded by training in both professional and life skills. The specific programs vary, but most of them follow a model tried in Chile. Disadvantaged young people are identified using, for example, out-of-work statistics, socioeconomic data, and poverty mapping. Qualified private firms, nongovernmental organizations, and public and nonformal training institutions provide the training on a competitive basis. Providers are required to line up internships and to ascertain what kinds of skills are needed by local employers before they can receive any funds for training. In this way, trainees can be placed in internships that teach the skills for which there is a demand on the labor market. In terms of life skills, programs mainly teach problem-solving skills, correct workplace behavior, conflict management, and job search techniques and seek to build self-esteem.

For example, Programa Juventud y Empleo in the Dominican Republic aimed to train 37,500 disadvantaged young people in trades relevant for the productive sector to increase their chances of getting a job (Card et al. 2006). Procajoven in Panama and Projoven in Peru are two other programs that strive to provide a demand-driven training curriculum. Projoven is known for its cooperation with prospective employers, who hire 80 percent of the training participants following a period of on-the-job training.29

One of the most recent skills training programs for young people in LAC is Entra 21. This initiative was developed in 2002 by the International Youth Foundation to make disadvantaged youths more employable through training in information and communication technology. There have been no rigorous impact evaluations of this program, but initial evaluations of the program’s outcomes in Bolivia, Brazil, Colombia, the Dominican Republic, El Salvador, Panama, Paraguay, and Peru have shown that participants’ chances of getting a job have increased and that the jobs found by participants are of higher quality than those found by young people who are not beneficiaries of the program (Pezzullo 2005).

Estimates of unit cost for the Jóvenes programs range from the US$600 to about US$2,000 per participant served. Active private sector participation generates significant savings to the government when firms cover the costs of on-the-job training. Likewise, the bidding mechanism to select
training institutions has been shown to be an efficient instrument for setting competitive training prices, ensuring high quality, and reducing costs. In general, the largest share of costs is accounted for by direct, nonadministrative expenditures. For instance, in the case of Projoven in Peru, which is one of the ongoing programs that has continuously measured costs and benefits since its implementation in 1996, direct costs (training plus financial services but excluding the opportunity cost of training) constitute nearly two-thirds of its total costs. In the case of Proyecto Jóven in Argentina, costs were initially high and the government could not afford to support it. The program was closed in 2001 and replaced by smaller programs (such as Programa Capacitar), which inherited the demand-driven model but were implemented on a smaller scale.

Impact evaluations of this kind of program have generally found positive results for program participants in at least two variables of interest— their chances of getting a job and the quality of their jobs as measured by salary, benefits, and type of contract (table 5.6). The evaluations have shown that women and younger beneficiaries have higher rates of return from participating in these programs than men and older cohorts (Card et al. 2006). Given their low cost per trainee and their positive impact on employment and earnings, nearly all such programs have a positive benefit-cost ratio, even without considering any positive externalities such as reduced risky behavior.

Soft and life skills training. One important element of a comprehensive training program is its provision of soft and life skills to disadvantaged individuals. Training in soft or life skills focuses on teaching communication, leadership, teamwork, motivation, and discipline. The training is targeted mainly to the unemployed and disadvantaged groups, such as young people. A common characteristic of the programs evaluated by the American Youth Policy Forum is the targeting of young people from economically disadvantaged neighborhoods with multiple issues such as substance abuse, criminal offenses, teen pregnancy, and low educational, social, and vocational skills development (Batlle 2006). Programs with a strong focus on life skills are sometimes financed and managed by the government and sometimes by international organizations. An exception is the Make a Connection (MAC) programs in Latin America, which are funded by Nokia and managed by the International Youth Foundation. MAC programs are operating in 17 countries: Brazil, Canada, China, the Czech Republic, Finland, Germany, Hungary, Korea, Mexico, Peru, the Philippines, Poland, the Russian Federation, South Africa, Thailand, Turkey, and the United Kingdom.

Three key categories of life skills are taught in training programs across the LAC region: (1) self-concept skills, including self-control, self-esteem, and coping strategies; (2) cognitive skills, including decision making, problem solving, and critical thinking; and (3) social context skills, including
skills related to communication, health and self-care, and social interaction (cooperation, teamwork, and leadership) as well as occupational skills (punctuality, appropriate dress, and appropriate conduct at job interviews) and civic skills (the use of environmental resources, exercise of citizenship rights, and the use of community social services).

While no impact evaluations of soft and life skills training interventions are available, certain initial conditions seem to be associated with the most promising programs. The first of these conditions is the availability of sufficient financial resources. The second condition is the existence of

---

Table 5.6 Impact and Cost-Benefit Analyses of the Jóvenes Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Impact on employment</th>
<th>Impact on earnings</th>
<th>Cost-benefit analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina: Proyecto Joven</td>
<td>10% (women)</td>
<td>10% (monthly wages)</td>
<td>NPV &gt; 0 if 12 years of positive benefits (DR = 5%)</td>
</tr>
<tr>
<td>Chile: Chile Joven</td>
<td>21% (individuals younger than 21 years old, women)</td>
<td>26%</td>
<td>n.a.</td>
</tr>
<tr>
<td>Colombia: Jóvenes en Acción</td>
<td>5% (women)</td>
<td>18% (men); 35% (women)</td>
<td>IRR = 4.5% (men); 13.5% (women)</td>
</tr>
<tr>
<td>Dominican Republic: Juventud y Empleo</td>
<td>Not significant</td>
<td>10%</td>
<td>NPV &gt; 0 if 2 years of positive benefits (DR = infl.)</td>
</tr>
<tr>
<td>Panama: Procajoven</td>
<td>Overall not significant; 10–12% (women and Panama City residents)</td>
<td>Overall negligible; 38% (women); 25% (Panama City residents)</td>
<td>NPV &gt; 0 if 1 year of positive benefits (IR = DR)</td>
</tr>
<tr>
<td>Peru: Projoven</td>
<td>6% (placement)</td>
<td>18% (hourly)</td>
<td>NPV &gt; 0 if 7 years of positive benefits (DR = 5%); IRR &gt; 4%</td>
</tr>
</tbody>
</table>


Notes: NPV = net present value; DR= discount rate; IRR = internal rate of return; IR = interest rate; n.a. = not applicable.
adequately and appropriately trained teachers. The third is adequate capacity building and performance standards, and the fourth is strong national, state, and local offices in charge of the implementation and management of the training programs (Hahn, Leavitt, and Lanspery 2006).

Employment services. All over the world, governments implement job intermediation services to help workers and employers. By centralizing information and providing assistance with job searches, these services expand the pool of potential candidates for jobs and help employers to select suitable candidates for their vacancies. The services include job search assistance (giving practical help to job seekers with curriculum vitae, guiding workers’ careers) and job placement (providing lists of job vacancies and training programs, doing preliminary screening of eligible candidates or suitable jobs). These services have the potential to become the central part of the whole system, linking job search, income support, training programs, and other ALMPs.

One area in which there has been a lot of innovation in the past few years is the provision of employment services to young people. By increasing use of the Internet, enhancing labor market information systems, and interacting with employers, these employment services have improved the job search situation for young people, which has, in turn, resulted in higher demand for employment services. Providing at-risk young people with more information about what jobs are available is particularly important because this group has fewer networks from which to acquire information than those who are better off. Indeed, the demand for employment services can sometimes be higher among disadvantaged young people than among their more privileged peers.

International studies have found that these relatively inexpensive services tend to be among the most successful of all ALMPs (Betcherman et al. 2007; OECD 2006). Evidence from the United States also suggests that these programs work best when they involve social workers who can help clients with other factors that affect their ability to work but are not included in standard employment services, such as transportation to the workplace or options for child care.

In LAC, job intermediation services are either nonexistent or have limited coverage (Mazza 2003). There tend to be fewer job intermediation centers in LAC than in comparable countries of similar size (see table 5.7). These centers capture only a small proportion of vacancies. Even in countries where private sector providers have been allowed, public and private employment agencies may not succeed in finding more potential candidates for employers. Moreover, the experience of Brazil suggests that even within countries, disparities in the quality of services can be large (Samaniego 2002). In addition, sometimes these services are perceived to serve those with the fewest skills and to have nothing to offer to other job seekers.
Overall, despite their limited means and coverage, employment services appear to have some positive effects, particularly in terms of improving matching. In Brazil, these services do not appear to be increasing the employment probabilities of the unemployed, but they do increase workers’ probabilities of finding formal jobs (Ramos 2002). Similarly, in Mexico, employment services have been found to help unemployed men (but not women) to find jobs more quickly, with better pay and conditions (Flores Lima 2006).

To date, the impact of labor intermediation programs for young people has not been comprehensively evaluated, but some initial results are promising. The evaluation of the United Kingdom’s Restart, which offers job search assistance to young people, found that male participants in the program had unemployment rates that were 6 percentage points lower than those in the control group, although no long-term effects were observed for women (Davies 2004). This program, as well as most others of this type in Organisation for Economic Co-operation and Development (OECD) countries, includes sanctions such as denial of welfare benefits for any participant who fails to comply with program rules. In LAC, the evaluation of Portugal’s InserJovem—which targets the long-term young unemployed, assists with job searches, and offers short basic skills courses—found a statistically insignificant reduction in the average unemployment duration for participants, but no gains in wages.
Skills certification frameworks. Because job seekers need a way to signal their skills to employers, training programs offer skills certification. Often referred to as competency-based certification, skills certification has become increasingly important to employers as a quality assurance mechanism that recognizes and certifies individual’s skills and competencies. As modes and pathways of learning become increasingly diverse, skills certification fulfills various objectives. First, it recognizes skills and competencies regardless of the way they were acquired and regardless of the job seeker’s educational background. Second, skills certification allows employers to compare individuals’ skills across the labor market. Finally, skills certification serves as a way to match the skills acquired through training or other means with the skills required to perform a job (Bouder et al. 2009). Other less immediate but nevertheless crucial objectives of skills certification are to increase occupational mobility, promote lifelong learning, and enable international and intergenerational comparative analysis (Bouder et al. 2009; Béduwé et al. 2009).

Skills certification allows individuals who have not completed formal schooling or who are engaged in nonformal learning arrangements to have their skills recognized within an integrated framework. In essence, skills certification enables those with no formal school-based qualifications to provide prospective employers with a guarantee of their skills and competencies (World Bank 2003). In principle, skills certification should be organized in the context of a national qualifications framework (discussed below). To date, most skills certification mechanisms have been sponsored by governments and donors. In OECD countries, where the majority of skills certification frameworks and mechanisms exist, they are financed mainly by national governments. However, as more and more developing countries establish certification frameworks and mechanisms, there has been an increase in donor funding in this area of education reform. For example, the national qualifications framework in South Africa has been mostly funded by the European Union with additional support from the Canadian government (Allais 2007). In LAC, the program Chile Califica is funded by both the government (50 percent) and the World Bank (50 percent).

Unfortunately, there is no evidence on the impact or cost-effectiveness of any of these programs. Even though these frameworks seem to play an important role in overcoming job search constraints, especially for the poor who are less likely than the rest of the population to have formal education, there is no rigorous account of their outcomes.

Programs for the self-employed. The central feature of programs for the self-employed is the promotion of entrepreneurial skills, namely, the ability to create and manage sustainable and efficient businesses that are capable of offering permanent jobs. They combine financial assistance with technical services, such as training, counseling, and assistance in developing business plans, that can successfully increase the productivity of beneficiaries and,
by extension, the viability of microenterprises. This type of intervention is particularly important in the LAC region given that microenterprises employ a large proportion of the labor force, mostly in the informal sector (Orlando and Pollack 2000), and, as shown in chapter 2, face specific difficulties in surviving and expanding in many countries of the region.

In LAC, these programs have mainly targeted disadvantaged young people who have entrepreneurial skills or who own a small or informal business. Peru's Creer para crear, Youth Entrepreneurship Program, and Certification of Youth Entrepreneurship are some examples of this kind of initiative targeted to young people in the LAC region. This approach is different from that of Europe and Central Asia, which have generally targeted unemployed people regardless of their sociodemographic profile.

Although initially sponsored by governments, these programs have begun to attract the private sector, including nongovernmental organizations. These private institutions are involved both in financing and in implementation. In fact, microcredit and start-up loans have been crucial in supporting the creation and maintenance of small new businesses (Betcherman, Olivas, and Dar 2004).

The few rigorous evaluations that have been carried out both in developed countries and in the LAC region tend to be encouraging, even though they do not provide information on the cost-effectiveness or the long-term effects of programs for the self-employed. They suggest that microenterprises that have benefited from these programs are more likely to survive. Two programs in Peru that are targeted to young people—Formacion Empresarial de la Juventud and Calificación de Jóvenes Creadores de Microempresas—have been evaluated. These evaluations have shown that participating in the project had a positive impact on the likelihood of having a business (even in the formal sector) and of hiring employees, and it also significantly reduced unemployment and inactivity rates while significantly increasing earnings. The evaluations found that the key determinants of this success were access to credit and frequent counseling visits. Nevertheless, it is important to indicate that, in general, these programs monitor and follow up beneficiaries' earnings and the state of their businesses for only one year after they participate in the programs. This limitation implies that only the short-term impact of the programs can be assessed and that further evaluations will be needed to understand any mid-term and long-term effects (Jaramillo 2004).

Wage subsidies. Wage subsidies have been used in developed and transition countries to help to create jobs by temporarily subsidizing employers' wage costs. Employers receive subsidies from the government upon hiring an entitled unemployed worker during a specified period of time, ranging from six months in transition countries to two years in developed countries. Most wage subsidy programs implemented in OECD economies use a categorical targeting and tend to focus on the long-term unemployed, on areas and sectors with high unemployment, and on special groups of workers such
as young people. The subsidy is meant to cover an initial period of training for the new workers so that, by the time the subsidy ends, their productivity is high enough for the employer to keep them. This policy has received theoretical support, although the implicit assumption is that labor demand for low wage earners is very sensitive to costs (Pagés, Pierre, and Scarpetta 2008).

In general, subsidies cover part of the worker’s wage or part of the value of social security contributions, or both. In all cases, it is important for policy makers to set the subsidy at a level that generates the right incentives to encourage participation (that is, to attract those who would not have found an appropriate match in the absence of the subsidy), while minimizing the potential displacement of unsubsidized workers. In the case of subsidies to social security contributions, it is also important for policy makers to assess whether employers have an incentive to participate by considering how much of their labor costs will be reduced by the program.

The level of subsidies varies across countries and programs. For instance, in the United States, the Youth Incentive Entitlement Pilot Project sets the wage of participants at the same level as the minimum wage; in Poland, wage subsidies were set to be no higher than the unemployment compensation benefit; and in Argentina, subsidies were set slightly lower than the minimum wage. In Belgium, the subsidy program reduces employers’ payroll costs by at least 13 percentage points, which is a substantial incentive for employers to participate in the program.

Impact evaluations of subsidy programs suggest that wage subsidies can be most effective when combined with other programs such as on-the-job training, counseling, information sessions, and job search assistance. Programs in the United States and Argentina have successfully combined wage subsidies with other active labor market measures. Katz (1996) showed that wage subsidy policies addressed to disadvantaged groups in the United States had positive effects on their employment and earnings outcomes. In Argentina, Galasso, Ravallion, and Salvia (2001) conducted a randomized experiment aimed at providing wage subsidies and specialized training to workfare participants to promote their transition out of welfare. The evaluation showed some positive short-term employment effects but no positive effects on participants’ future earnings. Moreover, because of the costs and administrative procedures required of firms, the take-up rate was quite low (Galasso; Marx 2008, Ravallion, and Salvia 2001).

**A Framework for Reform**

A thorough evaluation of evidence shows that some programs can be useful to some workers in some cases. Extreme positions about the effectiveness of active labor market programs seem misplaced. ALMPs are neither a panacea for reducing unemployment and protecting workers nor a waste of public resources with high opportunity costs. If well-designed and targeted, these programs can be cost-effective.
Since it is not fiscally feasible to provide public support to all programs, the challenge is to define, ex ante, the main constraints and to focus resources on programs that alleviate these constraints. This approach is particularly important given that, according to the Youth Employment Inventory, no particular program is inherently more successful than the others in its impact or cost-effectiveness. Therefore, policy makers should consider which type of intervention best addresses the problem in question. According to the discussion in chapter 2, some of the areas to focus on in Latin America would be the following:

- **Skills training for young people.** This has been the focus of most interventions in LAC that have helped to reduce skill shortages in the region.
- **Labor intermediaion.** This can be a good and relatively cheap way of helping low-income workers and young people to find adequate jobs.
- **Wage subsidies.** These can help to create employment for certain vulnerable groups (even if the economic and fiscal costs of doing so tend to be high) and could be an important complement for training programs.
- **Support to entrepreneurs.** This would take the form of multiservice programs, which could facilitate self-employment.

In all cases, successful implementation will require improving governance, administration, and monitoring and evaluation systems. In terms of governance, it is important to avoid excessive centralization, give local offices the flexibility to manage their programs, and outsource implementation to public and private companies through contracts that reward performance. It is also important to build institutional capacity to ensure better management of the system. For instance, strengthening institutional coordination and the ability to manage multiservice programs can be important for reducing operational costs. It is also necessary to improve or develop the capacity to manage the bidding process for the selection of training centers and program providers in general. Finally, improving data collection, monitoring, and evaluation systems is critical for better planning and decision making. Programs need to be adjusted and optimized continuously, and this process can go forward only if real-time data are available to managers about their operations and performance.

**Recommendations on training.** Successful examples of comprehensive training interventions underline the following factors that are necessary for success:

- **On-the-job training.** In recent years, classroom training programs have added on-the-job training and internship components into a
package that offers a more holistic training process. Through these programs, it is possible to acquire and test skills and competencies in a variety of settings.

- **Support services for participants.** These include stipends, reimbursement of fees, transportation vouchers, and financial assistance to participants over the duration of the program. Examples of programs that offer these supports include the Summer Youth Employment and Training program and Job Corps in the United States, the Employability Improvement Program in Canada, Juventud y Empleo in the Dominican Republic, and Proyecto Jóven in Argentina.

- **Demand-driven training that actively involves the private sector.** This is crucial to ensure that participants acquire those skills and competencies that are in strong demand and of which there are often shortages on the labor market. One way to involve the private sector is through competitive bidding for training providers. Good examples of training programs that use competitive bidding can be found in Brazil (Plano Nacional de Formação Profissional, or PLANFOR), the Dominican Republic (Juventud y Empleo), and Panama (Procajoven). Competitive bidding ensures that participants will receive relevant and high-quality training from competent institutions at competitive prices. The other important issue is for programs to solicit the active cooperation of prospective employers, first to ensure that the training content is aligned with demand, and second to give participants a greater chance of being employed after they finish the course.

- **Financial incentives for employers and employees.** In essence, these financial incentives constitute a form of wage subsidy (see below). They need to be considered for two reasons. First, when governments reimburse employers for the wages of on-the-job trainees, employers have an incentive to play a bigger and more effective role in the training of participants. Second, potential beneficiaries have more of an incentive to join the programs and stay until completion. Existing wage reimbursement programs include the Employability Improvement Program in Canada and the New Deal for the Young Unemployed in the United Kingdom. Some programs (such as the Government Re/Training program in Poland) require participants to reimburse the government for these subsidies if they drop out of the program, thus giving them a powerful incentive to complete the course and help the program to achieve its objectives.

- **Appropriate targeting strategies.** These are necessary to ensure that programs are successful in reaching the populations that they were designed to benefit. In most Jóvenes programs in LAC, the courses were advertised in a massive campaign in all selected municipalities. Interested young people then approached the local (employment)
offices, where they filled in a targeting questionnaire to determine their socioeconomic status and eligibility or were interviewed to check if they matched the objective profile. In some cases, young people went through both the questionnaire and the interview.

- **Coordination among public agencies.** Coordination among all relevant entities—the government, national employment services, and other relevant players—is necessary for the effective and efficient implementation of any program. In Argentina, for example, most procedures for Proyecto Jóven were centralized in Buenos Aires, an arrangement that left local offices around the country with no administrative authority to make any significant decision or to approve or refuse projects. This excessive centralization hindered the bidding processes for the selection of training providers, thus delaying the delivery of the courses and internships (De Moura Castro and Verdisco 1999).

In addition to the various programmatic factors that are crucial in ensuring successful outcomes, there are also certain necessary initial conditions. These include (1) sufficient government resources for training, (2) an adequate supply of high-quality training institutions, and (3) an adequate supply of competent teachers, trainers, and counselors. A capable technical management and supervision unit is also critical in ensuring both that the program operates up to its maximum potential at all stages and that adequate monitoring and evaluation takes place.

**Recommendations on employment services.** Employment services can be a cost-effective way to increase productivity and reduce the length of unemployment periods. Their effectiveness needs to be enhanced by (1) improving registration by workers and firms, (2) improving the quality of the services that they provide, (3) extending their regional coverage, (4) developing minimum standards of performance that can be accomplished nationally but that are conditional on local constraints, and (5) providing these services in conjunction with other ALMPs and with the receipt of benefits in countries with income protection.

Furthermore, job intermediation should take into account the idiosyncrasies of the region’s labor market (Mazza 2003). It is important to identify relevant vulnerable groups in the region and not to rely on evidence from industrialized countries that target the long-term unemployed. LAC countries need to target, for example, workers and employers in the informal sector. In Peru, for instance, employment programs provide information to small enterprises to try to persuade them to join the formal sector. It is also important for job intermediation services to acknowledge the substantial internal and external migration in the region so they can help workers to find work in other countries and list vacancies to match jobs and workers across borders.
Some more-specific recommendations are as follows:

- **Exploit information technology.** Using recent advances in information technology can reduce the cost of providing job mediation services. These technologies are already enabling employment ministries in several countries (such as Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Peru, Uruguay, and Venezuela) to make information more readily available to job seekers and employers. This information covers a wide range of topics, including workers’ rights, employment regulation, the availability of training programs, resources for job seekers, vacancies, and links to websites publishing vacancies at home or overseas, as well as information targeted to vulnerable groups such as young people, women, and disabled workers.

- **Provide better incentives for employers and workers.** Current evidence indicates that simply providing information about vacancies is not enough to attract the attention of either employers or workers. Employment offices need to provide personal services to job seekers and forge closer links with employers to attract more users. The most productive public employment agencies offer services such as managing firms’ vacancies, helping to screen candidates, and providing information on what subsidies are available.

- **Decentralize provision.** Recent improvements in the public provision of employment services have involved decentralizing, integrating, and monitoring their delivery. The aim of decentralization is to allow regional and local offices to tailor programs to the needs of the local job-seeking and employer communities, while the central administration retains responsibility for budgeting and funding, setting policy, and evaluations.

- **Integrate services.** The aim of integrating services is to ensure that unemployed individuals do not have to deal with several different public administration offices. One-stop centers can deliver a variety of services in one location. Integrated services provide several levels of services for the majority of participants, while offering specialized services for those with more specific problems, such as young people, women, and disabled workers.

- **Expand the role of the private sector.** Although monopolistic public provision of employment services was considered necessary for a long time, in the 1990s, a consensus arose that private providers also had a role to play. As a result, governments in the region began encouraging the development of private employment agencies. Today public agencies often retain a monitoring role and are in charge of determining the eligibility of participants, while leaving provision of services to (or sharing them with) private employment agencies (Pagés, Pierre, and Scarpetta 2008).
Recommendations on skills certification frameworks. Skills certification may improve signaling and needs to be carried out within a coordinated and consistent national qualifications framework (NQF). An NQF is defined as a coherent and comprehensive instrument for the classification of qualifications according to a single set of criteria for specified levels of learning achieved. In ensuring the existence of only one recognized certification process, the NQF increases transparency and the recognition of qualifications by labor market participants (Coles 2008). An NQF should ensure that qualifications are (1) defined in terms of a single set of criteria and in only one hierarchy of levels, (2) classified in terms of a comprehensive set of occupational fields, (3) achieved by gradual accumulation (credit accumulation and transfer), (4) transportable in the sense that elements of one qualification (for example, knowing to use a word processor) can be used for other qualifications, (5) transparent in the sense that learners know precisely what learning outcomes they are required to demonstrate to achieve a qualification, and (6) independent of any specific prior learning program requirements (Young 2005).

Major factors that have proven to be instrumental in ensuring the successful implementation of NQFs include the following:35

- **Gradualism.** While a gradual approach may not appeal to governments that feel a sense of urgency, a radical break from previous qualifications system results can cause difficulties (as happened in South Africa). Following a radical break, it is hard to establish benchmarks against which to test the new principles. On the other hand, taking a gradual approach reduces the risk of strong stakeholder opposition to reform.36

- **Consensus and compromise.** As qualifications can operate only on the basis of mutual recognition of their validity, it is important to take the time to go through a complete consultation process, as happened in the cases of the Irish and New Zealand NQFs. When this consultation does not take place, the entire idea of an NQF may lose public and professional credibility. For example, forced compromises over national vocational qualifications in England have prevented greater progress from being made in developing a broader national framework.

- **Building blocks.** As is evident from the experience of the NQF in Scotland, the importance of using partial frameworks as building blocks for a broader, more comprehensive framework is undeniable. Such building blocks include specific education levels, such as secondary and higher education, and various sectors, such as academic, vocational, and industrial sectors. Furthermore, the experiences of developed countries in developing NQFs highlight the following necessary initial conditions for their successful implementation and operation: (1) the political willingness of the national government;
(2) a legislative basis for the qualifications framework (OECD 2006); (3) the interest and collaboration of various stakeholders, especially the trio of employers, providers, and students (Grubb 2007); (4) competent and cooperative governmental departments prepared to share responsibility for implementing the NQF, especially those involved in education and training and in labor market policy (OECD 2006); (5) capable technical management agencies; and (6) effective communication with the general population.37

Recommendations on programs for the self-employed. Programs for the self-employed are generally underdeveloped in the region even though there is a clear need for them (Auer, Efendioglu, and Leschke 2005). Key features in the design and implementation of such programs should include the following:

- **Dissemination.** It is important to promote registration in programs through massive advertising campaigns. This approach is necessary, in particular, to reach low-income individuals or those with few or no skills, who tend to be less well-informed than the rest of the population.

- **Selection of beneficiaries.** An independent jury consisting of successful entrepreneurs, university professors, and specialists should be in charge of selecting the projects or business plans that promise the highest profits and that seem to be the most feasible. The program should offer advisory services to applicants to help them with the preparation of their proposals in order not to exclude low-skilled workers.

- **Training and postbusiness creation services.** It is important to provide training in general management skills to would-be entrepreneurs, especially to those whose business plans are selected by the jury. The managers of the selected businesses need to continue to receive support with services such as training, counseling, and internships.

- **Labor market information system.** A cross-country analysis of entrepreneurship initiatives in LAC has shown the important role that labor market information systems play in enabling self-employment assistance programs to expand. An information system that makes it possible to compare programs (for example, in terms of the number of new businesses that they helped to create and the performance of these businesses over time) is a valuable tool for improving the design of various interventions and scaling up the most successful (Jaramillo 2004).38

Recommendations on wage subsidies. The available evidence shows that wage subsidy programs succeed when (1) subsidies are combined with other services such as skills training and counseling (see above), and
(2) subsidy levels are set appropriately to generate the right incentives and minimize potential side effects. Comprehensive packages of services that combine wage subsidies with other measures such as training, counseling, and job assistance tend to have a positive impact on the labor market prospects of beneficiaries, particularly young people. How this extended package of services is designed is crucial for the success of the program. For instance, the training content needs to be consistent with the needs of the productive sector to ensure that workers are acquiring relevant and marketable skills. In addition, proper targeting and wage-setting strategies are necessary to increase the likelihood that the program will assist disadvantaged people who would otherwise be unemployed—and thus reduce substitution effects and deadweight losses.

The design of these programs should also include certain other elements to minimize any potential adverse effects:

- Creating incentives to retain staff after wage subsidies end. To avoid substitution effects, wage subsidy programs should include incentives for firms to retain their former and nonsubsidized workers at a competitive wage rate. Also, conditions can be imposed on the subsidies to reduce the risk of creating incentives for high turnover or of disproportionately benefiting sectors with high turnover and more employment. In the United States, for instance, in an attempt to reduce turnover, wage subsidy programs exclude any firms that systematically fail to retain their subsidized workers (Katz 1996). In Poland, the wage subsidy program gives firms that retain workers monetary incentives equal to as much as 150 percent of the national average wage to cover wage and social insurance costs for a period of six months after the program finishes.

- Targeting. Good targeting is a key feature of the design of wage subsidy programs. A recent study of the employment impact of a labor tax reform in Turkey stressed the relevance of targeting low-wage workers to have a significant effect on increasing employment (Betchnerman and Pagés 2007). In general, simulations of the implications of several reforms that have reduced labor costs through tax cuts and through reductions in social insurance contributions have shown that targeting low-wage workers and young people is considerably more cost-effective than targeting all workers.

- Accounting for institutional capacity. As in the case of the other programs, policy makers should take into account the institutional capacity of the administrative agency. Wage subsidies are usually managed by employment offices. Whether the program is managed centrally or by local government offices, it is important to follow standard criteria when selecting participating firms and workers. Equally important, the distribution of subsidies or vouchers needs
to be monitored and overseen to avoid corruption. An efficient practice used in developed countries is to deduct the subsidy from employers’ tax obligations. However, it might be difficult to replicate this practice in less developed countries because of their lower-quality information systems.

Implementation and Coordination of IPPs and ALMPs

The previous sections discussed the rationale for IPPs and ALMPs in LAC countries and recommended certain key design features to facilitate redistribution, improve incentives, and increase efficiency. The final form and size of these programs and the allocation of public resources to finance them will have to reflect the prevailing conditions in each country. In all cases, however, the performance of IPP and ALMPs will ultimately depend on the institutional arrangements set up for implementation, coordination, and management. Beyond the design of administrative and information systems, key decisions need to be made regarding the respective roles of the public and private sectors, as well as about governance structures that will affect the incentives influencing managers and program administrators. These incentives will determine the effectiveness of the various programs, their costs, and the quality of services.

A comprehensive review of these issues is a major undertaking that falls outside the scope of this chapter. The more modest goal here is to discuss briefly some key issues regarding the institutional arrangements necessary to ensure the following: (1) IPPs and ALMPs are properly coordinated to exploit any synergies between them, and (2) there are built-in incentives to control moral hazard and maximize the performance of both kinds of programs.

At the outset, it is important to mention that creating or reforming the institutions responsible for managing IPPs and ALMPs is a complex task but one that is not beyond the reach of most LAC countries. Several of them already have systems in place that require sophisticated administration (for example, defined contribution funded mandatory pensions) and most LAC countries have some form of ALMP. However, even in the absence of any changes in design, it would be necessary to upgrade the information, monitoring, and evaluation systems that govern these programs in these countries. Any institutional changes can be implemented gradually over a period of three to five years. Finally, in terms of investment costs, the largest share is related to the purchase and setup of appropriate information technology systems. If well designed, a modern labor market risk management system does not have to involve the creation of a large bureaucracy and thus should not involve enormous administrative costs.
The Components of an Integrated Labor Market Risk Management System

Economies of scale and the need to respond efficiently to demand from job seekers and employers require an integrated system of income protection and active labor market programs. An integrated system is particularly valuable for coordinating intermediation and job search assistance services with retraining (although, as discussed in the previous section, other ALMPs may also need to be part of the integrated package). Outside LAC, Korea is the classic example of a country that has implemented an integrated system (see box 5.3), while within the region, Chile started the move in this direction.

The general idea is to have an institution (probably, in most cases, within the ministry of labor) that is in charge of policy design and the coordination and management of IPPs and ALMPs. This institution will not manage all of these programs from the center. On the contrary, regional offices would take a prominent role in management, and the private sector would provide various services. The central office, however, would be responsible for policy coordination and, very importantly, for ensuring the proper dissemination of information through a central database that ultimately should reflect the dynamics of labor demand and supply in the country.

The Labor Market Risks Management (LMRM) Office, as it might be called, would have three central offices or units. The Job Search Assistance and Intermediation Unit (JSAIU) would provide employment services and facilitate intermediation. The Income Protection Unit (IPU) would be in charge of managing unemployment insurance or other income protection arrangements. The Retraining and Employment Support Unit (RESU) would deal with structural mismatches in the labor market, provide retraining services, and would, in some cases, develop programs to help to create jobs. The potential structure of an LMRM system is illustrated in figure 5.5. The organization and main functions of each unit are discussed below, starting with the JSAIU.

**Job Search Assistance and Intermediation Unit.** In the proposed model, services are provided by a set of certified public or private offices, called here JIAs (job intermediation agencies). JIAs are essentially the interface between the LMRM system and its client (job seekers and employers) and are one-stop shops for any individual looking for a job, not just the unemployed. The key functions of these offices would be (1) to register job seekers and process applications for unemployment benefits (when individuals are eligible) or other services (such as training or skills certification); (2) to receive and register job offers from employers; (3) to advise job seekers about job opportunities and recommend training and certification programs that can facilitate matching; (4) to help job seekers to prepare
Box 5.3 An Integrated System of Employment Services in the Republic of Korea

The Employment Insurance System (EIS) in Korea was created in July 1995. It comprises three basic programs: (1) the Unemployment Benefits Program, (2) the Employment Stabilization Program, and (3) the Job Skills Development Program. All companies are covered regardless of their size, and both part-time and hourly workers can participate in the program (only temporary part-time workers are excluded). The system is financed mainly by a 1.4 percent payroll tax. Revenues are deposited into the Employment Insurance Fund, which is a special account managed by the Ministry of Labor. There are separate accounts for each of the three programs. The Bureau of Employment Policy in the Ministry of Labor is responsible for policymaking and for the regulation of the EIS. Then there are hundreds of local centers, such as Employment Stabilization Centers and Manpower Banks that help to implement the system.

The Unemployment Benefits Program provides cash benefits for the unemployed. The benefits comprise the Job-seeker’s Allowance (JSA) and Employment Promotion Benefits (EPB). The JSA is the classic unemployment benefit equal to 50 percent of earnings (with a minimum of 70 percent of the minimum wage). It is paid for a period of 60 to 210 days depending on the age of the individual (workers between the ages of 30 and 50 have longer eligibility periods) and on the number of months of contributions made by the worker prior to becoming unemployed (a minimum of six is required). Benefits are not paid during the first week of the unemployment period and can be suspended if the claimant refuses to use job placement services or undergo training. The EPB provides supplemental benefits to give the unemployed an incentive to pursue their job search and to invest in training. Thus, workers who find a job before exhausting their benefits may receive 50 percent of the “balance.” Workers who opt for some form of training are eligible for grants, and there are also grants to facilitate job search in distant areas and a mobility premium if a worker gets a job that requires him or her to move.

The Employment Stabilization Program (ESP) promotes job creation. It consists of four different schemes: (1) Employment Adjustment Assistance (under which employers who hire dismissed workers receive subsidies equivalent to 50 percent of their wages for six months), (2) Regional Employment Stimulation Grant (credits to start small enterprises), (3) Employment Facilitation Assistance (grants to support the employment of older workers and women), and (4) Labor Market Information and Job Placement Services.

The Job Skill Development Program (JSDP) aims to increase the skills of the labor force and to promote the competitiveness of enterprises.

(continued next page)
Box 5.3 (continued)

The JSDP comprises three different schemes: (1) Assistance to Employers, (2) Assistance to Employees, and (3) Assistance for Training the Unemployed. The first consists of subsidies to finance training costs or loans to set up training facilities. The second provides subsidies to finance vocational training and loans to pay for tuition. The subsidies go directly to the employees, who are allowed to choose the training program and the provider. The third scheme provides subsidies for the unemployed who are not receiving any benefits and are therefore not eligible for free vocational training. There is also a special program that provides grants to institutes that train unskilled young people.


Figure 5.5: An Integrated Labor Market Risk Management System

Source: Authors.
Note: OJT = on-the-job training.

Curriculum vitae, fill out job applications, and prepare for work interviews; (5) to link individuals, as needed, with ALMPs (see below); and (6) to pay unemployment benefits given prior authorization from the IPU. For all these services, JIAs would be paid administrative charges financed by the central agency (in other words, the government), employers, and job seekers (see next section). JIAs would also be allowed to develop complementary
services (such as headhunting services for employers) and price them without any government intervention.

**Income Protection Unit.** The IPU would be an office in charge of managing the system of unemployment benefits. In practice, there would probably be several offices operating at the regional level. Their functions would be to monitor the operation of the system and to ensure that the various regulations are enforced. In the proposed model, the IPU does not manage the actual operations directly. For that purpose, the central and local offices can contract a private (or public) managing company (like Caixa Econômica Federal in Brazil, which manages the unemployment individual savings accounts) to run the entire business process, including collecting contributions (in coordination with a centralized collection institution if one were already in place), recordkeeping and reconciliation, and benefit payments (in coordination with the JIAs), as well as managing the assets (for example, the assistance fund, the reserves of the UI system, or any individual savings accounts). One function that might remain with the IPU would be the verification and audit of applicants’ eligibility for unemployment benefits.

An alternative model, as discussed in Robalino, Vodopivec, and Bodor (2009), would be to give the administration of the income protection system to the pension institution. This structure is certainly possible in those countries that have preserved publicly managed pension systems. Because the pension institution already has capacity to collect contributions, keep records, and process and pay benefits, adding a UI system or UISAs would be a manageable task. The only function that would be new to the pension institution would be the verification of eligibility. However, as discussed below, this task could be considerably simplified if the institution was not expected to monitor applicants’ employment status or their commitment to searching for a job.

For any given individual applying for unemployment benefits, the process would be as follows. The JIA would enter the individual’s application into a central database and would be responsible for requesting all of the necessary supporting documentation from the applicant (including, for example, a certificate from his or her last employer indicating why the contract was terminated). The person’s eligibility might be also conditional upon the JIA and the Retraining and Employment Support Unit verifying that the individual in question was applying for jobs or receiving the necessary training, or both (see the next section). Once the applicant’s statutory eligibility was established, the institution managing the program (for example, the pension institution) would check to see if a sufficient balance remained in the individual’s account, if enough transfer rights had accrued, and if the length of the unemployment period was below the maximum. Thereafter, the institution managing the program would send a payment order to the JIA where the application originated or, in the case of some clients, deposit payment directly into their bank accounts.
Retraining and Employment Support Unit. In the proposed system, a common policy and legal framework would drive the operations of ALMPs (which can operate at the central or local level). As in the case of IPPs, ALMPs do not discriminate among workers by region, type of occupation, or economic sector of last employment—although in individual regions specific programs can be more or less useful. The only criteria for targeting would be employment status, income, age, and education level. Hence, for each program and targeted population group (for example, young people, low-income workers in welfare programs, and the unemployed), there would be explicit eligibility criteria.

Like the IPU, the RESU would operate through the JIAs. Individuals would register with the JIAs (they could be employed or unemployed, and even if unemployed would not necessarily be eligible for unemployment benefits) and indicate the type of support that they would like to receive. For example, they might wish to apply for some type of retraining or financial support and advisory services to start a business; choices would depend on what programs were offered by the government. Given the eligibility criteria that would have been specified by policy makers for each of the programs, the JIA would be able to inform applicants on the spot if their applications could not be accepted. On the other hand, the JIA would submit any eligible applications electronically to the RESU for further processing.

Operationally, the RESU would implement its programs through certified public and private companies and employers. The companies would specialize in certain types of programs such as training or recertification. Employers, on the other hand, would be part of the board of the RESU and would be expected to support much of the training by providing internships and short-term contracts to eligible unemployed applicants.

Incentives to Enroll and Moral Hazard

For the various programs described here to function properly, it will be necessary to set up governance structures and put in place administrative and payment systems that create the correct incentives for job seekers, employees, and employers. Again, there are several complex policy questions in this area, with two being particularly important: (1) How is moral hazard in the income protection system to be prevented (administratively)? and (2) How are job seekers and employers to be given incentives to register or enroll in the system?

Reducing moral hazard in income protection programs. This chapter presented above some recommendations for designing income protection programs that would minimize distortions by separating their redistributive and insurance functions. However, improving incentives is no
guarantee that the programs will be free of abuse. Therefore, certain administrative arrangements need to be put in place to ensure that individuals receiving unemployment benefits are actively looking for work and not are refusing reasonable job offers. Experience from countries with well-developed employment services such as Australia suggests that the following processes need to be put in place and enforced:

- **Certification of eligibility.** First, the claimant (and his or her employer) should have been registered and contributing to the income protection program for a given period of time. Second, the employer should be required to certify that the individual has been dismissed (at least in the case of unemployment assistance, individuals should have become unemployed involuntarily). This certification by employers should be subject to auditing, and employers should be penalized if any fraud is discovered.

- **Proof of effective job search.** To this end, individuals looking for work should be required to visit JIAs regularly. They should also be required to submit a minimum number of job applications per week. As a centralized database is developed, individual applications could be followed up electronically by the JIAs, which would then report on their findings to the IPU. There should also be sanctions if the individual is found to be receiving benefits while employed in the formal sector (this type of breach could be discovered by requiring employers to submit any new contracts to the JIAs). Monitoring work in the informal sector, on the other hand, is difficult or—some argue—impossible. Thus, it has been suggested that the system should not rely on explicit regulation of informal work but should instead specify how much time individuals must invest in job search activities and in retraining (Robalino, Vodopivec, and Bodor 2009).

- **Waiting periods.** There should be a waiting period of one week to one month before unemployment benefits are paid. Rather than simply excluding the voluntarily unemployed from receiving unemployment benefits, they should be required to wait for longer, say up to three months, before receiving them.

- **Acceptance of job offers and retraining.** Beneficiaries should be required to accept any reasonable job offer. The term reasonable covers the occupation of the job being offered, the wages, and the job location. Beneficiaries who are going through a “long” period of unemployment should be required to accept almost any job that they are offered. Beneficiaries should also be required to undergo training or participate in other ALMPs if necessary. The requirement to accept work should be regulated by the IPU in coordination with the RESU, and the outcomes regarding each beneficiary should be communicated to the JIA.
Field inspections. Inspectors should make regular visits to companies to verify dismissals and their handling of job applications. Also, inspectors should monitor the operations of the JIAs.

Incentives for job seekers and employers to register through JIAs. Both job seekers and employers deciding whether to register through a JIA would weigh the expected costs and benefits of doing so. Therefore, the obvious strategies to increase registration rates would be to reduce the costs (for example, by ensuring that the registration process is simple and rapid) and to increase the benefits. One of the benefits of registering for job seekers is that they are more likely to find a job than if they do not register, and one of the benefits for employers is the likelihood of finding better matches. Therefore, for employers to register, they will need to be convinced that many job seekers will register, and vice versa. There is the danger that this will lead to a coordination failure, where neither employers nor job seekers register. To stop this situation from arising, the following issues and interventions need to be considered.

For job seekers, part of the incentive to register comes from the unemployment benefits themselves. Either individuals go to JIAs to apply for benefits directly or they go because they know that, to be eligible for benefits in the future (for example, after their first job), they will need to have a record indicating they were registered as job seekers. Another important way to ensure that job seekers register would be to require training institutions (such as vocational training centers and universities) to set up mini-JIAs on their campuses to register first-time job seekers.

Giving employers, particularly small businesses, a direct incentive to register is likely to be more difficult. For large employers, who have large human resources departments to search for the best candidates, the value added of a centralized employment agency is likely to be low. On the other hand, they might not object to registering if they could keep their transaction costs low (for example, if they could post job offers and matches online). Medium-size and, particularly, small firms might be more difficult to persuade. Transaction costs aside, these employers would have little incentive to register if their only gain would be access to a larger pool of eligible candidates than if they used their own resources (networks). For instance, the marginal productivity gain from acquiring better staff who might also need to be paid higher wages might not be justified when the employer operates in a low-productivity sector. As discussed above, one incentive to get these employers to participate is to offer access to a virtual human resource department for a low cost. Another incentive for them is to be able to advertise their services through the Web, assuming that there is a sufficient number of users. Well-designed information campaigns promoting the benefits of the system can also help. In all cases, subsidies are likely to be required. Their level needs to be carefully assessed and compared to the benefits of improving information flows in the labor market and, therefore, the matching of skills and vacancies.
In the end, the successful operation of the system will depend upon what incentives JIAs are given to attract and provide good services to job seekers and employers. These incentives will depend on contracting payment systems and accreditation rating systems. For instance, JIAs should be reimbursed on the basis of their performance and the services that they have delivered by means of a flat rate per case handled, financed from the general budget and by copayments from their clients. The performance of the JIAs could be rated by independent entities or by the government on the basis of objective standards such as the number of matches per application, the length of the period of unemployment of applicants (controlling for individual characteristics), the quality of the jobs obtained by applicants (again, controlling for individual characteristics), and administrative costs. The flat rates per case handled could also vary according to the rating of each JIA.

Conclusions

The main messages from this chapter can be summarized as follows:

- IPPs and ALMPs are important tools to manage labor market risks in Latin American and Caribbean countries that are characterized by a very mobile labor force, substantial unemployment risks, and a continuing large share of unskilled workers. IPPs are necessary to mitigate the impact of job losses on households, particularly those of low-income workers, thus also mitigating the social costs of labor market transitions. ALMPs, if well designed, can be effective in making unskilled workers more employable and reducing job search constraints.

- At the same time, IPPs and ALMPs have a role to play in an integrated strategy to promote economic diversification and the creation of better-quality jobs. IPPs can play this role by facilitating labor reallocations; ALMPs can play it by increasing the efficiency of the skills-matching process and helping to reduce the capital and technical constraints encountered by the self-employed.

- There is room to improve the design and expand the coverage of income protection programs without damaging incentives. This improvement can be made by moving away from severance pay toward a system that combines individual savings with a modest and well-targeted redistributive component. In essence, in the case of unemployment, individuals would receive benefits proportional to their savings in the system and government transfers conditional on their contribution histories and income levels. The savings component could be funded or pay-as-you-go and could allow workers to borrow from their pension wealth to finance unemployment benefits when they have depleted their other resources. This proposed arrangement
is likely to be more efficient than traditional unemployment insurance, as it would reduce moral hazard and would not distort the incentive effects of the transfers. However, policy makers should pay careful attention to the mandate of the system to avoid forcing workers to make excessive levels of precautionary savings. It is also important to ensure that savings are remunerated at competitive interest rates.

- Policy makers would also need to review the current portfolio of ALMPs and decide, based on an assessment of the binding constraints on employment creation, how best to concentrate limited public resources on the most effective programs. Some promising kinds of ALMPs include skills training for young people (particularly those from low-income households), intermediation services, certain forms of wage subsidies, and support to entrepreneurs. Because in most cases individuals face multiple constraints, there is evidence that packages that bring together multiple interventions and that are targeted to the most vulnerable individuals (for example, young people and informal sector workers) could be more cost-effective. In all cases, successful implementation will require making governance and administration more efficient and effective. In addition, better planning and decision making will require improved data collection and monitoring and evaluation systems. Programs need to be adjusted and optimized continuously, and these revisions can occur only if real-time data about their operations and performance are available to managers.

- It is also important to take advantage of synergies by integrating IPPs and ALMPs into a labor market risk management system. The integrated system would bring together the functions of consumption smoothing, training and retraining, and intermediation. Integration does not mean that it would be necessary to develop a central bureaucracy. On the contrary, regional offices would take a prominent role in management, and the private sector would provide various services. The central office, however, would be responsible for policy coordination. In addition, it would ensure the proper dissemination of labor information through a central database that ultimately should reflect the dynamics of labor demand and supply in the country.

Notes

1. Other labor market risks such as work accidents or fluctuations in earnings are not discussed here.
2. Because these policies are often related to regulations on hiring and dismissal procedures, these are also discussed.
3. The lack of credit is not discussed here.
5. The methodology used here is based on microsimulations and extends the work of Jaramillo and Saavedra (2005). The number of months of salary is a useful measure because it takes into account the level of benefits, the duration of the benefit (in the case of UI or UISAs), and any withdrawal factor that might apply. The calculation does not take into account any implicit benefits related to advance notice. Nor does the current analysis look at how benefits vary by level of income, thus ignoring the effects of floors on benefits and ceilings on contributions. These are important features that will need to be taken into consideration in future analysis.

6. For a discussion of this issue, also see Jaramillo and Saavedra (2005).

7. Clearly, the reverse is also possible—that is, employees claiming benefits even in the case of dismissal for misconduct and forcing employers to make them a lump sum payment.

8. At the macro level, there is evidence showing that UI can increase the equilibrium unemployment rate and the persistence of unemployment after a shock, mainly through an increase in reservation wages (see Blanchard 1999).

9. For a summary of UI performance in developed and transition countries, see Holmlund (1998); Vodopivec, Wörgötter, and Raju (2005); and Olinto et al. (2007).

10. See Orszag and Snower (2002) and Orszag et al. (1999) for a discussion.

11. See Cunningham (2000). The author explored the changes in regulations introduced in 1994. She used a differences-in-differences methodology to analyze the effects of UI on the duration of the unemployment period, postunemployment wages, and the likelihood of finding jobs in the formal sector.

12. Margolis (2008) used data from the Pesquisa Mensal de Emprego (PME) survey that covered workers in Brazil’s six largest metropolitan areas (Recife, Salvador, Belo Horizonte, Rio de Janeiro, São Paulo, and Porto Alegre). The study distinguished between transitions from unemployment to jobs in the formal sector and transitions from unemployment to jobs in the informal sector, and thus used a competing risks duration model (one risk being formal sector employment, the other being informal sector employment). The estimation methodology took into account the fact that access to UI is endogenous, as it is correlated with unobservable characteristics that make workers more or less likely to work in the formal sector. Thus, the author introduced correlation between the risks through unobserved individual-specific heterogeneity components in the model.

13. Large groups of individuals remain permanently outside the social security system. The available evidence suggests that these are low-income workers with very limited or no savings capacity.

14. As discussed in chapter 4, the contribution density is the ratio between the time during which an individual contributes to the social security system (say 120 months) and the duration of the period of analysis (say 40 years or 480 months).

15. The results of the empirical literature are reviewed in Holzmann (2005). Among the early studies, Lazear (1990) found that severance pay increases unemployment and reduces both employment and labor force participation; in an “update” of this study, Addison and Teixeira (2005) confirmed the first finding but cast some doubt on the others. Fallon and Lucas (1992) showed that strengthening job security regulations led to a strong decline in employment in India and Zimbabwe. More recent studies confirming the link between job security and lower employment levels include those by Haffner et al. (2001) for Organisation for Economic Co-operation and Development (OECD) countries; Heckman and Pagés (2004) for OECD and Latin American countries; Besley and Burgess (2004) for India; and Haltiwanger, Scarpetta, and Vodopive (2003) for OECD and transition countries. See also Davis and Haltiwanger (1999) for a survey of the effects of job reallocation on aggregate productivity growth. Other studies are by Grubb and Wells (1993), and Addison and Grosso (1996).

17. The current calculations treat contributions to defined contribution systems and UIAs as taxes. In practice, however, one would expect the tax component to be small or nil, except, for instance, if the rates of return on savings are below market rates.

18. For a discussion of the advantages of UIAs systems in middle-income countries, see Vodopivec (2006).

19. Robalino, Vodopivec, and Bodor (2009) have argued that controlling informal sector work would be very difficult even in middle-income countries, and that it is therefore better to have an unemployment benefit system that does not depend on the need for control.


21. The main concern about the proposal is that it would be initially more expensive than ex post transfers. However, the decision to prefund unemployment transfers is not very different from the decision to prefund pensions. For further details on the Republic of Korea system, see box 5.3 later in this chapter.

22. For a discussion of the role played by the dismissal tax in the design of unemployment benefit systems, see Blanchard and Tirole (2003, 2004) and Baumann and Stähler (2006).

23. Clearly, this is not an issue for many LAC countries because they have considerable experience with managing funded defined contribution pension systems.

24. For a discussion of NUSAs and their possible advantages and applications, see Robalino and Bodor (2008).

25. Specific skills are defined as skills that are useful in one firm or in one trade, as opposed to general skills, which are more generally applicable. The former are skills such as welding or waiting tables, while the latter are the basic skills that would allow one to learn any trade, such as literacy and numeracy, social skills, and so on. Unemployment due to skills mismatch is termed “structural unemployment.”

26. See Becherman et al. (2007) for a discussion of the impact of job training on employment and wages in LAC; see OECD (1993) for a discussion of the OECD experience.

27. Cunningham (2000) found that when the value of unemployment benefits increases, the share of unemployed Brazilians who enter self-employment increases, as well.

28. These programs come under a variety of names, such as microenterprise schemes or self-employment schemes, but they are generically referred to as “microenterprise development assistance.”

29. Under the New Deal for the Young Unemployed in the United Kingdom, starting in 2000, 60,000 employers agreed to provide employment opportunities for program participants, increasing youth employment by 17,000.

30. See Jaramillo (2006). Direct costs (per beneficiary) are US$316.20 for training and US$118.00 for stipend and insurance. Opportunity costs (per beneficiary) are US$96.50 during the training phase (three months) and US$160.70 during the internship phase (three months); they consist of the average monthly salaries before and after training, respectively.

31. The World Bank, together with the government of the Dominican Republic, is implementing an impact evaluation of the soft skills module of the Programa Juventud y Empleo.

32. Ramos (2002) makes this point about Brazil.
33. The impact evaluation of Bulgaria’s self-employment program found significant gains in employment for participants, with relatively larger gains for young female participants.

34. In some cases, the subsidy goes directly to the workers. The amount of the subsidy is set and provided directly by employment offices.

35. The list is from Young (2005).

36. An example of a gradual approach is the Scottish qualifications framework, developed through a series of linked reforms, without any complex standard-setting procedures or the development of new qualifications.

37. These initial conditions must be carefully considered in the context of the political and economic climate of the country. It is important to realize that the initial conditions mentioned above were crucial for the success of NQFs in the developed economies of Ireland, New Zealand, and Scotland which are also geographically and demographically small and fairly culturally homogenous (Young 2005).

38. A successful example of an information system for entrepreneurship programs was developed in Colombia in the late 1990s. The Sistema de Evaluación de Impacto de los Programas de Apoyo a la Microempresa (impact evaluation system of microentrepreneurship programs) was jointly sponsored by public and private institutions and was implemented in five cities across the country. It provided periodic and standardized information on the outputs of programs to help the self-employed and potential entrepreneurs. Preliminary analyses show that there was a reduction in the number of businesses that failed after the introduction of the information system.

39. The IPU reserves the right to audit the information provided by the individual and the employer.

References


Income Support: Increasing Its Effectiveness and Coherence

This chapter focuses on targeted income support for poor families, which is provided in the form of cash or in-kind transfers to alleviate poverty, to finance investments in human and physical capital, and to increase future incomes. These programs provide social protection (SP) to the uninsured population, within which most poverty and extreme poverty is concentrated. Eligibility for these programs is normally based on poverty levels (using geographic targeting and household means testing) and on membership in a given demographic category (such as the disabled, children, or people over 65 years of age).

Social assistance (SA) and poor relief have long formed part of public policy in Latin America and the Caribbean (LAC), but over the past two decades, large-scale poverty-targeted programs have become an increasingly significant part of the SP architecture in terms of both population coverage and expenditure. This trend reflects a realization by policy makers—especially in middle-income countries—that the state has a legitimate role to play in guaranteeing minimum living standards and promoting the health and education of the workforce, social inclusion, and economic development. This realization has led most countries in the region to establish targeted antipoverty programs, together with basic health insurance and education funded from general taxation, with the aim of reaching universal coverage by the SP, education, and health systems.

In the context of growing global economic instability, governments also need to respond to the impact of shocks on population groups that are excluded from formal social insurance (SI) systems. These groups are especially vulnerable to shocks, such as the “triple F” (food, fuel, and financial) crisis of 2008–09 and the current global economic slowdown. When shocks occur, countries with established safety net and SA programs are better positioned to provide income support to the most vulnerable households and to connect them with other SA or employment support programs.
This chapter argues that the recent development of large-scale, poverty-targeted transfers has been beneficial for LAC’s social welfare systems for several reasons. First, these transfers have added the “missing leg” of antipoverty programs to SP systems, bringing millions of extremely poor families within the social safety net and helping to correct a long-established pattern in which the poorest and most vulnerable households were excluded from public SP provision. The establishment of such programs strengthens the case for eliminating regressive subsidies to nonpoor groups (such as scholarships that are not targeted) and helps to protect other policy areas (such as food and agriculture and infrastructure services) from pressures to adopt inefficient subsidies that distort micro-economic incentives and harm growth, which remain in place in many countries in the LAC region.

Second, the quality of income support programs has improved. These programs increasingly are well targeted and well administered, and they have clear objectives that are rigorously evaluated and offer substantial benefits, including significant increases in disposable incomes and reductions in poverty at an affordable fiscal cost. Conditional cash transfer (CCT) programs have been central to this development.

Third, income transfers to the poor are increasingly coordinated with the other elements of the social welfare system, as is shown by the role that CCTs play in promoting demand for basic health, nutrition, and education services. The evidence is clear that such demand-side incentives can promote growth in the medium term by increasing investment in human capital accumulation. In some countries, such as Chile and Brazil, income support programs are being introduced with the aim of reducing exclusion from the SP and social welfare system as a whole.

Fourth, as well as attacking structural poverty and exclusion, modern income transfer programs also help to protect the most vulnerable, uninsured households from transitory economic or climate-related shocks. For example, the robust targeting and beneficiary identification systems of CCT programs can be used to channel increased support to the poorest households faced with rising food prices. The CCTs’ coresponsibility systems—which require beneficiaries to participate in health, nutrition, and education programs—also reduce the likelihood that households will resort to negative “coping” responses to shocks, because they increase the economic opportunity cost to households of withdrawing their children from health care and education in order to save money or put them to work.

This list of benefits arising from the development of targeted income support programs is a long one. It is also possible to ask whether the programs may have a downside. For example, does the existence of these programs reduce workers’ incentives to contribute to SI and thus give them an incentive to choose informality, or might it induce some beneficiaries not to work at all? There is little empirical evidence of such effects in the
available literature. Most of these programs have been designed to avoid this pitfall, in that their benefit levels are low, and few make their benefits conditional on unemployment; thus they do not create a disincentive to work or an incentive to choose informality. If anything, the causality runs in the opposite direction. Rather than increasing unemployment or informality, these programs fill the vacuum left in the lives of poor households by precarious labor market conditions and incomplete SI coverage.

The chapter finishes with a review of forthcoming challenges, including the need to do the following: (1) strengthen the supply-side coverage of health, nutrition, and education services and improve their coordination with CCT programs; (2) strengthen CCTs by creating open registers to continuously incorporate new beneficiaries and by periodically reviewing the entitlement status of families to “graduate” those who no longer meet the demographic or poverty criteria for program membership; (3) develop effective programs for urban, informal settings, which are more complex than the rural environment and pose corresponding risks, and adapt the CCT model to be appropriate in urban settings; and, finally, (4) increase the use of SP systems to help households to adjust to shocks (such as the present global economic downturn), and help countries with no established SP system to create one, so they are in a better position to support their populations in the future.

The Emergence of Income Support as Central to Social Protection in Latin America and the Caribbean

This section reviews the emergence of national, targeted income support systems as a central element of LAC’s SP systems over the past two decades. It shows that these systems are an appropriate policy response to the persistence of high levels of poverty and inequality, in spite of the revival of economic growth. Such programs seek to offset the regressive impact on income distribution of the region’s traditional SI systems. The section also documents the considerable potential of targeted programs to increase the disposable incomes of the poorest households at a modest fiscal cost.

Responding to the Need for Antipoverty Action

In the 1990s, LAC’s economies improved, democracy was strengthened, and political tolerance for poverty fell. Nevertheless, poverty declined at a disappointing rate. Under the auspices of the “Washington Consensus” on regional development strategy, most governments adopted an economic liberalization agenda, aimed at reducing poverty by increasing factor returns (especially labor earnings) for the poor. However, the region’s persistently skewed income distribution—reflected in some of the world’s
highest Gini coefficients—hampered the rate of poverty reduction, and there was a growing awareness among policy makers that redistributive fiscal systems had a critical role to play in antipoverty strategy. There was also a growing understanding of the positive relationship between distributional equity and economic growth (which exists because reducing poverty improves educational outcomes and raises labor productivity). A further impulse came from the election of left-leaning governments in many LAC countries, which put improving equity and reducing social exclusion at the top of their political agenda. Many governments came to the conclusion that they needed to complement policy actions to stimulate growth with direct antipoverty measures in the form of pro-poor fiscal transfers. Governments have also been aware that, by creating well-designed programs for the poor, they can help to shield sectoral agencies from pressure to adopt badly targeted subsidies that distort relative prices, damage microeconomic efficiency, and reduce growth potential. As a result of all these factors, targeted income support programs are today established and are helping to reduce poverty in most countries in LAC.

Across the region, traditional, fragmented SA schemes are giving way to programs financed and regulated by central governments—programs that are characterized by careful targeting, large benefits, and modern goal-based administrations and that deliver income support in the form of cash. There are many variants across the region in terms of the exact type of program adopted, the coverage, and the cost. However, in general, these programs have been large, well-designed, and well-targeted and have had a significant impact on reducing poverty.

These antipoverty programs now complement traditional Bismarckian social insurance, which was designed to be distributionally neutral, but which, in practice, favors households in the higher-income quintiles. This shift constitutes a significant change in the balance of the region’s SP systems. They appear to be moving toward a model in the style of the Organisation for Economic Co-operation and Development (OECD), which combines consumption smoothing and risk-pooling functions (through SI for contributing workers) with an explicit commitment to redistributive antipoverty programs.

This transformation, which echoes a shift that occurred in OECD countries during the 1930s and the post–World War II period, is still under way. Most LAC countries still invest more resources in regressive subsidies to SI than in targeted antipoverty programs, but the balance is likely to shift over the next decade as the transition costs of pension reform diminish. As a result, public spending on SP in LAC should gradually evolve toward the OECD pattern, with the lion’s share of subsidies going to antipoverty programs or universal education and health benefits, while contributory pension and unemployment insurance schemes (whether funded or pay-as-you-go) become self-financing.
Traditional Social Insurance: A Pattern of Exclusion and Regressive Subsidies

As was seen in chapter 1, traditional SI systems in most countries in LAC are “truncated” in the sense that the coverage of contributory systems falls well short of the theoretical goal of universal SI. Coverage of insurance against long-term risks (retirement and disability) and short-term risks (ill-health and unemployment) varies, but, in general, it is low. Only in Uruguay, Chile, and Costa Rica is more than 50 percent of the labor force enrolled in contributory SI schemes, while República Bolivariana de Venezuela, Argentina, and Brazil have between 30 percent and 50 percent coverage. In other LAC countries, coverage is less than one-third and shows little indication of improving. Only in El Salvador and Peru have significant increases in coverage been registered over the past decade. SI in LAC is a privilege enjoyed by the nonpoor. Almost everywhere, those in the lowest two income quintiles have extremely low coverage, and recent reductions in coverage have been especially marked at the bottom end of the income distribution. In Argentina, for example, in the past decade, coverage of those in quintile 1 fell from 40 percent to 25 percent, and for those in quintile 2 it fell from 50 percent to 30 percent. Similar (but smaller) declines have been observed in Uruguay, Colombia, and Costa Rica.

The low coverage of SI reflects the fact that both employers and low-paid workers currently have incentives to operate in the informal sector, where nobody pays taxes or contributes to SI, where there are no corresponding benefits for workers, and where statutory labor rights are not respected. Employers’ incentives to operate informally are clear, including avoiding taxes and insurance contributions and side-stepping statutory obligations (such as minimum wages, job stability, and severance pay). These incentives reduce the chances for workers to find formal sector work. When minimum wages are set above market-clearing levels, some workers may accept informal jobs without statutory protections because they would rather have a bad job than no job at all. However, there is also evidence that, in some circumstances, workers choose to work in the informal sector because they value the benefits that they would receive in the formal sector less than the costs (for example, taxes, deductions from wages, and a loss of flexibility in working arrangements) that they would have to incur to receive them (Perry et al. 2006). Low-paid workers often have high rates of time preference and thus put a relatively low value on future consumption compared with consumption today, which, in turn, reduces their interest in the deferred benefits that come with formal sector employment (such as pensions). The difficulties of establishing eligibility for SI benefits worsen this situation. Intermittent formal sector employment and the lack of pension portability between jobs can make it hard for workers to acquire the required number of contribution years to get a pension. A further factor is the growing availability of universal free or
government-subsidized health care in many countries, which reduces the marginal value of contributory health insurance for the poor.

Over the past three decades, this coincidence of interests between employers and low-paid workers in seeking to operate in the informal sector, coupled with the weak regulatory capacity of governments to enforce tax and SI laws, especially on small and medium-size firms, has led to an expansion of informal employment in many countries in LAC. In an effort to correct these problems, many LAC governments have reformed SI by establishing funded schemes with individual retirement accounts and by separating risks. These reforms have aimed to increase transparency, strengthen the link between benefits and contributions, improve the performance of pension funds, and eliminate regressive subsidies. In theory, such changes should give workers more incentives to participate in social insurance. However, the hoped-for increases in coverage have been slow to materialize, and most low-income workers remain uninsured.

The exclusion of the poor from traditional SI is particularly worrying given the considerable subsidy received by most SI systems. A recent study of pension expenditures in eight LAC countries (Lindert, Skoufias, and Shapiro 2006) revealed an average subsidy of 56 percent. The estimated subsidies (as a percentage of total benefits transferred) were as follows: Argentina 57 percent, Brazil 40 percent, Chile 56 percent, Colombia 77 percent, Dominican Republic 0 percent, Guatemala 25 percent, Mexico 84 percent, and Peru 89 percent. The same report used household survey data to analyze the distribution of these subsidies and confirmed that their incidence is highly regressive. On average, 58 percent of subsidies to social insurance benefit the top quintile of the income distribution, while only 3 percent benefit the bottom quintile. In contrast, noncontributory SA channels 26 percent of benefits to the bottom quintile and only 14 percent to the top quintile (table 6.1). Although the value of the average benefit from SA is only a quarter of that from insurance programs, it has a much bigger relative impact on the incomes of poor households, increasing incomes of quintile 1 beneficiaries by 13 percent on average, compared with 2 percent for social insurance.

**The Poverty Reduction Potential of Redistributive Transfers**

In the face of the high and rising Gini coefficients in many LAC countries, the potential that targeted income support programs have to reduce poverty is considerable. Table 6.2 shows Gini trends for major countries in the region from the start of the 1990s to the mid-2000s. Of the 19 countries for which there are data, the Gini worsened markedly for 11, improved for 5, and is unchanged in 3. It is noteworthy that the countries that have given priority to developing income support programs (such as Brazil, Honduras, Mexico, and Nicaragua) exhibit the greatest improvements in income distribution. The right-hand side of table 6.2 shows
### Table 6.1 Distribution of Subsidies to Social Insurance and Social Assistance

<table>
<thead>
<tr>
<th>Country</th>
<th>Social insurancea</th>
<th></th>
<th>Social assistance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average unit benefit (SPPP)</td>
<td>Benefit incidenceb (%)</td>
<td>Impact on incomec (%)</td>
<td>Average unit benefit (SPPP)</td>
</tr>
<tr>
<td></td>
<td>Q1</td>
<td>Q5</td>
<td>Q1</td>
<td>Q5</td>
</tr>
<tr>
<td>Colombia</td>
<td>23.7</td>
<td></td>
<td>1.0</td>
<td>66.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>65.6</td>
<td></td>
<td>3.0</td>
<td>63.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>20.7</td>
<td></td>
<td>1.0</td>
<td>81.0</td>
</tr>
<tr>
<td>Argentina</td>
<td>106.1</td>
<td></td>
<td>1.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Chile</td>
<td>80.9</td>
<td></td>
<td>4.0</td>
<td>46.0</td>
</tr>
<tr>
<td>Brazil</td>
<td>52.9</td>
<td></td>
<td>5.0</td>
<td>54.0</td>
</tr>
<tr>
<td>Peru</td>
<td>100.1</td>
<td></td>
<td>1.0</td>
<td>68.0</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>46.1</td>
<td></td>
<td>7.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Averaged</td>
<td>62.0</td>
<td>2.9</td>
<td>58.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

**Source:** Based on Lindert, Skoufias, and Shapiro 2006, table 4a.

**Note:** $PPP = purchasing power parity dollars; Q = quintile; n.a. = not applicable.

- a. The subsidy share of SI is defined as the proportion of total cash flow expenditure of SI that is funded from taxation rather from members’ contributions or interest income to the insurance funds. This study did not attempt to calculate actuarial deficits.
- b. Benefit incidence = proportion of the total benefit received by households in the bottom quintile (Q1) and top quintile (Q5).
- c. Impact on income = relative impact of the benefit received on household income in Q1 and Q5, respectively.
- d. Unweighted average for the eight countries.
### Table 6.2 Gini Coefficients and the Income Share of the Lowest Quintile, 1987–2005

<table>
<thead>
<tr>
<th>Country</th>
<th>Gini coefficient</th>
<th>Income share of lowest 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>45.4</td>
<td>49.2</td>
</tr>
<tr>
<td>Bolivia</td>
<td>42.0</td>
<td>58.1</td>
</tr>
<tr>
<td>Brazil</td>
<td>60.2</td>
<td>59.2</td>
</tr>
<tr>
<td>Chile</td>
<td>55.9</td>
<td>55.3</td>
</tr>
<tr>
<td>Colombia</td>
<td>52.7</td>
<td>57.6</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>46.3</td>
<td>46.9</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>50.9</td>
<td>50.1</td>
</tr>
<tr>
<td>Ecuador</td>
<td>50.5</td>
<td>52.8</td>
</tr>
<tr>
<td>El Salvador</td>
<td>49.0</td>
<td>51.4</td>
</tr>
<tr>
<td>Guatemala</td>
<td>58.9</td>
<td>55.3</td>
</tr>
<tr>
<td>Haiti</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Honduras</td>
<td>57.1</td>
<td>53.3</td>
</tr>
<tr>
<td>Jamaica</td>
<td>40.8</td>
<td>42.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>53.1</td>
<td>49.8</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>50.4</td>
<td>45.2</td>
</tr>
<tr>
<td>Panama</td>
<td>56.8</td>
<td>54.6</td>
</tr>
<tr>
<td>Paraguay</td>
<td>39.7</td>
<td>57.5</td>
</tr>
<tr>
<td>Peru</td>
<td>43.9</td>
<td>47.0</td>
</tr>
<tr>
<td>Uruguay</td>
<td>42.3</td>
<td>44.5</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>46.4</td>
<td>48.5</td>
</tr>
</tbody>
</table>

**Source:** World Bank calculations based on official household survey data sets.

**Note:** — = not available.
why targeted income support can make such a difference. Because of the enormously skewed income distribution of most countries in LAC, the poorest quintile (20 percent) of the population generally accounts for less than 4 percent of household income. The figure is less than 3.0 percent in seven countries, and in Bolivia, it is as low as 1.5 percent. In a situation where the pretransfer income of quintile 1 households is only 3 percent of gross domestic product (GDP), governments could, in principle, increase the average disposable incomes of these households by one-third by assigning 1 percent of GDP to well-targeted transfers for households in the bottom quintile.

The rest of this chapter discusses the development of income support programs over the past decade. It first reviews the types of programs that exist in the region, including their fiscal costs and design characteristics. It then analyzes their effectiveness, discusses the implications of this development for the coherence of SP systems as a whole, and reviews the main upcoming challenges for public policy in this field.12

Patterns of Social Assistance and Income Support

This section reviews the types of social assistance and income support programs that currently exist in LAC and describes recent trends in expenditures and program composition.

The Expansion and Consolidation of Social Assistance and Income Protection

LAC has a pattern of social protection similar to that of East Asia and the Pacific in terms of the relative size and structure of expenditures, with SA spending accounting for about one-third of total SP spending in the region (figure 6.1). In contrast, in the OECD and in Eastern Europe and Central Asia, SI spending is relatively more important, while in Africa, SA spending is more important than SI spending.13

Within LAC, there is considerable variation in total SP spending; the range is from as low as 2 percent of GDP in Venezuela, Guatemala, and Jamaica to a high of almost 14 percent in Brazil. There is no apparent correlation between the level of per capita GDP and SP spending. However, the Southern Cone countries (except Paraguay) have relatively high levels of spending (figure 6.2). Social assistance spending (defined as social protection spending minus social insurance spending) varies greatly, between a low of 0.4 percent of GDP in Paraguay and a high of 2.5 percent of GDP in Honduras (figure 6.3). One might expect that countries with low spending on SI would be more likely to increase spending on SA by way of compensation. Using data from 2000 to 2004, Lindert, Skoufias, and Shapiro (2006) found some evidence of such a
pattern; but Weigand and Grosh (2008) used more recent data and found no clear pattern in the relationship between SI and SA spending at the country level (figure 6.4).

Some countries (including Bolivia, Argentina, and Panama) have relatively high levels of SI and SA expenditure (above 5.0 percent and 1.5 percent
of GDP, respectively). Others have one high and one low, and a large group has low levels of both types of spending (table 6.3).  

However, although starting points differ among countries, the available data suggest that most countries have been increasing spending on SA over the past decade (table 6.4). Of the 12 countries for which data
Table 6.3 Patterns of Social Insurance and Social Assistance Spending

<table>
<thead>
<tr>
<th>Social assistance</th>
<th>High (&gt; 1.5% of GDP)</th>
<th>Low (&lt; 1.5% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social insurance</td>
<td>High (&gt; 5% of GDP)</td>
<td>Bolivia (6.3, 2.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Argentina (7.7, 1.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panama (5.0, 1.7)</td>
</tr>
<tr>
<td></td>
<td>Low (&lt; 5% of GDP)</td>
<td>Dominican Republic (0.7, 1.7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honduras (1.6, 2.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Costa Rica (4.3, 1.5)</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations based on Weigand and Grosh 2008.

Note: The first number in parentheses is SI spending and the second is SA spending.

are available, six (Argentina, Brazil, Costa Rica, the Dominican Republic, Mexico, and Paraguay) have increased the proportion of their GDP spent on SA over the past decade. Four (Chile, Jamaica, Peru, and Venezuela) have maintained their level of spending, with only Bolivia and Nicaragua having made slight reductions.

A Typology of Income Support in Latin America and the Caribbean

A complex array of income support programs operates in LAC today. These programs all share the goal of providing cash or in-kind support to the poorest households. Beyond that, their development goals are many and diverse, including alleviating long-term poverty, reducing exclusion, responding to short-term shocks and risks, improving the population’s nutrition status, and improving equality and equity. Their benefits vary in size and type and include both cash and in-kind transfers. They take different approaches to targeting and beneficiary selection, including geographic targeting, demographic targeting (for example, targeting school pupils or old people), self-selection (for example, participation in welfare programs), and sophisticated proxy means test systems, which use statistical techniques to predict which households are in a given quintile.
Table 6.4 Time Trends in Social Assistance Spending
% of GDP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0.9</td>
<td>1.0</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
<td>1.4</td>
<td>1.5</td>
<td>1.7</td>
<td>1.9</td>
<td>++</td>
</tr>
<tr>
<td>Bolivia</td>
<td>—</td>
<td>1.3⁴</td>
<td>1.4</td>
<td>1.4</td>
<td>1.2</td>
<td>1.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>–</td>
</tr>
<tr>
<td>Brazil</td>
<td>—</td>
<td>1.0</td>
<td>1.0</td>
<td>1.2</td>
<td>1.2</td>
<td>1.4</td>
<td>1.5</td>
<td>—</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>1.4</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>1.7</td>
<td>1.7</td>
<td>1.5</td>
<td>1.6</td>
<td>1.5</td>
<td>NT</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>0.9</td>
<td>0.7</td>
<td>1.7</td>
<td>1.6</td>
<td>1.6</td>
<td>1.5</td>
<td>1.5</td>
<td>2.8</td>
<td>—</td>
<td>++</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>—</td>
<td>0.4</td>
<td>1.1</td>
<td>1.0</td>
<td>0.3</td>
<td>0.5</td>
<td>1.7</td>
<td>1.3</td>
<td>—</td>
<td>++</td>
</tr>
<tr>
<td>Jamaica</td>
<td>—</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.6</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>NT</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>0.1</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>+</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>—</td>
<td>1.0</td>
<td>1.2</td>
<td>0.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>–</td>
</tr>
<tr>
<td>Paraguay</td>
<td>—</td>
<td>0.2</td>
<td>0.4</td>
<td>1.5</td>
<td>1.3</td>
<td>1.0</td>
<td>1.0</td>
<td>—</td>
<td>—</td>
<td>++</td>
</tr>
<tr>
<td>Peru</td>
<td>—</td>
<td>—</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>NT</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>0.98</td>
<td>1.41</td>
<td>0.78</td>
<td>0.87</td>
<td>0.82</td>
<td>1.04</td>
<td>1.17</td>
<td>—</td>
<td>—</td>
<td>NT</td>
</tr>
</tbody>
</table>

Source: World Bank calculations from national accounts.

Note: ++ = strong increase; + = increase; – = decline; NT = no trend; — = not available. Sources used in compiling the table used United Nations definitions for social assistance. These vary from definitions in Weigand and Grosh (2008), which are used in figures 6.1, 6.2, 6.3, and 6.4 and in table 6.3.

a. Data are from 1997.

b. Data for Mexico are for Progresa/Oportunidades only and so show a lower share of GDP than is seen in table 6.3.
or decile of the national income distribution, based on easily observed variables. The proportion of households that benefit from income support programs is illustrated in table 6.5. The available household-level data are incomplete, but they suggest that the covered population is above 30 percent in Brazil, Paraguay, Ecuador, Honduras, Peru, Chile, and Nicaragua. In many countries, the household-level coverage of income support programs now surpasses that of traditional social insurance.

**Table 6.5 Household Coverage of Cash and In-Kind Income Transfer Programs**

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Coverage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina (EPH 2006)</td>
<td>Jefes y Jefas</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Seguro de Desempleo</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>Brazil (PNAD 2006)</td>
<td>Seguro de Desempleo</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>School feeding</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Bolsa Familia</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>BPC-LOAS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
</tr>
<tr>
<td>Chile (CASEN 2009;</td>
<td>School feeding</td>
<td>13</td>
</tr>
<tr>
<td>administrative data)c</td>
<td>Chile Solidario</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>SUF</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
</tr>
<tr>
<td>Costa Rica (EHPM 2006)</td>
<td>IMAS</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General subsidy</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Ecuador (ECV 2005–06)</td>
<td>Bono de Desarrollo Humano</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>School feeding</td>
<td>32</td>
</tr>
<tr>
<td>Guatemala (ENCOVI 2006)</td>
<td>Vaso de Atol</td>
<td>28</td>
</tr>
<tr>
<td>Honduras (EPHPM 2006)</td>
<td>School feeding</td>
<td>43</td>
</tr>
<tr>
<td>Mexico (ENIGH 2006)d</td>
<td>Oportunidades</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Procampo</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td>Nicaragua (EMNV 2005)</td>
<td>School feeding</td>
<td>32</td>
</tr>
<tr>
<td>Paraguay (EPH 2007)</td>
<td>School feeding</td>
<td>51</td>
</tr>
</tbody>
</table>

(continued next page)
Table 6.5 (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Programa</th>
<th>Coverage (%)^b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru (ENAHO 2006)</td>
<td>Vaso de Leche</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Comedor Popular</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Desayuno Escolar</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>PACFO</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PANFAR</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Others (feeding)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41</td>
</tr>
<tr>
<td>Uruguay (ENHA 2006)</td>
<td>Seguro de Desempleo</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>School feeding</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Ingreso Ciudadano (PANES)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: World Bank compilation from referenced household data sets.

Note: EPH = Encuesta Permanente de Hogares; PNAD = Pesquisa Nacional de Amostra Domicilios; BPC-LOAS = Beneficio de Prestacao Continuada da Loas; CASEN = Encuesta de Caracterizacion Socioeconomica Nacional; SUF = Subsidio Unico Familiar (Family Subsidy Program); EHPM = Encuesta de Hogares y Proposito Multiple; IMAS = Instituto Mixto de Ayuda Social; ECV = Ecuador Encuesta de Condiciones de Vida; EPHPM = Encuesta Permanente de Hogares de Propositos Multiples; ENIGH = Encuesta Nacional de Ingreso y Gasto de los Hogares (Household Expenditure Survey); EMNV = Encuestas de Hogares sobre Medicion de Nivel de Vida; ENAHO = Encuesta Nacional de Hogares; PACFO = Programa de Complementacion Alimentaria para Grupos de Mayor Riesgo; PANFAR = Programa de Alimentacion y Nutricion de Familias de Alto Riesgo; ENHA = Encuesta Nacional de Hogares Ampliada; PANES = Plan de Atencion Nacional a la Emergencia Social.

a. Includes only programs for which household survey data are available.

b. Percentage of population. Includes only programs for which household survey data are available.

c. CASEN data are for school feeding; administrative data are for Chile Solidario and SUF.

d. The sample design for the 2006 ENIGH survey was not ideal for capturing social program coverage, so coverage by Oportunidades is likely to be underestimated here. The program currently estimates coverage at 25 percent. The 2008 ENIGH survey is expected to produce more precise data.

Cash transfers. Conditional cash transfers are now the prevalent model for income support in LAC. CCT programs have been established in 15 LAC countries and benefit an estimated 22 million households (over 90 million people, or 16 percent of the region’s population). They exist (in several different designs) in Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala,
Honduras, Jamaica, Mexico, Panama, and Peru, and most of them are large-scale programs.

The most distinctive characteristic of CCTs is “conditionality” (sometimes called “coresponsibility”). This refers to a requirement that program beneficiaries or their children must enroll in basic health, nutrition, and education services. However, the extent to which these conditions are enforced by the suspension of benefits varies widely. In Mexico’s Oportunidades program, conditionality is taken very seriously; at the other extreme, Ecuador’s Bono de Desarrollo Humano (BDH) program makes no effort to enforce it. Other distinctive features of most CCTs include the use of modern, goal-based management techniques, the selection of beneficiaries using rigorous poverty-targeting procedures (at the geographical or household level), benefit levels high enough to significantly increase a household’s consumption capacity, and the application of rigorous evaluations of process and impact.

An alternative way to transfer cash to the poor is through workfare programs, which offer paid temporary employment and, sometimes, training and work experience to the unemployed. Workfare programs are often expanded in response to cyclical upsurges of unemployment. Beneficiaries are self-selected in the sense that they choose to work in the program at the offered wage rate. Such programs have existed recently on a large scale in Argentina (Trabajar and Jefes) and Peru (A Trabajar Urbano, now renamed Construyendo Peru) and in Bolivia (Plan Nacional de Empleo de Emergencia, or PLANE).

Many LAC countries operate social investment funds (SIFs), which are similar to workfare in that they create temporary jobs in the construction of small-scale social and economic infrastructure and thus generate additional income. Such funds exist today in Bolivia, El Salvador, Guatemala, Honduras, Nicaragua, Peru, and several Caribbean countries, including Jamaica. The first SIFs were created in the early 1990s to alleviate the negative social impact of structural adjustment. SIFs were the first type of SP program in LAC to combine poverty targeting (through geographical poverty maps), large-scale interventions, and modern management techniques. The first generation of SIFs listed temporary employment creation as an explicit goal, but nowadays, most SIFs emphasize the goals of fiscal decentralization, community-driven development, and improvement of small-scale infrastructure. SIF expenditure is normally logged in the public expenditure accounts under the relevant sectors (such as education, health, roads, or water) and does not form part of the social assistance and income transfer data reported earlier in this chapter.

Many countries provide cash supplements to specific demographic groups whose vulnerability justifies the provision of support without necessarily entailing poverty targeting. For example, noncontributory pensions have been established in Argentina, Bolivia, Brazil, Chile, Costa Rica, El Salvador, Guatemala, Mexico, Panama, and Uruguay. Also, grant
programs for disabled people and child allowances form an important part of some SP systems. These demographically targeted programs often aim to achieve universal access for a given demographic group, as in Bolivia’s Renta Dignidad old-age income support scheme and its Seguro Social del Adulto Mayor health insurance program for old people. In other cases, the benefits are limited, for example, to the rural population (in the case of Brazil’s noncontributory pension scheme) or to the poor (in the cases of Chile’s PASIS\textsuperscript{18} and Costa Rica’s noncontributory pension scheme). Although they are not necessarily conceived as antipoverty programs, these demographically targeted programs can considerably reduce poverty because they offer large benefits to beneficiaries who tend to be poor.

**In-kind transfers.** Food-based programs remain an important part of the income support system in many countries in LAC. Prior to the development of SIFs, cash transfers, and workfare, most support for poor families in LAC was provided through such programs, often operated by local governments or community bodies. They represent a more traditional, paternalist approach to SA. The use of in-kind benefits sometimes reflects a political aversion to cash handouts. However, in-kind benefits can reduce the resulting economic benefit since, unlike an equal amount in cash, they make it impossible for beneficiaries to realize preferences they have other than food. In addition, food programs have often been poorly designed in terms of targeting and benefit specification, and their impacts (where documented) are often correspondingly small. A further problem is that the administrative and logistical challenges of procuring and distributing food are considerable, leading sometimes to very high administrative costs. These programs are also somewhat prone to being “captured” by beneficiary groups, for whom they become entitlements.

However, there are examples of food transfer programs that have overcome these deficiencies. Many countries have attempted to modernize food programs by applying similar management principles to those that characterize a standard CCT, including the clarification of goals, the consolidation of multiple programs, effective poverty targeting, and the inclusion of rigorous process and impact evaluations. The World Food Program has played an important role in improving the quality of food programs in LAC and in developing the use of food programs for crisis response in low-capacity countries such as Haiti.

As with cash-based income support programs, there are several different kinds of food programs. Many are poverty targeted using geographical approaches that focus on low-income communities, such as community soup kitchens and programs to distribute nutritional supplements (papillas or altoles) to mothers and babies in poor communities. There are also food-for-work programs, which (like workfare) use self-selection based on willingness to work as a targeting mechanism. Other feeding programs
target entire demographic groups with no explicit poverty targeting. The most notable of these are school feeding programs, which exist on a large scale in Bolivia, Brazil, Colombia, Ecuador, Haiti, Honduras, Jamaica, and Peru, and which often achieve impressively low unit costs. Some countries are now promoting nutritional programs that, rather than focusing on

**Box 6.1 Making Food Programs More Effective and Developing a Large-Scale CCT in Peru**

In Peru, a large proportion of social assistance has traditionally been devoted to food programs. In 2006, there were 27 food programs, costing 0.3 percent of GDP (half of all social assistance). The largest were Vaso de Leche (0.13 percent of GDP), Desayuno Escolar (0.06 percent), and Comedores Populares (0.04 percent). Some reach large numbers, but the benefits are too small to make much difference to consumption, so their impact on poverty has been small.

For example, the municipally operated Vaso de Leche has 3 million beneficiaries, over 10 percent of the population, but the average subsidy is less than 2 percent of beneficiary households’ consumption. Weak targeting further undermines poverty reduction (Alcazar 2003; Vasquez 2005). Vaso de Leche is also a case study in the “capture” of food programs by their beneficiaries. Many of the operating committees have been led by the same women for over 20 years, and their communities are far less poor today than when they entered the program. The program does not cover other poorer communities. The Vaso de Leche committees have presented fierce (and effective) resistance to efforts to retarget, close, or scale down the program. Peru’s government is now trying to encourage municipal governments to improve the targeting of Vaso de Leche by using a proxy means test system, SISFOH, in urban areas and to increase the efficiency of program administration by promoting intermunicipal cooperation in procurement. It is also working to eliminate or consolidate small, ineffective food programs.

At the same time, the government is shifting the emphasis of its income support efforts toward cash transfers under the CCT program, Juntos, which is much better targeted than most food programs, offers significant benefits to each household (S/. 100 per month, about 10 times more than Vaso de Leche), and now reaches almost 420,000 households (roughly 2 million people) in 638 of Peru’s poorest rural districts. In 2008, Juntos’s budget reached S/. 480 million—one-third more than Vaso de Leche. As part of this strategy, with support from the World Bank, the government is strengthening Juntos’s impact on nutritional outcomes by establishing nutritionally relevant conditionality and shoring up coordination with the health sector to ensure good health services are available for Juntos beneficiaries.

increasing food consumption, are centered on achieving behavioral change, such as increased participation in nutritional monitoring and counseling to improve health care and feeding of babies younger than 24 months of age. Examples of such programs are the PANN 2000 program in Ecuador and the AIN-C model in Central America. Using food distribution as an incentive to participate in such programs is analogous to the behavior-change goal of CCTs. Other countries have shifted toward broader early childhood development programs, of which feeding is only one element or in which feeding is not important at all (such as PAININ in Nicaragua). However, such reforms have not always been easy, as traditional food-based programs have proved to be difficult to reform (see box 6.1).

**Toward Greater Coherence and Effectiveness**

The previous sections have shown that poverty-targeted income support programs are commanding an increasing share of resources and covering an increasing share of the population in the countries of LAC. This next section argues that in the past decade, there have also been some important advances in the coherence and effectiveness of income support in LAC and an accompanying improvement in the coherence of LAC’s social welfare and SP systems as a whole.

These developments have several dimensions. First, there is a growing prevalence of bigger, cash-based programs, which are more effective than traditional food-based income support programs in targeting and program administration. Second, as a direct result of the adoption of large, well-targeted programs that provide significant benefits, income transfers are having an immediate impact on poverty. Third, income support has become better coordinated with other SP, health, and education services. Most CCT programs now include some conditions for beneficiaries regarding the take-up of health, nutrition, and education services, which have resulted in increased use of these services. In some cases, they have also provided a point of pressure for improved supply-side coverage and quality in basic rural health, nutrition, and education services. In countries that already have relatively complex systems of welfare rights and benefits but which still face problems of exclusion for the poorest families, a new generation of cash transfer programs is emerging. Targeted income support programs such as Chile Solidario have been used, not so much to increase the disposable incomes of poor households, but rather to increase their access to human development and to the welfare system as a whole, using models of support that have been effective in OECD countries. Fourth, the region’s strengthened income support system is proving increasingly capable of responding to short-term shocks (such as the 2008 food and fuel prices crises and the threat of increased unemployment and poverty associated with the 2009 global economic downturn) by establishing temporary workfare programs.
or channeling temporary additional benefits to households covered by established, targeted antipoverty programs.

**The Prevalence of Larger, Better-Targeted, and Better-Administered Programs**

Income support in LAC is increasingly concentrated in large programs that are well targeted, well designed, and professionally administered, and that include rigorous process and outcome evaluations. Meanwhile, the number of small, badly targeted, inefficient programs has been decreasing.

This improvement in the quality of income support programs in the LAC region is closely associated with the emergence of the CCT model. In several cases, CCTs were created to replace or consolidate weaker pre-existing programs. For example, Ecuador’s Bono de Desarrollo Humano was established in 2003 from the fusion of two previously existing transfer programs (Bono Solidario and Beca Escolar). Brazil’s Bolsa Familia, established in 2003, consolidated four preexisting programs (Bolsa Escola, Certao Alimentacao, Auxilio Gas, and Bolsa Alimentacao). Figure 6.5 illustrates the effect of this consolidation on the pattern of income support spending. Bolsa Familia became the biggest single program in Brazil, followed by two demographically targeted programs, one for disabled people and one for elderly people. These three programs accounted in 2005 for 84 percent of all Brazil’s social assistance spending (panel b in figure 6.5). In 2003, before the consolidation, the three biggest programs accounted for only 65 percent of spending (panel a in figure 6.5). Box 6.2 summarizes the recent process of consolidation in the El Salvador SP system.

In several countries, there has been a shift from untargeted consumption subsidies (for food or fuel, for example), which are a fiscally and economically inefficient alternative to a targeted social safety net, toward targeted income transfers. For example, in Mexico, when Progresa (now Oportunidades) was established in 1997, it replaced consumption subsidies for maize. Oportunidades now serves 25 percent of the population and accounts for 0.4 percent of GDP. In Peru, the Juntos CCT program, established in 2005, did not immediately replace any other programs. However, after it was established, political pressure grew in Peru to consolidate social programs, and, as a result, the share of SA spending channeled through Juntos began to grow rapidly (see box 6.1). Similarly, El Salvador in 2005 established a social safety net system that prominently featured a cash transfer program (see box 6.2).

**The Impact of CCTs on Disposable Income and Poverty**

CCT programs now exist in 15 countries in LAC. They generally account for a significant proportion of each country’s safety net spending, with
Income Support

Figure 6.5 Increase in Concentration of Brazil’s Social Assistance Spending

Source: World Bank data on program budgets.

Note: PETI = Programa de Eradicacao de Trabalho Infantil; BPC = Bono de Prestacao Continua.
El Salvador's social safety net was characterized by the prevalence of small, uncoordinated programs and an absence of coherence and strategic vision. In 2000, there were 52 social safety net programs implemented by governmental, private sector, and nongovernmental organizations, with a total budget of just over 1 percent of GDP. Coverage was low and targeting was weak (World Bank 2005a). However, this situation started to change in 2005, when the government decided to move toward a more integrated SP system. As a first step, the government launched Red Solidaria, a CCT later renamed Comunidades Solidarias Rurales), which currently provides monthly cash transfers of US$30 in its health and education components to 106,000 households with children aged 0 to 18 in the poorest 100 municipalities of the country. The program’s objectives are (1) to increase disposable incomes, (2) to strengthen demand for investments in human capital (education, health, and nutrition), (3) to increase the network of basic infrastructure and services available to the poor, and (4) to support the development of economic enterprises in poor areas. As of 2009, Comunidades Solidarias Rurales had a budget of US$40 million—0.2 percent of El Salvador's GDP. The program is coordinated by the Technical Secretariat of the Presidency and the Social Investment Fund for Local Development, and is now one component of the new Universal Social Protection System (Sistema de Proteccion Social Universal, SPSU), recently announced in the context of the National Development Plan 2010–14. The SPSU seeks to guarantee the population of El Salvador, especially the poor and extremely poor, a basic level of well-being through a combination of universal and targeted policies and programs. In 2010, the government launched the following: (1) a social pension component, the Pension Básica Universal, which initially targeted 7,000 individuals aged 70 years or more in the poorest 32 municipalities; (2) a pilot income support program in the poorest 25 urban municipalities, called Programa de Apoyo Temporal al Ingreso (PATI), which aims to reach 55,000 people in 2011–12 and whose benefits are conditional on participation in community services and training; (3) a housing development program called Piso y Techo that planned to build 20,000 dwellings in the poorest 32 municipalities; and (4) two programs to support children in primary and secondary school—Programa de Alimentacion Escolar (school feeding) and Paquetes Escolares (school material and uniforms)—that will eventually reach 1,350,000 students.
budgets ranging from 0.1 percent of GDP (Chile and Peru) to 0.6 percent of GDP (Ecuador). The tightness of targeting varies; they cover only 1.5 percent of the population in El Salvador but as much as 34.0 percent in Ecuador, and a huge 54.0 percent in Bolivia. On average, they account for 0.25 percent of GDP, cover 16.9 percent of the population, and spend the equivalent of 3.1 percent of their countries’ per capita income per beneficiary household (table 6.6).

Because of differing program costs and targeting approaches, CCTs’ costs per beneficiary vary greatly. At one extreme, in El Salvador, 0.3 percent of GDP is invested in the program, but only 1.5 percent of the population is covered, so the cost per beneficiary is 20.0 percent of per capita GDP. At the other extreme, in Bolivia, the Juancito Pinto program also has a budget of 0.3 percent of GDP but covers 54.0 percent of the population, so the cost per beneficiary is only 0.6 percent of per capita GDP (table 6.6). However, many CCT programs provide relatively generous benefits, and their impact on the spending capacity of beneficiaries is significant, especially for the poorest. Table 6.7 presents details of the household-level benefits provided by six different programs. These benefits range from 4.7 percent of pretransfer household expenditure in Brazil to 29.0 percent in Nicaragua. For beneficiaries in the lowest quartile of the income distribution, the average income boost from CCTs is greater, ranging from 8.7 percent in Brazil to 33.0 percent in Mexico.

Table 6.8 illustrates the impact of four of LAC’s most important CCT programs on the rate and intensity of poverty in their respective countries. The programs have reduced the national head-count poverty rate by 8.0 percent in Ecuador (BDH) and Mexico (Oportunidades), by 4.5 percent in Jamaica (Programme of Advancement Through Health and Education, or PATH), and by 3.0 percent in Brazil (Bolsa Familia). These fairly modest reductions in poverty rates reflect the fact that pretransfer incomes are well below the poverty line, so most beneficiary households remain poor. Although most beneficiary households are not lifted out of poverty, they are lifted closer to the poverty line. This reduced severity of poverty is reflected in reductions in the poverty gap and the squared poverty gap. In Mexico, Oportunidades has reduced the poverty gap by 19 percent and the squared poverty gap by 29 percent. In Brazil, Bolsa Familia has reduced the poverty gap by 10 percent and the squared poverty gap by 16 percent. In Ecuador, the reductions are 14 percent and 19 percent, respectively. The smallest impact on these indicators was made in Jamaica (9 percent and 13 percent, respectively).

**Income Support’s Long-Term Impact on Poverty Reduction**

Beyond their immediate impact on households’ spending capacity, income support programs have the potential to increase beneficiaries’ long-term
Table 6.6 Budget, Population Coverage, Cost per Beneficiary, and Targeting of CCT Programs

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Starting date</th>
<th>Budget as % of GDP</th>
<th>Number of households covered (thousands)</th>
<th>Population covered (%)</th>
<th>Cost per beneficiary (% of per capita GDP)</th>
<th>Targeting method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Program Familia</td>
<td>2002</td>
<td>0.18</td>
<td>504</td>
<td>4.3</td>
<td>4.2</td>
<td>PMT</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Juancito Pinto</td>
<td>2006</td>
<td>0.30</td>
<td>1,200</td>
<td>53.6</td>
<td>0.6</td>
<td>CAT</td>
</tr>
<tr>
<td>Brazil</td>
<td>Bolsa Familia</td>
<td>2003</td>
<td>0.35</td>
<td>10,500</td>
<td>25.0</td>
<td>1.4</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td>Chile</td>
<td>Chile Solidario</td>
<td>2002</td>
<td>0.08</td>
<td>256</td>
<td>5.8</td>
<td>1.4</td>
<td>PMT</td>
</tr>
<tr>
<td>Chile</td>
<td>Familias en Acción</td>
<td>2001</td>
<td>0.20</td>
<td>1,700</td>
<td>14.5</td>
<td>1.4</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Avancemos</td>
<td>2008</td>
<td>0.02</td>
<td>80</td>
<td>8.0</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Dominican</td>
<td>Solidaridad</td>
<td>2005</td>
<td>0.34</td>
<td>243</td>
<td>9.4</td>
<td>3.6</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td>Republic</td>
<td>Bono de Desarrollo Humano</td>
<td>2003</td>
<td>0.60</td>
<td>1,060</td>
<td>33.7</td>
<td>1.8</td>
<td>PMT</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Red Solidaria</td>
<td>2005</td>
<td>0.30</td>
<td>24</td>
<td>1.5</td>
<td>20.0</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Mi Familia Progresa</td>
<td>2008</td>
<td>0.40</td>
<td>400</td>
<td>20.0</td>
<td>2.0</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td>Honduras</td>
<td>PRAF</td>
<td>1998</td>
<td>0.20</td>
<td>240</td>
<td>15.8</td>
<td>1.3</td>
<td>Geo</td>
</tr>
</tbody>
</table>

(continued next page)
Table 6.6 (continued)

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Starting date</th>
<th>Budget as % of GDP</th>
<th>Number of households covered (thousands)</th>
<th>Population covereda (%)</th>
<th>Cost per beneficiary (% of per capita GDP)b</th>
<th>Targeting methodc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamaica</td>
<td>PATH</td>
<td>2001</td>
<td>0.19</td>
<td>240</td>
<td>34.7</td>
<td>0.5</td>
<td>PMT</td>
</tr>
<tr>
<td>Mexico</td>
<td>Oportunidades</td>
<td>1997</td>
<td>0.40</td>
<td>5,000</td>
<td>25.0</td>
<td>1.6</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Red de Protección Sociald</td>
<td>2000</td>
<td>0.20</td>
<td>36</td>
<td>3.3</td>
<td>6.0</td>
<td>Geo, PnMT</td>
</tr>
<tr>
<td>Panama</td>
<td>Red Oportunidades</td>
<td>2006</td>
<td>0.15</td>
<td>90</td>
<td>10.6</td>
<td>1.4</td>
<td>PMT</td>
</tr>
<tr>
<td>Peru</td>
<td>Juntos</td>
<td>2005</td>
<td>0.11</td>
<td>319</td>
<td>4.9</td>
<td>2.2</td>
<td>Geo, PMT</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>c</strong></td>
<td></td>
<td><strong>0.25</strong></td>
<td><strong>16.9</strong></td>
<td><strong>3.1</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Fiszbein and Schady 2009; World Bank country reports. Data for spending and beneficiaries are for 2005 (Chile Solidario, Red Solidaria); 2006 (Juanicito Pinto, Bolsa Familia, Bono de Desarrollo Humano, and Oportunidades); 2007 (Programa Familia, Familias en Acción, Programa de Asignación Familiar [PRAF], Programme of Advancement through Health and Education [PATH], Solidaridad, Red Oportunidades, Juntos).

a. Population coverage includes members of beneficiaries’ households for the latest available year, based on administrative data. Differences from table 6.5 are due to differences in source (administrative versus household survey data) and in dates (table 6.5 contains mainly survey data circa 2006, whereas table 6.6 has the latest data available).

b. Calculated as follows: (program cost as % of GDP)/(coverage as % of population). Program costs include administrative costs, so benefit amounts per family will be lower.

c. Targeting methods are proxy means test (PMT), geographical (Geo), and categorical (CAT).

d. This program closed in 2005.

e. Unweighted averages.
<table>
<thead>
<tr>
<th>Country and program</th>
<th>Amount transferred (US$)</th>
<th>Benefit as a % of pretransfer income or expenditure&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All beneficiaries</td>
</tr>
<tr>
<td>Brazil: Bolsa Familia (2004)</td>
<td>$40 per month per family</td>
<td>4.7</td>
</tr>
<tr>
<td>Colombia: Familias en Acción (2002)</td>
<td>$6 per child per month in primary school; $12 per child per month in secondary school; $20 per family per month for health</td>
<td>17.0</td>
</tr>
<tr>
<td>Ecuador: BDH (2006)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>$15 per month per family&lt;sup&gt;d&lt;/sup&gt;</td>
<td>6.0</td>
</tr>
<tr>
<td>Jamaica: PATH (2004)</td>
<td>$9 per child per month; $9 per eligible household member per month</td>
<td>8.2</td>
</tr>
<tr>
<td>Mexico: Oportunidades (2004)</td>
<td>$12–$23 per capita per month for primary school; $34–$43 per capita per month for secondary school; $57–$74 per capita per month for higher education&lt;sup&gt;e&lt;/sup&gt;</td>
<td>21.8</td>
</tr>
<tr>
<td>Nicaragua: Red de Protección Social (2000)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>$17 every 2 months per family plus $34 per year per family for health</td>
<td>29.3</td>
</tr>
</tbody>
</table>

Source: Fiszbein and Schady 2009.

Note: PATH = Programme for Advancement through Health and Education; — = not available.

a. Pretransfer expenditure except for Brazil (pretransfer income).
b. The impact on spending capacity for beneficiary households in quartile 1 of pretransfer per capita expenditure.
c. In Ecuador and Nicaragua, transfer value is compared with the consumption of the median control household.
d. The BDH benefit was doubled, to US$30 a month, in 2007.
e. Benefit for Mexico refers to 2006.
Table 6.8 Impact of CCT Programs on National Poverty Indexes

<table>
<thead>
<tr>
<th>Country</th>
<th>Headcount poverty rate</th>
<th>Poverty gap</th>
<th>Squared poverty gap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretransfer</td>
<td>Posttransfer</td>
<td>Relative reduction (%)</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.2445</td>
<td>0.2365</td>
<td>−3.3</td>
</tr>
<tr>
<td>Ecuador</td>
<td>0.2438</td>
<td>0.2242</td>
<td>−8.0</td>
</tr>
<tr>
<td>Jamaica</td>
<td>0.2439</td>
<td>0.2330</td>
<td>−4.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.2405</td>
<td>0.2222</td>
<td>−7.6</td>
</tr>
</tbody>
</table>

*Source: Fiszbein and Schady 2009.*
earnings capacity. This feature of programs is attracting growing attention from researchers. There are two possible ways to realize this potential: making it possible for households to increase their risk-taking and investments, in general; and increasing their investment in human capital accumulation, in particular.

**Increased investment and risk-taking by poor families.** Low-income households normally consume a high proportion of their income and have little access to capital and considerable risk aversion. It is difficult for them to borrow money from banks at accessible interest rates to invest in productive activities because there is a large risk that they may default and because they have no collateral. In contrast, households with secure cash incomes (such as a CCT benefit) are more likely to be able to borrow money, since the lender can see that they have a stable income stream from which the loan can be repaid. This stable income stream may also make the household more willing to take risks on activities with potentially higher returns than those generated by their traditional, conservative allocation of labor, land, and other assets. Even where households do not use their CCT benefits to leverage borrowing, they may invest a part of the cash transfer, especially when they have other income available (such as during harvest times). A study of the Oportunidades program in Mexico found that beneficiaries invested, on average, 12 percent of their transfer in productive activities such as microenterprises and agriculture (Gertler, Martinez, and Rubio-Codina 2006).

**Increased human capital accumulation.** Many income support programs now require their beneficiaries to participate in nutrition, health, and education programs. The goal is to increase their human capital and, as a result, the future incomes of the beneficiary populations and their children. There are two ways income support can increase the take-up of nutrition, health, and education services. In the first place, it has an income effect, in the sense that households with more income are likely to spend some of it on the education and health of their members. Second, in programs in which the benefits are conditional, there is also a substitution effect, which arises from the impact of the change in the relative price of the conditioned services (for which the transfer becomes a negative tariff) on the household’s pattern of purchases and time allocations. The value of the benefit becomes an incentive for households to consume more education, health, and nutrition services than they would otherwise have chosen to consume. The two effects are not easy to unravel empirically because they are produced simultaneously in conditional programs, but both effects seem to play a role in increasing the use of these services (Fiszbein and Schady 2009). The following paragraphs summarize what is known about the combined income and price effects of the various kinds of income transfer programs on the use of human development services in LAC.
The available evaluation evidence suggests that CCT programs in LAC have had an impact on education demand. Specifically, they have somewhat increased school enrollment and attendance rates and have reduced school drop-out rates (Behrman, Sengupta, and Todd 2000; Britto 2004, 2007; Rawlings 2005). However, these effects are often small in relation to the cost of the subsidy because of the “deadweight” cost of giving subsidies to children who would have attended these programs even in their absence. Primary school enrollment in most LAC countries was already high before the CCTs were established, and there is little clear evidence of increased educational attainment due to CCTs (Villatoro 2005a, 2005b).

In response to such findings, some commentators have argued in favor of shifting the focus of CCT programs toward groups of children who are most likely to drop out of school, such as those in transition to secondary education, but this shift might undermine the short-term poverty reduction goals of the programs. Several authors have argued that policy makers need to pay more attention to the problem of low educational quality, which can prevent greater school attendance from improving educational outcomes (Morley and Coady 2003; Reimers, da Silva, and Trevino 2006).

In response, some programs have also sought to strengthen the supply side of the education system. For example, the demand-side stimulus created by Mexico’s Oportunidades program has highlighted gaps in the supply of high-quality education services in its targeted communities. In response, the government—with the help of parental associations—supported the rehabilitation of schools and funded the construction of more secondary schools through the Programa Educación de Calidad and the CONAFE (Consejo Nacional de Fomento Educativo) program. The Programa de Ampliación de Cobertura also expanded access to basic health services in rural areas (Levy and Rodriguez 2004; Gonzalez-Pier et al. 2007). The Mexican health budget includes funds to expand coverage in areas where Oportunidades operates.27

CCTs also have had a measurable impact on health and nutrition indicators in LAC. Evaluations have found evidence of increases in vaccinations and in children’s visits to health centers for growth and development consultations, and reductions in morbidity rates in several countries (Bouillon and Tejerina 2006; Britto 2007; Rawlings 2005). In Mexico, evaluations have found reductions in both maternal and infant mortality (see table 6.9).

CCTs also seem to have positively affected the nutritional status of beneficiaries by increasing the variety of food that they consume, and, in some cases, they have also reduced child malnutrition. In Mexico, the Oportunidades program increased the height of beneficiary children on average by 1 cm (Gertler and Fernald 2004). In Colombia, Familias en Acción reduced the incidence of chronic malnutrition in children under five by 6.9 percentage points (DNP and DAPR-FIS 2006). In Nicaragua, the Red de Protección Social reduced chronic malnutrition by 5.3 percentage points (Maluccio and Flores 2004). However, an evaluation of the Programa de
Asignación Familiar (PRAF) Honduras found no positive nutritional outcome, possibly because of the small size of the transfer (Cohen and Franco 2006b). Evaluations across LAC have found little impact of CCTs on anemia, which remains widespread in the region and impedes cognitive development, thus undermining human capital formation. However, the Oportunidades program did reduce anemia among girls in rural Mexico (Britto 2006; Cohen and Franco 2006b; Levy and Rodriguez 2004). As in the case of education, CCTs have clearly increased the take-up of health services but have so far produced only modest improvements in outcomes. This result indicates that increasing demand alone is not sufficient to improve outcomes and that policy makers should also take initiatives to improve the quality of the services. This improvement is emerging as one of the main challenges for social policy in LAC.

Cash incentives are not the only way of increasing demand and improving outcomes in education and health programs. There is considerable worldwide evidence on the positive long-term impact of school feeding on learning attainment (Ahmed and del Ninno 2002; Tan, Lane, and Lassibille 1999). As noted above, school feeding programs

---

**Table 6.9 Effect of CCTs on Health Demand and Outcomes**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Countries where effect has been documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-up of prenatal, natal, and postnatal care</td>
<td>Increased in El Salvador, Honduras, Mexico, and Peru</td>
</tr>
<tr>
<td>Take-up of child growth monitoring</td>
<td>Increased in Colombia, Honduras, Mexico, Nicaragua, and Peru</td>
</tr>
<tr>
<td>Vaccination rates</td>
<td>Increased in Colombia, Honduras, Nicaragua, and Peru</td>
</tr>
<tr>
<td>Mortality rates</td>
<td>In Mexico, 11% reduction in maternal mortality; 2% reduction in infant mortality</td>
</tr>
<tr>
<td>Morbidity rates</td>
<td>In Mexico, 12% overall reduction for children under 5; 20% reduction for children under 5 in rural areas</td>
</tr>
<tr>
<td></td>
<td>In Colombia, 5% reduction in diarrhea for rural children under 5; 10% reduction for urban children under 5</td>
</tr>
<tr>
<td>Knowledge of health care services</td>
<td>In Mexico, increased knowledge among women</td>
</tr>
<tr>
<td></td>
<td>No effect on risky sexual practices among adolescents</td>
</tr>
</tbody>
</table>

are widespread in LAC. These programs have the potential to increase enrollment and attendance and, if food is given at the start of the day (as breakfast rather than lunch), to give children a short-term energy boost that makes them more alert and capable of learning. It can also involve some pitfalls, for example, if food preparation disrupts teaching. Unfortunately, there is little rigorous evaluation evidence on LAC’s school feeding programs (Adelman, Gilligan, and Lehrer 2007). However, the available studies suggest that they have had some positive effects, particularly for the most vulnerable children. A randomized experiment in Jamaica found that, in rural primary schools, school breakfasts increased attendance rates, particularly those of undernourished children (Powell et al. 1998). In another study of rural Jamaican schools, Simeon and Grantham-McGregor (1989) found that school breakfasts improved the cognitive performance of malnourished children but not that of well-nourished children. In Peru, a school breakfast program in Huaráz increased the attendance rates of fourth- and fifth-grade students by over 3 percentage points (Jacoby, Cueto, and Pollitt 1996).

Reducing exclusion from complex social welfare systems: The Chile Solidario model. As the previous sections show, the best-known income transfer programs in LAC aim to increase the spending power of extremely poor households and their take-up of education, health, and nutrition services, especially in rural areas suffering from widespread structural poverty and exclusion. However, in Chile, Colombia, and Uruguay, a variant has been developed that illustrates the potential for integrating income support more closely with other human development and social welfare strategies.

Chile Solidario forms an integral part of the government of Chile’s social policy strategy. It is more narrowly targeted than most CCT programs—aimed at only the poorest 5 percent of the population—and provides a modest benefit, for only two years, as a way of attracting families into the social safety net. Once they have entered the program, they are guided to a wide range of other benefits (such as housing and child benefits) and supporting services (such as training and labor market inclusion programs) that can potentially help them to escape from social and economic exclusion. Specifically, Chile Solidario (1) refers clients to relevant social services with preferential access, (2) provides them with counseling on how to attain a set of minimum living standards for their family members, and (3) establishes a framework of coresponsibility with the family based on an agreed-upon action plan to lift the household out of extreme poverty. Compliance with this customized plan then becomes the household’s condition for continuing to receive the program’s support. Chile Solidario also works to adapt the supply of social services to the needs of poor families and to strengthen the institutional capabilities of local governments (Galasso 2006) (see box 6.3).
Box 6.3 Graduation from Income Transfer Programs: Is It an Issue?

The challenge of “graduation” from income transfer programs receives considerable attention in LAC’s SP community. Some have seen the programs as a whole as transitional cushion, needed only until structural reforms can absorb people into well-remunerated employment. This vision informed the first generation of social funds that accompanied structural adjustment at the start of the 1990s. However, poverty and exclusion in LAC are unlikely to be so radically reduced as to make income transfers superfluous. On the contrary, over time, growth will make the residual inequities less tolerable and will strengthen the demand for safety net programs, as has been seen in OECD countries. The realization that income transfers for the vulnerable and excluded are here to stay in LAC leads to the conclusion that they should be carefully designed as an integral part of the SP system, rather than cobbled together as a temporary addition to it.

An important question is how to keep individual families from remaining permanently on entitlements and falling into a welfare dependency trap. Haunted by the specter of the capture of earlier social assistance programs by their beneficiaries and concerned that entitlements might be undermining beneficiaries’ incentives to work, policy makers have often tried to limit the length of time that a family may benefit from the program. One variation of time-limited support is offered by the Chile Solidario model, conceived as a bridge to help poor families to take advantage of a broader set of welfare programs. However, this model presumes the existence of other SP and welfare programs that can provide ongoing support, especially to families with a high degree of vulnerability, such as that associated with disability. In another variation, Brazil’s Bolsa Familia has begun to help its beneficiaries to access microfinance, training, and labor market opportunities, but progress has been slow and the global downturn will reduce opportunities for this kind of service, even in urban areas.

LAC’s CCT programs mainly benefit structurally poor rural families, in settings where there are few other established benefits and where the income generation potential is limited. In such settings, CCTs encourage beneficiaries’ children to use nutrition, health, and education programs to increase their human capital and their future income-earning potential, and they provide a minimum income to the households to alleviate their poverty. This is a long-term strategy for intergenerational poverty reduction. It is unreasonable to expect that it will rapidly transform the income-generating potential of most rural beneficiaries, so it makes little sense to put time limits on program membership. The families should stay (continued next page)
Box 6.3 (continued)

on the program as long as they continue to meet the demographic and poverty criteria for participating in the program. Families that no longer meet demographic requirements, but that remain poor, should be connected to other programs that can give them ongoing support.

Providing long-term support to extremely poor families through CCTs is not likely to produce negative labor market effects. To the extent that opportunities to work exist, there is little a priori reason to suppose that CCTs will undermine incentives to take them up, since in most cases, once a household is qualified, program support is not linked to earnings. This design avoids creating a poverty trap, with a high marginal tax rate at the threshold income qualifying level. So, rather than rushing beneficiaries out of the program, the main issue for many CCTs is to ensure that newly qualified households can join the program at any time. This goal can be achieved by maintaining accurate, transparent, and up-to-date beneficiary registries. At the same time, periodic recertification exercises should be used to eliminate those beneficiaries who no longer meet the poverty criteria for participating in the program.

This model presupposes the existence of a well-developed social safety net system, and of a vulnerable minority who have been excluded from benefits to which they are entitled. To be effective, it needs to include an intensive counseling and advisory service, which carefully monitors each beneficiary family and which works with municipalities to help families gain access to schools and primary health services. Its effectiveness requires a strong information and monitoring system that can track beneficiaries across several different programs. This model has much in common with programs to tackle social exclusion that have been developed in OECD countries over the past two decades.

The approach has been emulated in Colombia, which launched Juntos to reach the poorest households (around 15 percent of the population). In 2007, the government implemented a Juntos pilot in some 35 municipalities, covering 60,000 families; 15 public agencies participated in the network. In 2011, under the new Santos administration, the program became Unidos and advanced in coordination with Familias en Acción. Similarly, in Uruguay, the National Emergency Social Assistance Program (Plan de Atención Nacional a la Emergencia Social, PANES), launched in 2005, included a temporary cash transfer program, Ingreso Ciudadano (IC), which gave US$56 per month to every eligible household for two years. The program covered around 8 percent of the population and was among the best targeted in LAC. When it was introduced, over 200,000 households applied.
The 80,000 beneficiaries were then selected using a proxy means test; social workers and volunteers made home visits to collect the data. When the IC was phased out in March 2008, most of the beneficiaries were transferred to a noncontributory family allowance program.

This approach implies a system of cross-sectoral management that includes (1) identification of all available benefits in the SP network, (2) formal agreements between institutions to provide services to the same beneficiaries, and (3) the sharing of targeting and beneficiary selection systems. In some variants of this model, such as Chile Solidario, conditional cash transfers are seen as a temporary catalyst to help establish permanent links between the most vulnerable households and the broader, permanent SP network. The program goal is to ensure that families learn how to access their entitlements and make effective use of the network.

**Supporting the Uninsured Poor in the Face of Shocks and Crises**

In addition to addressing structural poverty, governments also need to provide credible safety nets to protect the poorest households against such shocks as economic crises and natural disasters. This need was never clearer than during 2008–09, as the global economic crisis gathered momentum. The same structurally poor population groups who need income support to build their long-term capacity are also often highly vulnerable to shocks and tend not to have access to any insurance to protect them. This vulnerability can result in catastrophic harm. For instance, extremely poor rural families whose incomes are reduced may decide to reduce the amount of additional solid and liquid foods given to children in the critical age range of 6 to 24 months, thus leaving them overly dependent on breast milk. In that phase of life, inadequate nutrition can produce lifelong negative consequences from chronic malnutrition and the associated loss of physical and cognitive potential (World Bank 2005b). This risk is especially marked in those LAC countries with high malnutrition rates such as Bolivia, Ecuador, Honduras, Guatemala, and Peru (World Bank 2007b). In crisis situations, governments also need to help less poor households, such as those of urban informal sector workers, who have no protection against unemployment and whose wages are unlikely to adjust rapidly to price hikes, such as those that occurred in the case of food and fuel in the first half of 2008.

Recent developments in LAC’s SP systems have strengthened the capacity of many countries to respond to such shocks: they use existing income support programs in a flexible manner to channel increased support, either by temporarily increasing benefits or by incorporating additional families that qualify. However, these programs have limited potential to serve as a safety net in response to shocks because their targeting mechanisms are not intended to capture the “new poor.” That limitation leaves open the challenge of developing programs that are appropriate for supporting
households hit by cyclical unemployment. Temporary workfare employment creation programs may be an option in some cases, so long as they are designed to encourage the self-selection of appropriate beneficiaries and to avoid distorting labor market incentives. However, in practice they are difficult to implement; many countries are not able to set sufficiently low wages to encourage self-selection of the poor, and as a result such programs tend to have a high cost per beneficiary and risk distorting labor market incentives. A more promising option is to develop programs that link temporary allowances for job seekers to their participation in training and job search activities, along the lines of the active labor market programs discussed in chapter 5. The Seguro program in Argentina, which is supporting the development of municipal employment offices, is a good example of this approach (see box 6.4).

**Adapting existing programs to respond to crises: Mexico.** The throes of a crisis are not a good time to establish a strong safety net system. The system needs to have been put in place beforehand. The most striking lesson of the 2008–09 crisis is that governments that had a preexisting SP framework for the poorest households have been the best equipped to provide their vulnerable populations with additional safety net support.

This lesson is well illustrated by the contrasting cases of Haiti and Mexico. In Haiti, in early 2008, the government was toppled following riots to protest food price hikes. The price of rice doubled in the first half of 2008, and no effective safety net system existed. In the absence of programs with established information systems to identify the poorest households and established capacity to transfer resources, it was difficult for the new government to respond efficiently to the overwhelming political demand for action. The only way to cushion the poorest was to create a universal subsidy for rice, which also benefited less needy households (including possibly some in the neighboring Dominican Republic). Household data from 2001 suggest that only 33 percent of national rice expenditure is accounted for by the lowest two income quintiles (54 percent from the lowest three quintiles), while 46 percent of rice is consumed by the two highest income quintiles. These figures imply not only that there was significant “leakage” of the universal rice subsidy’s benefits to the nonpoor, but also that this approach distorted households’ incentives to adjust their consumption bundles to changed relative prices. The resulting temporary subsidy program cost the government US$30 million over a five-month period, the equivalent of 0.5 percent of Haiti’s GDP, and had to be supported by external assistance.

In contrast with Haiti, Mexico had a strong and coherent income support system for uninsured families already in place when the 2008 food price crisis began. This enabled the Social Development Ministry (Secretaría de Desarrollo Social, SEDESOL), to respond quickly and effectively to those who needed help, while limiting the leakage of resources to those who did not. The Mexican SP system includes a variety of programs
Box 6.4 The Transition from Emergency Workfare to Sustainable Safety Net Programs: Argentina and Bolivia

Argentina’s Jefes program was established at the height of the 2002 economic crisis and enrolled 2 million beneficiaries. The rapid creation of the program led to criticism about political manipulation and unfair selection of beneficiaries. A transition to better designed programs began in 2006, when beneficiaries began to be transferred to one of two programs: an employment benefit and training program, Seguro de Capacitación y Empleo (referred to as Seguro) run by the Ministry of Labor, Employment, and Social Security, and a conditional cash transfer (CCT) program, Familias, administered by the Ministry of Social Development. The transition advanced slowly until late 2009, when a new program of Universal Child Allowances (Asignacion Universal por Hijo–AUH) was introduced and all beneficiaries from Jefes and Familias were transferred. AUH and Seguro are now the main government instrument for providing social assistance to the unemployed and informal workers. AUH provides a monthly benefit similar to the transfer received by children of formal workers (about 10 percent of the minimum wage per child) for children of unemployed or informal workers. As of late 2011, there were approximately 3.6 million beneficiaries, and the program is open to new entrants. Seguro, on the other hand, provides beneficiaries with a monthly benefit for up to two years, worth about 25 percent of the minimum wage. In addition, participants receive job search support through municipal employment offices and the national network of employment services, including labor intermediation services for public and private sector employment, basic and professional training, and technical assistance for starting small businesses. There were over 150,000 beneficiaries receiving income transfers from Seguro in late 2011, and new municipalities are included in the program every month as additional employment offices are opened.

Plan Nacional de Empleo de Emergencia was a temporary workfare program that operated in Bolivia between 2002 and 2005. It was set up in response to a rapid rise in open unemployment (from 6 percent to 9 percent of the working-age population between 1999 and 2002) and in underemployment (up from 16 percent to 21 percent in the same period). During those three years, it financed around 800,000 job-months. Eighty percent of funding for PLANE came from bilateral donors. The target population was poor people aged 25 to 55 years old. Employees worked for seven hours per day for up to 10 weeks. The monthly salary for unskilled workers was Bs 480 (slightly above the minimum wage), while skilled workers received Bs 1,600 per month. Resources were allocated using geographic targeting based on an index of municipalities’ unmet basic needs. PLANE was created to mitigate the

(continued next page)
Box 6.4 (continued)

effects of the economic crisis of the early 2000s, but it was extended well beyond the crisis and became difficult to close down due to a perception by the beneficiaries that they were entitled to ongoing employment. In 2006, the incoming Morales administration decided to close PLANE but encountered strong opposition from a union of PLANE employees. Eventually, PLANE was fused with a social fund project, Pro Pais, and PLANE beneficiaries were given the option of working temporarily on a Pro Pais project.


targeted at household level, which can be used as channels for additional short-term income support in response to crises. The situation at the beginning of the crisis was as follows. The CCT program Oportunidades had 25 million beneficiaries and a budget of US$3.4 billion in 2008. Other programs that provided cash and in-kind support to communities not covered by Oportunidades were Apoyo Alimentario (Food Support), which had 520,000 beneficiaries and a budget of US$30.5 million, and Alimentario para Zonas Marginadas (Food for Marginal Zones), which had 550,000 beneficiaries and a budget of US$114.5 million. In addition, Abasto Social de Leche LICONSA (Social Milk Supply) had 5.9 million beneficiaries and a budget of US$177 million. There was also a community-targeted rural supply network, Abasto Rural DICONSA (Rural Supply), that sold basic products at affordable prices in 22,450 shops in rural communities with high poverty rates; its budget was US$182 million. It is estimated that 45.8 million people live within reach of this network.

In response to the food crisis, SEDESOL staff analyzed household expenditure data from the 2006 Household Expenditure Survey (ENIGH), together with consumption data from evaluation studies of social programs, to accurately estimate the impact of the crisis, thus avoiding overdimensioned or misdirected policy responses. Their analysis showed that Mexico’s general and food price inflation rates were among the lowest in the region (standing, respectively, at 5 percent and 9 percent in June 2008, compared, for example, with 23 percent and 33 percent, respectively, in Nicaragua). However, the exposure of Mexico’s poor to food price inflation was considerable. Households in food poverty spent 52 percent of their budgets on food and drink, so a rise of almost 10 percent in food prices represented an erosion of 5 percent of the spending power of these households. In contrast, those households that were not in food poverty spent an average of only 20 percent of their budget on food and drink, so the effect on them was only modest.
Using these data, SEDESOL calculated the transfer amount that would be needed to offset the effect of food price inflation for households in food poverty to be Mex$115 a month (about US$10) per household. On this basis, SEDESOL decided to establish temporary additional cash transfers of Mex$120 a month, channeled through existing social programs. This strategy was chosen because it was the least distortionary one available. It would allow each household to make its own decisions about how to use the funds. To ensure the funds were delivered quickly to the right people, SEDESOL decided to use the existing beneficiary registers of Oportunidades, Apoyo Alimentario, and Alimentario para Zonas Marginadas to target the temporary benefits. Consequently, the monthly amount of the base benefit provided by Oportunidades and Alimentario para Zonas Marginadas was raised from Mex$245 to Mex$365,31 and the benefit provided by Apoyo Alimentario was raised from Mex$182 to Mex$302 a month. The six-month budgetary cost of this compensatory adjustment was estimated to be Mex$4.5 billion (about US$410 million), which constituted a modest 12 percent of the base budgets of these programs.

The strategy was complemented by actions to restrain the price of key products in communities with high poverty rates. Analysis of the consumption bundles of households in food poverty showed that 90 percent of their consumption of corn was in the form either of corn grain or tortillas. Therefore, the government decided to hold the price of corn grain in the DICONSA network at Mex$3.50 per kilo (well below the market floor of Mex$5.60) and that of corn flour (used to make tortillas) at Mex$5.00 (as opposed to Mex$7.20 in the open market). Similarly, the price of fortified LICONSA milk was held at Mex$4.00 per liter as opposed to Mex$11.70 in the open market. Finally, the government acted to offset movements in market prices by eliminating import duties on wheat, rice, white and yellow corn, sorghum, and soya paste. It also eliminated import quotas for frijol beans and halved taxes on imports of powdered milk. At the same time, to help farmers increase production, the government lifted import taxes on fertilizers and chemical inputs (whose prices were rising due to fuel price inflation), established a credit line to help small agricultural producers to buy fertilizer, and increased support for small-scale agricultural production.

Other governments in the region have also taken advantage of existing safety net programs to protect the poorest households from the effects of the recent crisis. The two most common actions have been increasing the benefit amounts given to existing program beneficiaries (to offset the impact of inflation) and increasing the nominal income cutoff line for program participation (to allow previously ineligible families to enter the program). In Brazil, the income cutoff point for inclusion in Bolsa Familia was raised to offset inflationary pressures, resulting in an increase in the program’s coverage of almost 20 percent, to 12.4 million families. In
Chile, additional payments were made to beneficiaries of Chile Solidario and to those of the family subsidy program, Subsidio Único Familiar. In Colombia, the Juntos program was expanded to cover a total of 1.5 million families, and the main CCT program, Familias en Acción, was expanded to 2.5 million (a 30 percent increase). In El Salvador, the value of the Red Solidaria per household transfer was doubled, to US$300 a year.

Using social funds to respond to crises: Honduras and the Caribbean. Another example of how governments can adapt existing SP programs to respond to temporary crises involves the use of social investment funds in Central America and the Caribbean following natural disasters. Perhaps the best-known example is the response of the Honduran social fund, the Fondo Hondureño de Inversión Social (FHIS), following Hurricane Mitch in 1998. The hurricane left Honduras devastated, with damage estimated by the United National Economic Commission for Latin America at 5 percent of GDP. In the first year following the hurricane, while line ministries sometimes struggled to organize their responses, the FHIS was widely recognized as one of the most effective agencies in the reconstruction effort. In the immediate aftermath of the hurricane, the destruction of parts of the road network made it difficult for national government agencies to respond quickly. Local governments were often in a better position to decide on priorities for reconstruction, especially with regard to small-scale infrastructure. The FHIS had an established system for targeting resources to the municipal level based on a credible poverty map and had an existing pool of resources (including a newly negotiated World Bank loan) available to fund the implementation of reconstruction efforts. It also had an autonomous administrative structure, which allowed it to take decisions and contract for civil works relatively quickly. Following the hurricane, FHIS directors were dispatched to the regions affected by the storm to carry out rapid appraisals in partnership with local authorities. Based on their analyses of need, the available funds were channeled into priority reconstruction efforts.

Social funds have played a similar role in the Caribbean region. Community development funds as well as agencies such as the Basic Needs Trust Fund, a multicountry program financed by the Caribbean Development Bank that provides funding for small-scale social and economic infrastructure projects, have been able to respond following hurricanes because of their flexibility and capacity to mobilize resources quickly in times of crisis. For instance, after Hurricane Keith in 2000 and Hurricanes Chantal and Iris in 2001, Caribbean counties used social funds to channel donor support for reconstruction.

Reducing perverse coping responses to shocks. Even without changing the benefit amounts, the mere existence of some types of SP program can help to reduce the damage inflicted on vulnerable households by economic shocks and natural disasters. One way that shocks cause damage is by
provoking negative household “coping” responses, which yield short-term savings for the household but undermine its long-term earnings capacity. For example, a household facing a fall in prices for its main crop might reduce how much it spends on health care for its members or on complementary feeding for its infants—thus putting these infants at risk of chronic malnutrition and reduced cognitive and physical capacity as they grow. It might also pull the children of the family out of school to save transport costs or enable the children to bring in labor income—thus reducing the household’s future earnings potential. Households might also decide to sell their most productive assets to finance their consumption in the short term—thus undermining their long-term earnings capacity (Baez and Mason 2008). Each type of shock has different potential effects of this sort, and the damage that they do can vary.32

Cash benefits that are conditional on the use of health, nutritional, and educational services—such as those offered by a CCT—can make a big difference to how households reallocate their labor supply and income in response to crises. This is true whether the crisis arises from an idiosyncratic shock that is specific to the household (such as sickness or loss of employment) or from a systematic shock (such as a recession or inflationary crisis). Either way, conditional programs can dissuade households from responding negatively. For instance, if missing a nutrition counseling session or pulling a child out of school might lead to disqualification from a cash transfer program and loss of a significant amount of income as a result, that household is much less likely to take that decision than is a household not in the program. Similarly, the existence of a school breakfast program will reduce the likelihood that families will withdraw their children from school, as they would then have the expense of feeding them at home. Evaluations of CCT programs in LAC offer a small but growing body of evidence for the existence of such protective effects from CCTs. Maluccio (2005) found that, in Nicaragua during the 2001–02 coffee crisis, households that benefited from the Red de Protección Social (RPS) cash transfer program were protected from the nutritional effects of the crisis. De Janvry and Sadoulet (2006) showed that the beneficiaries of Oportunidades were less likely to respond to systematic or idiosyncratic shocks by withdrawing children from school than households not enrolled in the program.

Enacting workfare. Workfare programs are implemented in crisis situations with the explicit goal of ameliorating rising unemployment, usually in urban areas. Table 6.10 summarizes the recent examples of such programs in LAC, which include Jefes in Argentina, PLANE in Bolivia, Empleo en Acción in Colombia, Construyendo Peru in Peru, Programa de Empleo Temporal (PET) in Mexico, and PANES in Uruguay. Such programs provide temporary full-time or part-time employment to adults, and sometimes have additional qualifying rules. For example, in Argentina, beneficiaries must have dependents; in Colombia, they must be qualified as poor under the country’s
<table>
<thead>
<tr>
<th>Country/program/duration</th>
<th>Targeting method</th>
<th>Work requirement</th>
<th>Benefit (US$/month)</th>
<th>Coverage (% of EAP)</th>
<th>Spending (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina Jefes de Hogar 2002–present</td>
<td>Unemployed heads of households with dependents</td>
<td>20 hours per week of community work, training, or education; or 6-month subsidy to private employer</td>
<td>$45 (2003)</td>
<td>13.0 (2004)</td>
<td>0.80 (2003)</td>
</tr>
<tr>
<td>Bolivia PLAN 2001–05</td>
<td>Unemployed adults</td>
<td>7 hours a day for up to 10 weeks</td>
<td>$63 (2002)</td>
<td>1.6 (2002)</td>
<td>0.27 (2004)</td>
</tr>
<tr>
<td>Colombia Empleo en Acción 2000–04</td>
<td>Unemployed adults in poverty (SISBEN 1, 2)</td>
<td>4 hours a day working on infrastructure projects in poor urban areas</td>
<td>$85 (2000)</td>
<td>1.8 (2000)</td>
<td>0.22 (2000)</td>
</tr>
<tr>
<td>Mexico PET 1995–present</td>
<td>Rural population over 16 in extreme poverty</td>
<td>Economic and social infrastructure rehabilitation for up to 4 months</td>
<td>$81 (2004)</td>
<td>2.4 (2001)</td>
<td>0.29 (2001)</td>
</tr>
<tr>
<td>Peru Construyendo Peru a</td>
<td>Unemployed adults</td>
<td>Economic and social infrastructure rehabilitation for up to 4 months</td>
<td>$153 (2008)</td>
<td>1.1 (2008)</td>
<td>0.18 (2008)</td>
</tr>
</tbody>
</table>

Source: Authors’ compilation based on SELA 2005.
Note: EAP = economically active population; SISBEN = Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales.

a. This program was previously called A Trabajar Urbano.
proxy means test system; and in Mexico, they must live in a poor rural area. Benefit amounts vary considerably—from US$45 per month under Jefes (Argentina)\textsuperscript{33} to US$153 under Construyendo Peru, but they are generally much larger than those paid under CCT programs, making workfare an expensive policy option. For this reason, coverage is normally limited to around 2 percent of the economically active population. However, there are some exceptions. For example, Jefes in Argentina reaches 13.0 percent of the economically active population, and PANES in Uruguay reaches 7.2 percent. Not surprisingly, these are the most expensive workfare programs in LAC, accounting, respectively, for 0.8 percent of GDP and 0.5 percent of GDP, compared with around 0.2 percent in the other cases.

Ideally, workfare programs should pay less than the market wage, to avoid distorting labor market incentives, and they should be anticyclical—that is, gradually eliminated as the recovery begins. However, because of labor laws, many workfare programs in LAC have to pay the minimum wage, which is often set well above the (informal sector) market wage for unskilled labor. In addition to making workfare programs expensive, this arrangement also increases the risks that workers will be attracted away from private sector jobs and will then be reluctant to leave their workfare jobs, given that they have little chance of earning similar wages elsewhere. As a result, in spite of governments’ intentions, it has not always been easy to keep program membership temporary, since workers have put pressure on the governments to allow them to continue in these jobs. However, in other countries, governments have been able to make the transition to more sustainable safety net programs. Box 6.4 contrasts how Argentina and Bolivia have recently made such transitions.

Interest in workfare is being revived in the context of the current global financial and economic crisis, and this renewed interest makes it important to ensure that lessons have been learned from previous workfare programs. The evidence yielded by evaluations of these programs suggests that while their targeting was not particularly strong, especially when compared with CCT programs, they generally had a positive impact on the employment and poverty status of their beneficiaries. Jefes in Argentina, which provides a cash transfer worth about one-half of mean per capita household income, is estimated to have reduced overall unemployment by 2.5 percentage points, to have reduced the national poverty rate by 2.0 percentage points, and to have reduced extreme poverty among its beneficiaries by 10 percent (Galasso and Ravallion 2003). Evaluations of PLANE indicated that the program had positive effects on the income of its beneficiaries, especially women. Most workers employed in the program increased their spending on food; over one-half learned a new skill and 20 percent succeeded in getting a permanent job afterward (Landa and Lizárraga 2007). In Colombia, Empleo en Acción increased the consumption of beneficiary families by 9 percent (Colombia DNP 2006). Given that these programs have achieved modest impacts at quite high costs, they should be kept small
and temporary and their wage levels should be kept as low as is legally feasible to allow the program to assist the largest possible number of beneficiaries. Governments should not consider workfare programs as a credible alternative to programs that tackle long-term structural poverty, such as large-scale CCTs. Rather, workfare should be seen as a way to provide urban safety nets for informal sector workers during downturns and crises. Wherever possible, it should be linked to training opportunities and active labor market programs to help its beneficiaries find permanent employment (see chapter 5).

Is There a Downside?

The positive effects of recent developments in LAC’s income support programs, documented in the previous sections, have been considerable. Now established as legitimate, income support programs have reduced social exclusion by extending coverage to previously forgotten groups—especially the extreme poor in rural areas—and have significantly increased the spending capacity and reduced the poverty of their beneficiaries. They have contributed to a gradual improvement in the overall coherence of social welfare policies by stimulating demand for the take-up of basic health, nutrition, and education services, thus helping poor households to increase their human capital and, in turn, increase their chances of escaping poverty in the future. They have also helped some poor households to invest in economic activities with higher returns than their previous activities, which will increase their incomes in the short to medium term. They have strengthened the capacity of public policy to provide safety net protection to the poorest households in the face of economic shocks and natural disasters, while also creating incentives that reduce the likelihood that households’ short-term coping reactions to shocks will cause long-term damage to their children’s economic potential. Modern income support programs are, in general, more transparently administered than the previous generation of SA in LAC, are less prone to being captured by beneficiaries, and have been subjected to more serious evaluations. These achievements have come at a modest fiscal cost, because the programs provide relatively small benefits, are not expensive to administer, and have avoided the leakage of large amounts of resources to the nonpoor. They have also provided an effective argument against recurring to badly thought-out general consumption subsidies in an effort to protect the poor against shocks.

These well-documented successes have inevitably led to the question: Is there a downside to these achievements? This section discusses two important concerns that some development economists have about the possible negative ramifications of targeted income support as a central pillar of LAC’s SP system. First, it asks whether there is any evidence that such programs are reducing the work effort of beneficiary households, or displacing them toward informal employment. It finds little evidence to support this thesis. Most of the programs in this new generation are structured to make such
effects unlikely, and policy makers can be fairly confident of avoiding them by following some simple rules about program design. Second, it discusses a more complex and subtle critique, recently expressed in an influential book by Santiago Levy (2008). Levy suggested that LAC might be undergoing a shift to a “two-tier” social protection system, in which access to the “ground floor” of noncontributory, targeted support has unintentionally become limited to those who work in small-scale, informal economic organizations, which are intrinsically uncompetitive and offer limited potential for future productivity growth. This shift, in turn, would imply that the emerging SP system might be hampering the region’s long-term growth potential.

**Labor supply effects of income transfer programs.** Concerns that income support may give rise to moral hazard by undermining incentives to work and leading to welfare dependency have sometimes undermined political support for transfer programs (Grosh et al. 2008). Such effects can arise when eligibility for benefits depends on being unemployed. The value of the benefit then becomes a marginal tax on income earned in the formal sector. This poverty trap can lead beneficiaries to stop looking for work or to bend the rules by working in the informal sector while also claiming the transfer. However, this problem does not apply to either of the main classes of transfer programs that exist in LAC—CCTs and workfare. Once a household becomes eligible for a CCT, the entitlement is not means tested, so there is no implicit marginal income tax that might discourage work effort. In the case of workfare programs, beneficiaries must either work or participate in training, so they cannot claim the benefit and remain idle; this model reflects the design of unemployment assistance under the “welfare-to-work” reforms in OECD countries. Programs that include no unemployment test may still erode incentives to work, but only to the extent that benefit recipients have such a low preference for additional marginal consumption that they are not prepared to trade their leisure for increased consumption beyond the amount financed by the transfer and therefore would prefer to remain idle rather than to work. However, it is a priori unlikely to be the case in LAC, given the modest size of the transfers paid by most programs and the extremely low pretransfer household incomes of most beneficiaries. In fact, given that low-income communities in the region have little or no access to capital markets, there may well be an opposite effect on labor supply. Transfers may give households the additional liquidity that they need to make small investments, which may actually “crowd in” an increase in the work effort (Ellwood 2002). The size and direction of the net labor supply effect would then be an empirical question. The following paragraphs summarize the available evidence.

As theory predicts, the empirical evidence suggests that LAC’s CCT programs have little or no disincentive effect on the adult labor market. Skoufias and di Maro (2006) found that Progresa had no significant effect on adult
labor force participation in Mexico. Maluccio and Flores (2004) found that Red de Proteccion Social in Nicaragua had no effect on adult participation rates or on the hours worked by women. Leite (2006) simulated the effect of Brazil’s Bolsa Familia on adult work effort and found that the program had had little impact. However, two studies found that a considerable (and desirable) reduction in child labor was associated with CCT participation in Ecuador and other countries as a result of income effects and education conditionalities (Skoufias and Parker 2001; Schady and Araujo 2008).

The evidence on workfare programs suggests that, as expected, they affect the interplay between formality and informality and participation rates. Design factors play a key role in these outcomes. Perry et al. (2008) found that the Jefes program in Argentina created incentives for its beneficiaries to work in the informal sector, suggesting that some beneficiaries were able to “moonlight” to earn income in addition to receiving the transfer. This finding underlines the importance of enforcing work requirements or other similar measures. The evidence also suggests that if workfare programs pay high wages, then workers will be dissuaded from looking for other employment. Galasso and Ravallion (2003, 2004) showed that the large benefit provided by Plan Trabajar, the predecessor to the Jefes program, had a negative impact on labor supply, but when the benefit was reduced in 2002, this effect came to an end. This finding argues for keeping the benefit as low as possible. There have also been some targeting problems with workfare programs. Household survey evidence suggests that one-third of the beneficiaries should have been ineligible for the program and that, on the other hand, 75 percent of eligible adults did not benefit from the program (Galasso and Ravallion 2004). This finding argues for strengthening the self-selection aspect of workfare programs, once again by keeping the remuneration paid by the program lower than the market wage.

An issue that has concerned some commentators is the ambiguous effect of workfare on unemployment rates. Galasso and Ravallion (2004) found that Jefes had had a perverse effect on unemployment because it increased female participation rates. A similar effect was observed in the evaluation of PLANE in Bolivia (Landa 2003). However, these effects should not concern policy makers. Participation rates are well-known to be responsive to labor demand, which is increased by the presence of a workfare program. The ratio of employment to the working age population is a more stable indicator of labor market conditions than the formal unemployment rate.

Social protection, informality, and growth potential: The Levy critique. As outlined above, the risk that some workers may seek to hold informal jobs while also claiming benefits can be simply sidestepped, either by removing the unemployment test for benefit entitlement (the CCT solution) or, alternatively, by strictly enforcing the requirement that beneficiaries must participate in work or training under the auspices of the program (the welfare-to-work solution).
However, there is a more complex and subtle way in which the development of noncontributory SP programs may reinforce the trend toward informality. In a world where social protection continues to be mainly funded by payroll contributions—as is the case in LAC—the availability of noncontributory alternatives may increase the demand for informality. This possibility raises the specter that the increasing availability of alternative income safety nets and of free universal health insurance will give workers more incentives to avoid SI contributions, thus increasing the attractions of informality. The result may be a vicious circle of decline in the viability of contributory social insurance, as workers with lower risk profiles move into the informal sector where they can benefit from programs financed from general taxation but do not have to pay taxes themselves.

If informal enterprises tend to have low productivity because they are unable to benefit from economies of scale and have difficulty accessing markets and credit, the same limitations may also undermine economic growth. Levy (2008) has expressed the concern that the recent development of Mexico’s SP system has had the unintended consequence of promoting the growth of small-scale, informal economic organizations, which are intrinsically uncompetitive and offer limited potential for future productivity growth. He argues that this phenomenon may dilute the future economic benefits that beneficiary households might otherwise have been able to expect from the increases in their human capital produced by the health, nutrition, and education conditions imposed by CCTs. Similarly, Gendreau (2000) has argued that the critical nexus between investments in human capital today and better living conditions in the future can occur only in a socioeconomic context in which skills can be translated into higher earnings, which is not the case in the informal sector. Other authors have emphasized that the precarious nature of low-quality, informal sector jobs makes them an unacceptable paradigm for the future of work in the region (Cohen and Franco 2006a, 2006b).

So the direction taken by the region’s emerging social protection system may be threatening its long-term growth potential. Instead of increasing productivity and incomes of the poor with redistributive transfers, the new SP arrangements may be accidentally subverting them by reinforcing the flow of workers into informality. This possibility is a valid cause for concern for policy makers, which they should address by designing the antipoverty component of LAC’s SP systems so as to minimize incentives to seek out work in the informal sector. The simplest solution, in general terms, is to reduce the use of payroll taxes to fund social insurance benefits in the formal sector. However, as discussed in chapter 7, this solution is not likely to be easy in practice.

In any case, even the total elimination of payroll taxes would not be likely to end informality in LAC. Much informality is the result of income tax avoidance by employers and workers alike and of the desire on the
part of employers to avoid mandatory labor standards. The enforcement of labor standards and fiscal compliance are not a social protection problem as such, and they do not have a social protection solution. There is no way to tackle informality in LAC without strengthening the regulatory enforcement capacity of the public sector, especially that of the fiscal authorities.

In the meantime, LAC needs social protection systems that can be effective in an environment where informality is the norm for a large proportion of the workforce. As is argued in chapter 7, this means opening up contributory SI to the population as a whole (rather than just to workers with formal employment contracts) and ensuring that any subsidies are transparent, equitable, and consistent with promoting work and savings. This approach will open the way to expanding the coverage of contributory SI and limiting the proportion of the workforce that needs to be assisted by noncontributory safety net programs.

Future Challenges

This final section outlines the key challenges for the future development of income support in LAC’s SP and welfare systems that have emerged from the discussion in this chapter. It highlights five related areas at the cutting edge of SP policy, all of which will continue to require concentrated attention from policy makers in the coming years. The first area is the need to strengthen the quality of education and health service supply, in order to complement the positive effect of CCTs on the demand for those services. Better coordination between supply-side and demand-side initiatives is needed to ensure that desired improvements in health, nutrition, and education outcomes for CCT beneficiaries will materialize. The second is the need to strengthen the CCTs themselves by creating accurate, transparent, and up-to-date mechanisms for incorporating newly eligible beneficiaries and by periodically reviewing the beneficiary lists to remove families who no longer meet the entitlement criteria. The third is the need to improve links between CCTs and the broader SP system to ensure that CCT beneficiaries get the support they are entitled to from other parts of the system. The fourth is the need to develop effective SP programs for urban, informal settings, which are more complex than the rural environment and pose corresponding risks. Subnational governments have an important role to play in the future of urban SP in LAC, and linking beneficiaries to labor market opportunities will be an important challenge. Finally, the fifth area is the need to strengthen the capacity of social safety nets to respond to temporary shocks—economic or natural—while ensuring that adaptations can be phased out when the shock has passed.
Improving Social Service Delivery in Health, Nutrition, and Education

Ensuring that the beneficiaries of conditional income support programs are able to receive health, nutrition, and education services of adequate quality remains a big challenge in most countries in the region. Cash transfer programs need to be an integral part of the overall system of social welfare provision. Many governments have complemented CCTs with actions to improve the education, health, and nutrition services available to their target communities. Sometimes, the government has channeled additional funding through the CCT itself, as was done in Honduras and Nicaragua. However, this approach has led to tensions between the CCT and the line ministries, and has proved to be unsustainable. Other countries, such as Bolivia, El Salvador, Guatemala, Panama, and Peru are supporting the expansion of health and nutrition services in the regions where the CCT program operates to ensure availability of services for the eligible households. Experience suggests that effective coordination between line ministries is fundamental to the success of CCTs and other intersectoral social programs (Levy and Rodríguez 2004). Where CCTs have enjoyed high-level political endorsement, they have been a useful mechanism for increasing coordination among ministries and other agencies (see box 6.2 on El Salvador). Some CCTs have become a de facto regulatory agency for education and health services in their areas of intervention, identifying gaps in provision and coordinating with line agencies to ensure adequate provision in the targeted communities. The clarification of roles and responsibilities for the programs themselves and for higher-level social sector planning agencies will be a central theme in the future.

Strengthening CCTs: Open Registers, Stronger Beneficiary Databases, Periodic Recertification

In many countries across the region, CCT programs have become a permanent part of the social protection system. They now need to develop more sophisticated mechanisms to incorporate newly eligible beneficiaries and to graduate families who no longer need long-term income support. This improvement will require establishing open enrollment mechanisms so that families who become entitled to the program (for example, because they have just had a baby) can immediately apply for support, without having to wait for the program to carry out a large-scale recertification exercise. Hence, the program will need to establish local offices, where people can file applications for support, and to develop a sophisticated online database of program beneficiaries. At the same time, existing beneficiaries need to be periodically recertified, to ensure that they still meet the demographic and poverty criteria for continued program participation. Those who are no longer qualified should graduate from the program, to
make room for others. But families who leave CCT programs because they no longer meet the demographic criteria but who remain poor should be connected with other programs that can give them ongoing support.

Improveing Links between CCTs and Other Social Protection Programs

CCT programs are a potentially important vehicle for improving coordination of access for poor people to the SP network as a whole (social assistance, other cash transfers, in-kind transfers, scholarships, cash for work, social housing, employment and job search programs, and so on). SP programs are often spread across several institutions and fail to achieve full coverage of the target population. They can benefit from the good targeting achieved by most CCT programs to reduce their errors of omission and inclusion. On their side, the CCTs can achieve better results for their target population if they help them connect to other parts of the SP system. Strengthening the interface of CCTs to social protection systems will often require new institutional arrangements and the linking of information systems. Brazil, Chile, Colombia, and, recently, Mexico are moving in this direction.

Facing the Urban Challenge

There is strong political demand in LAC countries for the SP system to address the needs of workers who “fall between the cracks.” The largest element of this population is the urban informal sector. Although urban poverty rates are lower than rural ones, the urban population includes many people in extreme or moderate poverty. In many ways, the urban poor are more exposed to shocks than rural households (whose poverty is more structural than cyclical). However, people in the urban informal sector often do not qualify for tightly targeted cash transfers; nor are they covered by formal contributory social insurance. This gap in the coverage of SP programs is also a political economy issue. Because of the size and voting power of the urban population, it is difficult for politicians to ignore this group. So the issue of the “missing middle” in SP programs merits urgent attention.

Beyond addressing the needs of vulnerable groups such as the disabled, abandoned children, and victims of violence (not the subject of this paper), the main urban social challenges that need to be addressed in LAC are these: (1) finding ways to expand the coverage of contributory social insurance to informal sector workers (discussed in detail in chapter 7); (2) helping workers to acquire adequate skills (hard and soft) to meet the requirements of the local labor market and improve information flows about labor demand and supply (discussed in chapter 5); and (3) responding to cyclical fluctuations in labor demand. Given the limited value of most cash transfer and income support benefits, income generation remains crucial to complementing SA transfers for the beneficiaries
of CCT programs. As they become more important in urban areas, where work opportunities are potentially greater, CCTs will need to focus more on connecting their beneficiaries to labor market opportunities, through links to other programs and, possibly, through explicit coresponsibilities linked to job search and training activities.

There is also a need to define a new role for municipal authorities in urban SP systems. In the past, central governments too often simply delegated SP to local governments, which had little fiscal capacity to respond. In recent years, national SP programs have been developed that mainly have little role for municipalities. The exception is Brazil, where Bolsa Familia is municipally administered. However, across the region, municipal capacity (financial and administrative) has been increased by decentralization. There is now a need for local governments to use their growing capacity to identify and register poor and vulnerable households, in consultation with local communities, and to cofinance SP programs, especially where governments have significant fiscal resources. When large cities operate their own SP programs, there is also a need to ensure coordination between municipal and national programs in order to avoid duplication (see box 6.5).

**Box 6.5 The Pitfalls of Urban CCTs**

Most CCT programs in LAC began as targeted programs for extremely poor rural families. However, the majority of LAC populations now live in urban areas. Although extreme poverty rates are much lower in urban areas than in rural areas, there is a significant group of extremely poor urban households. As a result, many governments are now expanding CCT coverage to low-income urban households; this step has already been taken by Brazil (Bolsa Familia), Colombia (Familias en Acción), and Mexico (Oportunidades).

Adapting the CCT model to the urban environment involves important challenges. The social and economic complexity of urban settlements is greater than that of most poor rural communities, with poor and nonpoor households living close together in the same communities. This proximity makes it important to complement geographic targeting with instruments that can identify appropriate beneficiary households and exclude the nonpoor. One clear option is the use of proxy means testing. However, statistical models may perform less well as predictors of poverty in more complex urban settings than they do in more uniform rural ones. In addition, urban households are more likely to challenge exclusion decisions.

(continued next page)
This tendency could be problematic, since the qualification criteria of the proxy means test cannot be made public without inviting large-scale cheating.

There are also important differences between the characteristics of urban poverty and those of rural poverty. The short-term potential for economic advancement of extremely poor urban households is greater, because of the existence of concentrated labor demand in urban areas. Urban households are less likely than rural households to be stuck in structural poverty, from which it will take a generation to escape. As discussed in chapter 5, active labor market programs are a viable option to increase the economic potential of the urban poor through skills training and access to labor market opportunities.

Another issue to be addressed in expanding CCTs to urban areas is that basic health and education coverage in these areas is normally much higher than in rural areas, so there is less need to stimulate demand. Often, the most urgent problems are on the supply side: many urban areas already have difficulty expanding supply fast enough to keep pace with population growth. Also, it is harder to monitor compliance with conditionality on health and basic education in urban settings, because there are multiple possible suppliers within reach. The existence of more work opportunities in urban areas also means that the opportunity cost of household time is higher; and for those who have work, the relative value of the CCT benefit is correspondingly lower. Moreover, limited health center hours can generate access problems for those who have work. This situation has led to much lower take-up rates for urban CCTs than is generally achieved in rural areas.

Given these factors, a possible approach for adapting CCT programs to the urban environment is to focus on supporting labor market access and improved earnings opportunities for young people in low-income communities. The strong national institutions that already operate CCTs in most countries in LAC would thus be brought to support the part of the human development agenda most clearly in need of strengthening in the region’s cities: increasing earnings potential. Transfers could be paid in the form of modest job search or training allowances. Targeting strategies could thus make use of self-selection, through a requirement for intensive participation in training and job search activities. Where there is evidence of demand-side constraints to secondary education completion, the CCT might also provide cash incentives for low-income students to complete their secondary education (possibly in alternative modes that allow them also to work).

Source: Authors, based on Ochoa 2009.
Providing Social Protection Responses to Short-Term Shocks

The global economic crisis of 2008–09 has highlighted the importance of strengthening safety net services for the poor. The main message from the crisis is that countries that have in place well-structured, long-term antipoverty programs, such as CCTs, can use them to provide temporary additional support to their targeted beneficiaries—that is, to protect them from the consequences of shocks such as the food price crisis. As discussed above, Brazil, Chile, Colombia, El Salvador, Mexico, and Panama have all used their existing program structures to provide cost-effective responses to the crisis over the past few years.

The preexisting capacity of a country’s core SA system therefore plays a key role in its ability to help the poor when crises hit. This capacity should include, at a minimum, well-established targeting mechanisms, reliable databases, information systems for household registries management, payment systems, delivery mechanisms, and tools for basic monitoring, oversight, and control. When all these elements are in place, the government will be in a strong position to increase benefit levels and introduce new temporary programs in response to a shock. In contrast, when these elements of the SA system are not in place, as was the case in Haiti during the food price crisis in 2008, a country’s options for organizing an effective response to a crisis are far more limited, and policymakers may have to resort to less efficient interventions.

When no targeted antipoverty programs are operating, appropriate responses to cyclical fluctuations in employment (which can affect uninsured poor families who are not qualified for CCT programs) can include active labor market programs and temporary workfare programs. The former might promote employment services and skills development, and—especially for young people in urban areas—they could condition income transfers on job search and training activities. Temporary workfare and training programs reduce the risk of benefit leakage to the nonpoor by paying below-market wages, and impose work requirements or other constraints to avoid disincentives to work.

Notes

1. The development of free health insurance is dealt with in chapter 3 and noncontributory pensions in chapter 4. The issue of improving the quality of employment of the poor is tackled in chapter 2.

2. Such programs should be differentiated from the income protection programs, discussed in chapter 5, that relate to protecting workers at all levels of income from unexpected interruptions in their income due to unemployment or similar shocks.
3. Perry et al. (2006) found that better (more equal) income distribution led to higher economic growth rates. They also argued that LAC’s fiscal systems have historically done too little to improve income distribution. In LAC, fiscal interventions tend to be distributionally neutral: in most countries, the Gini of disposable income (after taxes and transfers) is very similar to that of pretax income. In contrast, in Europe, tax systems make a huge distributional difference. For example, in the United Kingdom, the pretax Gini is 0.53 (similar to that of many LAC countries) but the Gini for disposable income (after taxes and transfers) is 0.35. The European Union (EU15) average pretax Gini is 0.47, while the posttax (disposable income) Gini is 0.33. See Perry et al. (2006, pp. 92–93).

4. The case for including an explicitly redistributive antipoverty component in SP systems is laid out in Grosh et al. (2008).

5. For review of the phases of historical development of SI and SA systems in LAC from the 1920s to the present day, see Lindert, Skoufias, and Shapiro (2006, chap. 3). For an excellent discussion of the historical origins of the welfare state in the United Kingdom and United States, and the distinctions between consumption smoothing, risk-pooling, and redistributinal, antipoverty functions of SP systems, see part I.2 of Barr (2004).

6. In many LAC countries, governments are financing transitional deficits in residual pay-as-you-go systems, which have arisen from the transfer of younger generations’ contributions to funded insurance plans. These costs are sometimes considerable—for instance, in Bolivia they are around 5 percent of GDP—but they should diminish as the residual generation of pay-as-you-go beneficiaries gradually dies off. However, countries that fail to tackle actuarial imbalances in their contributory systems will need to continue to fund the resulting deficits indefinitely out of general taxation. In those cases, regressive subsidies may continue to absorb a large proportion of welfare spending. The possibility of the repeal of reforms that created funded systems in response to the 2008 financial crisis—which is happening in Argentina and Bolivia—may also undermine the future reduction of regressive pension subsidies.

7. A further benefit of creating a transparently redistributive antipoverty program as part of LAC’s SP systems is that it has accelerated the elimination of the opaque, regressive subsidies that have crept into many SI systems over the past few decades. For a classic article on the conundrum posed for development policy by the limited de facto scope of purportedly universal SP systems in developing countries, see Streeten (1972). On the issue of “insiders” and “outsiders,” see de Soto (1986). For a recent study documenting the limited scope of the region’s social insurance systems, see Rofman and Lucchetti (2007), and for a review of their regressive fiscal implications, see Lindert, Skoufias, and Shapiro (2006).

8. The low coverage of unemployment insurance, in part, reflects the fact that most LAC countries opted for a model that puts the onus of ensuring short-term income security on employers through statutory labor codes, under which it is difficult to make workers redundant (de facto employment guarantees) and that include generous requirements for severance pay.

9. The data in this paragraph are from Rofman, Lucchetti, and Ourens (2008) and are based on household survey data.

10. Bolivia, Paraguay, Peru, Nicaragua, Guatemala, Colombia, Ecuador, El Salvador, and Mexico all have formal social security coverage of less than 30 percent.

11. In some cases, these subsidies reflect the transition costs of pension reform and thus exaggerate the long-term subsidy element of the social insurance system. However, these transition costs are themselves long term, and mostly benefit non-poor households at the expense of the general taxation fund.
12. Free health insurance is covered in chapter 3 and noncontributory pensions in chapter 4.

13. The data for social insurance spending cited here are for gross transfers, including the part financed by beneficiary contributions. No systematic data are available for net transfers (the part financed by general taxation). As mentioned above, Lindert, Skoufias, and Shapiro (2006, annex 3) found that the average subsidy element of SI transfers was 56 percent of the total. This finding suggests that around half of SI spending in LAC is a public subsidy.

14. Lindert, Skoufias, and Shapiro (2006) also found there was no clear correlation between SA and SI spending. They presented a three-part typology separating countries with high, medium, and low SP spending, in which relatively high SA spending can be seen both in countries with high SI spending and in countries with low SI spending.

15. In the rest of the world, public works programs have been used to generate employment, often in response to cyclical downturns. They can be similar, in practice, to social funds and workfare programs. For a review of such programs, see del Ninno, Subbarao, and Milazzo (2009). However, in LAC, the label "public works program" is rarely used.

16. This transformation in the stated purpose of the social funds has been reflected, within the World Bank, by the fact that most SIF projects in LAC are now run by the infrastructure and urban development teams in the Sustainable Development Department and no longer by the social protection team in the Human Development Department. However, elsewhere in the world, the Bank’s SP teams continue to work with SIFs as a vehicle for community-driven development.

17. These are often referred to as zero pillar pensions to reflect the fact that they aim to provide a minimum (subsistence) level of support and do not depend on beneficiaries having made contributions to the SI fund.

18. PASIS (Programa de Asistencia Social de Pensiones) was replaced by a basic solidarity pension (PBS) for all poor people in the 2008 Chilean reform.

19. Some early CCT programs in LAC—such as the Honduran PRAF project—were defined explicitly as nutritional projects and were promoted as more efficient alternatives to food distribution programs.

20. Bolivia’s Juancito Pinto is an outlier in terms of CCT design. It gives an annual cash benefit to primary school students as an incentive for school attendance. It has had little impact on poverty due to the small size of the benefit (US$25 per child per year), which is low because of the wide scope of the program (it benefits all children in public schools up to fourth grade). Bolivia is now planning a new CCT that will provide much bigger benefits.

21. This estimate is based on the household expenditure survey (ENIGH) and may be underestimated.

22. The doubling of the BDH benefit in Ecuador in 2007 will have further increased its impact on poverty.

23. Most CCTs target households below the 30th percentile, while most poverty lines in LAC are above the 40th percentile.


25. The value of the benefit becomes a negative tariff for the service: the beneficiary is paid to use it.

26. The literature on CCT impacts in LAC is growing rapidly. Recent additions include the following: Barrientos and Santibañez (2009) summarize quasi-experimental evaluation findings for Nicaragua’s RED, Honduras’s PRAF II, El Salvador’s RS, and Paraguay’s Tekopora. Johannsen et al. (2009) summarize impacts of nine programs. Hanlon, Barrientos, and Hulme (2010) summarize evidence from the studies of the Oportunidades program in Mexico. Finally,

27. Personal communication from C. Steta.

28. In Bolivia, El Salvador, and Panama, CCT programs have recently been designed to reduce chronic malnutrition among small children.

29. This section is based on program and policy data collected for this study from government and nongovernment sources in Haiti and Mexico.

30. According to the national evaluation council (CONEVAL), in 2006, the per capita income necessary to avoid food poverty was Mex$810 (about US$74) in urban areas (those with over 15,000 inhabitants) and Mex$599 (about US$54) in rural areas. In the same year, Mexico had 14.4 million people (13.8 percent of the population) in food poverty, of whom 9.4 million lived in rural areas and 5 million in urban areas. Private communication, CONEVAL.

31. The average total benefit per family from Oportunidades rose by 22 percent, from Mex$535 to Mex$655 a month.

32. For example, a recession might increase the demand for free education services because the economic opportunity cost of the time invested in education would be reduced by the fall in labor demand. This phenomenon was seen in the United States during the Great Depression (Goldin 1999) and was documented in Nicaragua during the coffee crisis of 2001–02 (Maluccio 2005; cited by Fiszbein and Schady 2009).

33. This is a big reduction from the benefit of US$200 a month paid by the precursor to Jefes, Plan Trabajar.

34. The theoretical possibility of a negative incentive effect would depend on workers deliberately reducing asset accumulations to qualify on the proxy means test, which, in turn, would require knowing what the test parameters are based on.

35. For a review of how welfare programs in OECD countries affect labor markets, see Grosh et al. (2008). Moffitt (1992, 2002) estimated that income support for single mothers in the United States (Aid to Families with Dependent Children, or AFDC) reduced their work effort somewhere between 10 and 50 percent because the program’s rules converted the benefit amount into an implicit tax on any earned income. This finding led to the welfare-to-work reforms of the 1990s in the United States and Europe, the purpose of which was to eliminate incentives for recipients of income support to pursue unemployment or informality. In the United States, the Temporary Program for Needy Families (TANF) incorporated many design elements that encouraged beneficiaries to work. As a result of these reforms, open unemployment and informal employment (“moonlighting”) were drastically reduced.

36. Male program beneficiaries worked on average six hours less per week than nonbeneficiaries, but the total number of hours worked increased for both the control and intervention group of the study, so these results are not easy to interpret. The authors believe that they may reflect a drought that afflicted the study areas.

37. This effect was strong in 2003–04, when the Jefes transfer was almost equal to the market wage, but during subsequent years, when the differential widened, the program’s effect on informal employment disappeared.

References


Part III
Addressing Cross-Cutting Challenges

Parts I and II of this volume documented the recent evolution of social protection (SP) in Latin America and the Caribbean (LAC). Two decades of reforms have produced important advances. In many countries, contributory social insurance (SI) has been modernized through pension reforms that aimed to increase fiscal sustainability and to correct distorted incentives. At the same time, noncontributory programs have been established to provide a safety net of income support and health services for those excluded from contributory social insurance (primarily the poor and informal sector workers). As a result, in most LAC countries, although SI coverage has continued to stagnate, overall SP coverage has risen considerably. Many countries have also developed labor market programs that have extended the scope of the SP system to improve workers’ labor market opportunities.

However, some important challenges remain. As detailed in chapter 2, the expansion of contributory systems has been constrained by the prevalence of labor market informality, which severely limits the scope of mandatory insurance. In addition, the high incidence of poverty reduces the capacity of many households to contribute to savings and insurance schemes. Even among those who do contribute, high labor mobility between sectors, jobs, and types of employment lowers contribution densities and limits access to SI benefits for many workers. These problems are further aggravated by the horizontal fragmentation of the systems and by implicit, opaque, and regressive redistributive arrangements that can generate perverse incentives. As a result, the rules of SI systems may be contributing to the growth in informality in some countries.

In addition to having low overall coverage rates, LAC’s contributory SI systems have evolved in an ad hoc manner, often producing multiple programs and institutions with diverse mandates regarding benefits and
beneficiaries. In many countries, there are multiple income protection programs (unemployment benefits), pensions, and health insurance systems operating in parallel, often with no coordination. Fragmentation is especially severe in the case of health insurance. Within mainland Latin America, only Brazil has a fully integrated system. But in addition to this fragmentation within programs, there is little or no coordination in the design of different types of SI programs and among SI, social assistance, and labor market programs and policies. For instance, old-age income support, health, and antipoverty reforms have been implemented in a piecemeal way, with policy makers giving little attention to the interactions between them. There are few countries where active labor market programs (ALMPs) are coordinated with income protection programs. Similarly, policies on disability pensions are seldom coordinated with policies on unemployment benefits. Even more worrisome, the design of redistribution arrangements within the SI system is not coordinated with the design of social assistance programs.

There is also room to improve the impact that social assistance programs have on human development and the contribution of the SP system in general to the creation of good-quality jobs. Overall, coordination and integration of social assistance programs is still a challenge in many countries. In addition, the impact of conditional cash transfers (CCTs) on education and health outcomes is limited by supply-side constraints and cumbersome procedures to enroll and graduate beneficiaries. Expanding CCTs to urban areas brings new challenges as well. Regarding labor markets, SP policies have not done enough to break the cycle of low-quality and low-productivity jobs. Many of the causes of these poor labor market outcomes lie outside the sphere of social protection. Nevertheless, SP policies can also make a difference. They can facilitate employment creation and the movement of labor toward higher-productivity activities by reducing tax wedges (which remain high in many LAC countries), by easing regulations on labor contracts, and by facilitating labor market transitions and better job matches through adequate active labor and income protection programs. Regrettably, however, few of LAC’s income protection systems and ALMPs are yet up to this task.

Part III analyzes the cross-cutting policy implications that emerge from the previous analysis, building on the framework developed in chapter 1. The key message is that LAC countries need a coherent overall vision for the design of their SP systems. Instruments, financing mechanisms, and institutions should work in harmony to achieve three goals: (1) smoothing consumption in response to life-cycle income variations and to short-term health and labor market risks, (2) preventing poverty (the social safety net), and (3) developing and promoting human capital. In designing SP programs, policy makers should take account of the behavioral responses of individuals, households, and SP providers to program rules and incentives. How much
of an opportunity exists to reform existing systems will, of course, depend on each country’s initial conditions and priorities, and sometimes it will be possible to make only small advances. However, having a clear overall vision of the eventual goal will be crucial to ensuring that the region moves toward a more coherent, integrated, effective, and equitable SP system in the medium term.

The remainder of this chapter is organized in four sections. The first section discusses the challenge of extending the coverage of consumption smoothing programs to a much larger proportion of the population. It makes the case for extending access to SI (health, unemployment, and pensions) beyond those who work in the formal sector and their dependents. It shows that, to this end, it is necessary to (1) open up contributory SI programs to all workers, regardless of where they work; (2) review, and to the extent possible harmonize or integrate, the mandates of SI programs, making explicit choices about the benefits offered to individuals with different levels of income; and (3) rationalize redistribution in the SI system by removing implicit taxes and subsidies and moving toward a unified system of transfers that are targeted based on means and financed from general revenues. The second section turns to the challenge of enhancing human capital and facilitating the creation of high-quality jobs by keeping labor costs at affordable levels, by increasing the efficiency of the job search and matching process, and by increasing the employability of groups at risk, particularly youth and the poor. The third section focuses on how to coordinate all risk and program areas to increase the efficiency of the SP system as a whole, while avoiding duplications or disincentives to formality and minimizing opportunities for “gaming” the system. The second and third sections outline ideal directions for reform, but how these are followed in practice will depend on the existing conditions of individual countries, which vary widely in income levels, economic and demographic structures, and the development of institutions. The fourth section therefore argues that the reform process will inevitably be path dependent, reflecting the history and characteristics of existing SP systems. It categorizes LAC countries into three broad groups based on their advances to date and identifies the resource constraints, competing demands, and social preferences that will limit their strategic options for the future strengthening of their SP systems.

The Challenge of Expanding Social Insurance

This section lays out a strategy for increasing the coverage of SI. It first makes a case for allowing all workers to contribute to SI, regardless of whether they work in the formal or informal sector. It then suggests principles for improving the design of SI programs to align benefits with the cost of contributions and eliminate implicit forms of redistribution. Finally, it
suggests a mechanism for designing subsidies, which would help workers with limited savings capacity to participate in SI without creating incentives to informality or reducing incentives to work or to save.

*Opening Contributory Social Insurance Systems to All Workers*

Part II identified two challenges that are common to all SI programs—expanding coverage to all citizens in a sustainable and equitable way, and minimizing distortions that can reduce employment levels, constrain labor mobility, and promote informality. It suggested that addressing these challenges requires “delinking” access to SI from the labor contract. In essence, all citizens regardless of where they work would be treated equally by and have equal obligation with the SI system. This subsection discusses the implications for financing mechanisms.

*Choosing the appropriate financing mechanism: General taxes, individual contributions, or both.* One option is to disassociate both access and financing from the labor contract and move to tax-financed national social security schemes. The goal would be to offer basic benefit packages (including health, pension, and unemployment benefits) to all citizens (or residents) regardless of their income level or where they work. The costs of this package would be financed out of general revenues or earmarked taxes. Individuals who wanted extra protection or insurance would be free to enroll in voluntary complementary plans, managed by either the public or private sector.

The appeal of this proposal is that all individuals would be covered, regardless of where they worked. Distortions in labor markets would be reduced because payroll taxes would no longer finance the package, and the tax wedge would be eliminated. In addition, policy makers would not have to worry about any distortions emerging from parallel systems for different occupations or formal or informal sector workers. Distortions might still arise as a result of the income effect of the subsidies, and moral hazard (reduced work or savings efforts) might result, but these problems could be contained if the mandates of the programs were not excessive.

The main drawback of this proposal is that it may not be possible to make such large changes in the structure and financing of SP in many LAC countries in the short to medium term. The proposal implies reducing the mandate of contributory social security systems, but many employees may be reluctant to give up their existing rights. Also, there are concerns about the opportunity cost of transfers that subsidize the entire population regardless of income, since this approach reduces the availability of funds for targeted programs. Depending on how well the tax system operates, this arrangement might also be regressive. Finally,
general tax revenues (for example, from income or consumption taxes) are low in many LAC countries, and the political scope for introducing significant tax reform is limited. Therefore, finance ministers are likely to be loath to end payroll contributions for SI, especially because (viewed as a tax) this is one of the more progressive elements of most fiscal systems in LAC.

An alternative is to extend access to contributory SI beyond the formal sector but continue to rely on beneficiaries’ contributions (and employer contributions when available) to finance the scheme. All citizens (or residents) would have the same rights to social security coverage but would contribute to the financing of the benefits they receive in proportion to their savings capacity. High-income workers would pay in full the contributions or premiums corresponding to the risks for which they are covered, while low-income individuals would pay only a portion and the long-term poor would be fully subsidized.4

This approach would eliminate the implicit redistributive component of existing SI systems, which increases the tax wedge and can reduce employment levels, promote informality, or induce other adverse behavior from workers and employers. Instead, the redistributive component of the reformed system would be made explicit and would be financed out of general revenues (see box 7.1).5

Implications for administrative systems. Expanding the coverage of the contributory system to those who spend much of their lives working in the informal sector or doing agricultural work in rural areas presents several challenges. These are often unskilled workers with low incomes and limited savings capacity. They are not permanently employed and their incomes fluctuate seasonally. They also tend to have high discount rates and strong preferences for liquidity. Many have little contact with financial sector institutions.

To be able to cover such workers, it will be necessary for contributory systems to adopt appropriate rules and payment and contribution collection systems.6 First, policy makers will need to acknowledge that it is not be possible to enforce a mandate to contribute on most people in this population, so participation will be de facto voluntary and must therefore be attractive to the workers. Second, because many of these workers are not wage earners, their contributions will need to be made as flat payments rather than as a proportion of their wages, and different scales will be needed to accommodate individuals with different savings capacities. Third, it will be necessary to be proactive in marketing the insurance programs and in collecting contributions (for example, to use mobile agencies operating in street markets or in remote geographical areas). Fourth, transaction costs will have to be reduced, given the low incomes—and by implication the small contributions—of these workers.7 Finally, restrictions on vesting periods for the payment of benefits will need to be relaxed,
The reform of redistributive arrangements is a necessary condition to expand the coverage of SI to low-income workers in LAC. Chapters 1 and 2 showed that low-income individuals are less likely to be covered and that they have lower contribution densities. Chapter 3 showed that even when the poor are covered by national health services, access and adequacy of benefits are a cause for concern. Many wage earners work in small firms where productivity levels are too low for the employers to afford even the minimum mandatory cost of labor. Low-income workers also tend to have relatively high discount rates and to prefer liquidity and thus have a correspondingly low demand for accumulating pension savings. And for the long-term structural poor, enrolling in contributory SI programs is simply not an option. Subsidies are a necessary part of any strategy to bring these groups within the umbrella of social protection.

Social insurance systems in LAC already have strong redistributive elements, but unfortunately they are often the wrong ones; as a result, they have not generally helped to improve access for low-income workers. Although it is rarely discussed, in a typical SI system, de facto redistribution is as important as the stated risk-pooling (insurance) function. Unfortunately, however, it is often implicit and nontransparent and can be regressive. Within the insured populations, there are wide variations in the ratio of contributions paid to benefits received. The result is that, depending on earnings levels and on their behavioral responses to the incentives within the system, some plan members systematically receive more than they put in (an implicit subsidy), while others systematically receive less (an implicit tax). It is difficult to know ex ante who benefits and who pays, but often the taxes and subsidies are regressive, transferring income from low- to high-income workers. In addition, as was shown in part II, several SI systems have heavy cash flow deficits that are covered from general revenues, or have accumulated liabilities that cannot be financed out of future contributions and will therefore require public transfers. Since their beneficiaries are overwhelmingly from the top end of the income distribution, this arrangement is highly regressive. As shown in table 6.1, a recent study of eight LAC SI systems found that they received an average annual subsidy of PPP$62, of which 58 percent went to the top quintile, while only 3 percent went to the poorest quintile (Lindert et al. 2006).

As well as being generally unfair, the existing redistributive arrangements in LAC’s SP systems can distort households’ labor supply and savings decisions. Redistribution and incentives are two sides of the same coin. Taxes and subsidies can influence behavior by providing incentives to employees to strategically manipulate wages, retire early, reduce their

(continued next page)
Box 7.1 (continued)

job search efforts, and, in general, reduce labor supply, avoid formal work, and reduce savings. Chapter 4 showed how the ratio of pension entitlements to contributions can be affected by the timing of enrollment and of retirement and by the frequency (density) of contributions. Similarly, subsidies from unemployment insurance depend on take-up rates, and this arrangement can favor high-income workers (as in the case of Brazil, discussed in chapter 5). And in health insurance, net subsidies depend on contributions and patterns of use of health services. The less transparent a redistribution system, the more prone it is to being abused, since controls are more difficult to implement.

*Implicit and nontransparent redistribution is also more costly because subsidies are not targeted to those who need them the most, and they cannot be financed in the most efficient way.* Thus, any associated distortion affects a larger group of workers and can therefore have more important economic consequences. Moreover, redistribution within the SI system is mainly financed through payroll taxes that increase the tax wedge and that can reduce employment levels and promote informality.

The solution is to adopt redistributive programs in which the transfers and their intended beneficiaries are defined explicitly. Contributory SI schemes should aim to strengthen the link between the contributions and the premiums and benefits. This goal means contributions should be based on the expected cost of the benefits, rather than on the earnings of the worker. Then, to address the needs of those who cannot cover the full cost, there should be separate redistributive programs, the cost of which should be financed from general revenues. They might be designed either to subsidize contributions or to top up benefits. Such subsidies can be targeted to those individuals who need them the most and can be financed in the most efficient way, thus reducing fiscal costs. The subsidies should also be designed to minimize any distortions in labor supply and savings decisions. When redistribution is targeted to specific groups, any resulting distortions are localized and can be better controlled. For instance, as discussed in chapter 4, flat rate pensions for the elderly poor, if set at a modest level relative to economy-wide average earnings, have little negative effect on labor supply.

since it is likely that many plan members will not be able to achieve high contribution densities.

Such problems can be addressed, in part, by operating through facilitating agencies that could “aggregate” the contributions of low-income workers in the agricultural sector and services sector. These could be cooperatives, developed to generate scale economies, reduce transaction costs,
and ensure access to financial services for informal and geographically remote workers. These cooperatives or associations would enroll workers and collect contributions on behalf of the social security institution. Explicit financial incentives might be required to attract individuals with limited savings capacity who would not be able to save enough to cover adequate benefits or to pay premiums in full; these incentives are discussed in the third section.

The main conclusion of this section is that the expansion of the contributory system can work only if benefits are proportional to contributions. Only then would the system be able to accommodate different contribution rates and discontinuous contribution densities without compromising its financial sustainability.

**Reviewing the Mandates (Benefits Packages) of Social Insurance Programs**

SI in LAC has evolved in an ad hoc manner, resulting in multiple programs and institutions with unclear mandates. As discussed in part II, many countries have multiple pension and health insurance systems running in parallel. Similarly, unemployment benefit entitlements—if any—vary according to where and in which sector people work. Chapters 4 and 5 also documented large variations in the benefits offered by different systems. These do not necessarily reflect thought-out policy choices. Instead, the pattern of benefits is often the result of cumulative ad hoc changes over time, in response to specific problems (such as the need for financial sustainability) or to social demands.

This heterogeneity in plans and mandates is inequitable and inefficient. It is *inequitable* because workers are treated differently by the public system depending on where they work. It is *inefficient* for at least four reasons. First, the existence of multiple systems fragments the labor market and constrains labor mobility. In the case of pensions, for instance, fragmentation can mean that workers are penalized or even lose pension rights when they change jobs. This type of penalty can give workers a disincentive to change jobs and can also negatively affect labor productivity growth (see chapter 2). Second, fragmentation reduces the size of risk pools and thus increases the costs of insurance schemes. This increase is a major issue in many health systems. Third, administrative costs also tend to be high because multiple systems reduce economies of scale (a large share of administrative costs are fixed costs). Finally, in the case of health, the mutual exclusivity of health insurance schemes and a lack of choice for consumers among care providers leads to significant inefficiencies in the production of health care (such as low capacity use of facilities) and in health care outcomes (such as suboptimal allocation of care). The Mexican health system, discussed in chapter 3, is a classic example of such inefficiencies.
Expanding the coverage, improving the equity, and increasing the adequacy of SI requires policy makers to review the mandates of existing schemes and to coordinate them more effectively. The first step is to define what coverage and benefits should be offered to individuals in different segments of the income distribution. These choices will vary from country to country depending on social preferences and beliefs about the appropriate balance between the responsibility of individuals and that of the government. There is no single “right” set of SP mandates, but it is important to make the choices explicit and for policy makers to understand the trade-offs that are involved.

The mandates of pensions and unemployment insurance programs can be characterized by three policy variables: (1) a targeted income replacement rate for the average worker, (2) a minimum benefit, and (3) a ceiling on covered earnings. These three variables determine the benefits that individuals at various income levels receive. The minimum benefit increases the replacement rate for low-income workers and is an important element in preventing these workers from falling into poverty. The ceiling, on the other hand, reduces the effective replacement rate for high-income workers, allowing them to diversify risks outside the mandatory system.

Characterizing the mandate of the health insurance system is more complex, but similar principles apply. Health systems directly contribute to the three core SP objectives of consumption smoothing (mitigating the financial consequences of ill-health); poverty prevention (making sure that catastrophic health expenditures do not lead to poverty); and human capital strengthening (improving the population’s health status and labor market potential). The mandate is normally defined in terms of health states covered by the insurance system; the package of services (benefits) that is available, contingent on health states; and the share of the cost of a given health intervention for which it will pay. Explicit social choices need to be made about the health expenditures to be covered by the SI system and the part to be covered by the individual (either out-of-pocket or through voluntary insurance arrangements). This ratio could vary with income level—for example, by giving higher deductibles to high-income individuals. Commonly, the mandate of social health insurance systems aims to ensure the universal coverage of basic health services, because preventive, maternal, and child health services are important for improving human capital outcomes and sometimes have public good characteristics.

In general, when defining the mandates of SI programs, both the adequacy of the benefits and the efficiency and affordability of the program need to be taken into account. Benefits need to be sufficient to enable recipients to preserve a decent standard of living and not to fall into poverty after a shock or life event (adequacy). However, they should not reach levels that are high enough to discourage people from saving or to dissuade them from working (efficiency). Nor should the subsidized element of the benefits put an unsustainable burden on public finances.
(affordability or sustainability). These thresholds are difficult to define ex ante. Stakeholders need to discuss the economic impact of alternative mandates, which will vary depending on the country’s level of economic development, demographic structure, productivity, income distribution, natural resources, tax system, and informal SP arrangements. In general, richer countries can afford more generous SI systems than poor countries because they have greater fiscal resources and because a smaller proportion of households will need subsidies.

It is also important to reduce uncertainty about how the mandate of SI programs will evolve over time. A common mistake, which has often been made in the case of pensions and income protection programs in LAC, is to define parameters in nominal terms or to use discretionary indexation of benefits. In inflationary settings, fixing minimum benefits in nominal terms renders them irrelevant over time, and nominal ceilings on covered earnings would gradually exclude most wages from insurance coverage. Such practices create uncertainty about the real effective replacement rates or reimbursement rates and allow the mandate of the systems to change over time as a function of the inflation rate. A better alternative would be to fix key parameters in real terms—for example, by indexing them to average earnings. This approach both protects benefits against inflation and also produces automatic increases in real benefits in line with increases in the standard of living.

In most cases, the eventual goal should be to integrate the different schemes within each of the SI programs, but integration cannot happen overnight. In the interim, policy makers need to harmonize benefits across schemes and to make benefits portable. One possible approach would be to integrate schemes that cover the same risk by requiring new generations of workers to enroll in a common insurance system, while allowing complementary occupational plans to exist on top of the basic mandatory programs. At the same time, countries could be working toward harmonizing benefit formulas and eligibility conditions across programs. The 2007 reform of the ISSSTE (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado), Mexico’s pension program, is a good example of how this type of harmonization can be applied to civil service and private sector pension programs (see chapter 4). This reform is expected to improve equity and facilitate labor mobility. Allowing benefits to be portable across schemes is another sensible short-term measure, which is likely to encounter little resistance. An excellent example is the 1996 Caribbean Community social security portability agreement, which has increased labor mobility both within countries and across countries in the Caribbean regional labor market.

The mandate of a social insurance program should be chosen independently of its implementation arrangements and financing mechanisms. Defining the mandate is a political decision that requires wide consultation and negotiation and should reflect the country’s social ideals and
preferences. In contrast, how the system is designed to implement the chosen mandate is a technical process, the goal of which should be to minimize economic costs. The following sections focus on the technical aspects of the design of contributory and noncontributory systems as part of a strategy to expand coverage and reduce labor market distortions.

Reforming Social Insurance Subsidies to Remove Implicit Redistribution

Expanding social security coverage to all involves public subsidies because many individuals, such as low-skilled workers in low-productivity jobs, do not have enough savings capacity to cover the cost of the risks against which they need to insure themselves. However, the way in which these subsidies are designed and financed matters a great deal. As discussed above, implicit transfers financed from payroll taxes, which are currently the prevalent form of subsidy in many of LAC’s SI systems, can be regressive and costly and can distort incentives. Removing implicit redistribution from the contributory systems is important and has three purposes: (1) to target the available subsidies to those individuals who need them most; (2) to reduce unintended behavioral consequences (targeted transfers affect fewer workers, usually those with lower productivity, thus reducing the risk of production losses); and (3) to make financing more efficient, for instance, by reducing the tax wedge.

This section looks at transparent, explicit subsidies as a tool to expand SI coverage to households with limited savings capacity. These transfers would need to be carefully designed because, even when they are explicit, redistributive subsidies can have adverse consequences—creating disincentives to work and save, inducing early retirement, and promoting informality. Financing for such programs may be unsustainable and the opportunity costs of the resources that they require can be considerable. The section highlights five design features that can minimize incentive problems and make programs fiscally sustainable: (1) benefit formulas, (2) eligibility conditions and benefits, (3) targeting systems, (4) ex-ante as opposed to ex-post transfers, and (5) financing mechanisms.

Most of the related problems of social insurance programs result from badly designed benefits formulas that create implicit taxes and subsidies which distort incentives while compromising financial sustainability. In the case of pensions, for instance, defined benefit formulas usually do not respect the links between contributions, replacement rates, and retirement ages. They also tend to base benefits on just the last few years of salaries, which make rates of return on contribution vary from one plan member to another depending on enrollment, career, and retirement patterns. In the case of unemployment insurance, taxes and subsidies are pervasive since contributions are not related to expected risks and benefits. Even
in unemployment individual savings accounts (UISAs), implicit taxes can occur if the level of interest paid on savings is below market rates. Finally, in health insurance, implicit taxes and subsidies are also the norm since contributions (collected through payroll taxes) are based not on premiums but on earnings.

The mechanism to improve redistribution, address incentive problems, and improve financial sustainability is straightforward: within the core SI system, all individuals should pay the expected cost of the benefits that they receive.\textsuperscript{12} This arrangement would make the core of the SI programs nonredistributive, thus minimizing economic distortions and avoiding regressive redistribution.\textsuperscript{13} However, the elimination of regressive redistribution from the core design of SI systems does not imply that redistribution disappears altogether, or that the reformed systems should lack all forms of solidarity toward low-income workers. As highlighted in box 7.1, redistribution is essential for improving coverage and also for efficiency reasons (externalities), but it should be handled separately.

For old-age pensions, the first challenge is to adjust benefit formulas in defined benefit programs that are financed on a pay-as-you-go basis.\textsuperscript{14} If properly designed, DB-PAYG systems can be viable and sustainable over the long term, even when the population is aging. They can also play an important role in diversifying the financial and labor market risks of the pension system, as the recent financial crisis has emphasized (Dorfman, Hinz, and Robalino 2008). In most cases, however, benefit formulas and eligibility conditions need to be revised so that all individuals receive the same rate of return on their contributions and so that this rate of return is sustainable.\textsuperscript{15} This revision can be achieved in two ways. The first is to keep DB formulas but to correct them to align benefits with contributions. This approach implies changing the way the accrual rate is defined, making it a function of the contribution rate, the retirement age, and life expectancy at retirement.\textsuperscript{16} Hence, the pension that individuals receive relative to preretirement income would depend on when they retire, how much they contributed, and how long they are expected to live. It is also essential that all salaries be included in the calculation of the pension, revalorized by the sustainable rate of return of the system.\textsuperscript{17} The second option is to move to a defined contribution (DC) formula but without changing the financing mechanism. This is the so-called notional defined contribution (NDC) system.\textsuperscript{18} In essence, the system tracks workers’ contributions and adds interest at a rate equal to the sustainable rate of return of the system. When the workers retire, their total contributions plus interest (which is notional since the contributions are not invested in financial assets) are transformed into an annuity.\textsuperscript{19} Either of these two options would ensure that, regardless of workers’ behavior and career histories, all would receive the same rate of return on their savings. These arrangements would also be likely to give workers an incentive to enroll and contribute, since each contribution would then count toward the value of their final pension.
In the case of unemployment insurance, countries should rely less on risk-pooling (with implicit redistribution) and more on savings. In theory, implicit redistribution could be eliminated by setting a premium for each individual that reflected his or her unemployment risks and the value of the unemployment benefits, but this method would be very difficult to implement, since the system would need to track risks by age, income level, and other individual characteristics. The alternative proposal laid out in chapter 5 was to introduce UISAs. As with pensions, these could be fully funded or pay-as-you-go (notional). Either way, the benefits would be directly linked to how much individuals contributed or saved, thus giving them an incentive to work. Individuals who experienced more frequent and longer unemployment periods would not be able to finance adequate unemployment benefits for themselves. However, again, explicit redistributive arrangements could be set up for them; these are discussed in the second section.

In the case of health, risk-pooling arrangements tend to be more efficient than savings arrangements, particularly for catastrophic diseases. But risk-pooling in the core system should avoid or minimize implicit income redistribution. The starting point would be to define the package of eligible health interventions and services to be provided by a given network of providers and estimate their expected costs, which could be adjusted for broad age and gender groups. The system would be financed by flat-rate premiums that would finance the cost of the program for individuals and their dependents. In principle, individuals with more dependents would pay higher premiums. Again, solidarity with low-income households would not disappear, but it would be implemented through explicit arrangements and benefits would be targeted to those who need them.20

Introducing insurance programs based on savings or nonredistributive risk-pooling would also solve the problem of financial sustainability. Savings arrangements are sustainable by definition: they can pay back only what individuals have accumulated in their savings accounts (whether funded or notional). Risk-pooling arrangements can also be sustainable if the premiums are set at a level that captures the expected costs of the benefits provided.

A final issue that would need to be addressed is how to deal with the existing unfunded liabilities that would remain in many systems after the new procedures were introduced. These liabilities would be present in most pension systems with PAYG financing. Changes in benefit formulas could prevent the accumulation of new unfunded liabilities but would not erase the current debt. If there is no default on this debt (in other words, if the reform preserved these acquired rights), then the government should acknowledge as much (for instance, by issuing nontradable bonds to the pension institution) and should gradually repay them out of general revenues. There would also be unfunded liabilities in the severance pay system. Mandating a switch to UISAs could be very costly for employers—and
for workers if employers finance the costs of this transition by reducing wages—but current acquired rights could be “grandfathered” so that only new benefits would be accrued in the savings accounts.

*Defining eligibility and benefit levels for explicit transfers.* Eligibility for subsidies should be based on workers’ earnings and savings capacity rather than on their type of occupation or economic sector, or on whether they have a formal or informal job. Design features that distort relative net earnings between sectors—including formal and informal sectors—can be inequitable and may produce undesirable behavioral responses. A subsidy limited to the informal sector would be the economic equivalent of a tax on formal work and could increase the share of informal work in the economy. Similarly, a subsidy limited to formal sector workers would exclude unskilled and low-income workers and would likely be regressive.

The empirical evidence about the effects of subsidized schemes on informal work in LAC is scanty. As discussed in chapter 3, in 2010, Mexico’s subsidized health regime, Seguro Popular, was offering *net benefits* that were higher than those of the formal health insurance regime operated by the Mexican Institute for Social Security (IMSS). This arrangement might be expected to increase the likelihood that individuals would take informal sector jobs and reduce IMSS affiliation. The available studies find only small decreases, thus far, in affiliations to IMSS health insurance as a result of Seguro Popular (Parker and Scott 2008). However, in the medium and long term, the displacement effects of Seguro Popular might be greater. In Colombia, some employers reportedly have begun to require workers to obtain health insurance through the noncontributory scheme before they will hire them, but once again, there is no clear evidence about the size of such effects (CIDER 2007). Overall, the evidence base for understanding this sort of interaction effect in LAC remains limited. Further research is needed to improve our understanding both of the negative side effects on informality from the development of noncontributory insurance options, and of the design features that could help minimize them.

Nevertheless, it is clear that the amount of the subsidy is an important factor in determining such outcomes. Transfers that are low relative to earnings are unlikely to change behavior. However, as chapter 4 showed, Brazil’s large minimum *pension guarantees* relative to average earnings induce early retirement and reduce contribution densities. Large unemployment subsidies (or long periods of eligibility for benefits) are likely to create moral hazard and increase the length of unemployment spells, thus increasing costs and compromising the program’s sustainability (see chapter 5).

It is difficult to define exactly when a transfer becomes too large, but average earnings, minimum wages, and the poverty line can provide useful points of reference. Around the world, minimum pension guarantees range between 15 and 30 percent of average earnings, while unemployment
benefits range between 50 and 60 percent of average earnings (Robalino et al. 2008; Robalino, Vodopivec, and Bodor 2009; Whitehouse 2007). In LAC countries, any transfers above these levels would likely be both unaffordable and distortionary. Minimum pensions and unemployment benefits equal to the minimum wage would likely give beneficiaries a disincentive to work. In general, the recommended approach is to start with modest benefits, as it is politically easier to scale programs up than down.

It is also important to establish eligibility conditions that will avoid undesirable behaviors and control costs. Chapter 4 showed that setting the eligibility age for pension transfers high enough avoids creating incentives to retire early or work less and lowers the costs of the program. Ideally, the eligibility age should be indexed to life expectancy. Simulations show that automatic indexation can reduce the long-run costs of programs by over 1 percent of gross domestic product (GDP) (Piggot, Robalino, and Jimenez-Martin 2009). Vesting periods are a less effective tool, since compensatory old-age poverty benefits would need to be paid to those who do not contribute for enough years to get their pension (see the discussion in the next section).

In the case of unemployment benefits, the best ways to avoid undesired behavioral responses (moral hazard) and to control costs are to have a long vesting period for benefit eligibility and to limit the duration of the benefit. Worldwide, vesting periods range between 6 and 12 months. There is a wider variation in the duration of the benefit, but, as discussed in chapter 5, affordable programs are unlikely to offer more than three months of benefits.

Targeting systems, effective marginal tax rates, and informal work. Several of the chapters in part II advocated using means tests to allocate subsidies. There are two (related) reasons for doing so. First, for a given level of benefits, means tests can reduce the costs of the program. Second, for a given budget, they make it possible to give higher benefits to those who need them most. For example, a recent study of the Kyrgyz Republic, Niger, Panama, and the Republic of Yemen has shown that, given budget constraints, universal pensions would be spread too thin and would therefore fail to have much impact on poverty (Grosh and Leite 2009). However, means tests automatically create an effective marginal tax rate (EMTR) on the income of individuals close to the eligibility line. Thus, workers trying to avoid the tax (or preserve the subsidy) might decide to reduce their labor supply or take informal sector jobs. The magnitude of this problem would depend on the amount of the transfer and the specification of the income cutoff point. The greater the transfer amount and the higher the income cutoff point (hence the more people who are potentially eligible), the bigger the likely effect.

When the means test that determines eligibility for noncontributory subsidies is based on the amount of benefits that the worker receives from
the contributory system, the resulting EMTR can reduce incentives for formal sector work.\textsuperscript{25} This effect was seen in the case of Brazil’s minimum pension guarantee and Chile’s minimum pension, as discussed in chapter 4. In these programs, the amount of subsidy given in the minimum pension guarantee depends on the value of the contributory pension. The resulting EMTRs are often equal to 100 percent.\textsuperscript{26} In other words, for each unit increase in the contributory pension, the transfer pension is reduced by one unit, which means that low-income workers who contribute more do not increase their total pension. A high EMTR of this sort can clearly reduce contribution densities and drive workers into the informal sector.

Much depends on the relative productivity of the formal and informal sectors and the resulting differential in gross wages. If the productivity of the formal sector is higher than that of the informal sector, even high social security contributions and high EMTRs on transfers will not lead many people to prefer informal sector jobs because, even after taking account of these factors, net earnings in the formal sector would still be higher. However, if the difference in productivity is too small to offset the cost of social security contributions and the EMTRs on transfers, then workers may prefer to work in the informal sector.\textsuperscript{27} This trade-off—between productivity differentials between the formal and informal sector, on the one hand, and the EMTR on noncontributory benefits withdrawn on moving to the formal sector, on the other—is illustrated in figure 7.1. The sloping lines in the figure are the points at which net earnings are the same in the formal and informal sectors. Above the line, net earnings are higher in the informal sector, while below the line, net earnings are higher in the formal sector. As informal sector productivity falls relative to that of the formal sector (vertical axis), the social security contribution rate paid by formal sector employees (horizontal axis) can rise without provoking an increase in informality. For a given social security contribution rate, an increase in the relative productivity of the informal sector entices more workers into the informal sector. Increasing the EMTR (in other words, increasing the value of means-tested, noncontributory benefits) would shift the line down, making informal sector work more attractive. One solution to this problem is to introduce gradual clawbacks of the transfers so that EMTRs are less than 100 percent of their value. Calculations for Chile suggest that optimal clawback rates would be well below 50 percent.\textsuperscript{28} For a given benefit level, however, the lower the EMTR, the higher the cost of the program, which means that policy makers will need to assess carefully the trade-off between incentives (a lower EMTR) and fiscal costs.

\textit{Ex ante versus ex post transfers.} Subsidies to enable workers with limited savings capacity to access SI for pensions, unemployment benefits, and health care can take the form of ex ante matching contributions (to complete the required premiums) or of additional ex post noncontributory
benefits (to allow the household to attain a minimum level of income). Social pensions are an example of an ex post benefit. To take a similar approach to unemployment benefits, governments could consider matching the contributions to UISAs or paying subsidized unemployment benefits when workers’ savings in the UISAs run out. In the case of health, governments could either subsidize workers’ premiums or their health expenditures.

In principle, ex ante transfers generate incentives for workers to contribute and may cost less, at least in the case of pensions and unemployment benefits. The government’s offer to match contributions to pension funds can induce more workers in the informal and agricultural sectors to enroll and save, thus reducing the costs of social pensions in the future. A study that performed simulations with nonbehavioral models (Palacios and Robalino 2009) found that (depending on the value of the take-up rate and the matching elasticity) matching contributions could cost between

\[
\frac{1 + B (1 - EMTR_1)}{T} > EMTR_1
\]

\[
\frac{1 + B (1 - EMTR_2)}{T}
\]

Figure 7.1 Informal Sector Productivity, Payroll Taxes, EMTRs, and Incentives for Informality

Source: Authors’ calculations.

Note: The slope of the line depends on the employer’s payroll tax \(T\), which affects the total cost of labor in the formal sector, here assumed to be equal to labor productivity. The interception of the lines with the y axis depends on the employee contribution rate, the value of the transfer \(B\), and the EMTR. Along the lines, the differences in labor productivity between the formal and informal sectors are equal to the tax wedge. Along the dotted line, the EMTR is higher than along the solid line.
20 and 50 percent less (in present value) than social pensions. A study using behavioral models (Robalino et al. 2008) also predicts that matching contributions have the potential to generate savings relative to ex post transfers. Thus, projections for Brazil suggest that moving from a minimum pension guarantee to matching contributions could increase contribution densities while reducing fiscal costs considerably. For unemployment transfers, as discussed in chapter 5, the main benefit of introducing matching contributions is that they create incentives in favor of working (Robalino, Vodopivec, and Bodor 2009). If workers can keep the subsidies regardless of whether or not they work, then unemployment spells would be reduced, meaning that a system based on matching contributions would cost less than others.

Unfortunately, global experience with ex ante transfers is limited. As seen in chapter 4, some countries, such as China and India, have implemented matching pension contributions, but these schemes have not been evaluated and little is known about the key parameter—the elasticity between matching rates and the take-up rate. The only rigorous evidence comes from 401(k) plans in the United States, where elasticities are around 0.35, but the results cannot be extrapolated to the informal and agricultural sectors in middle- and low-income countries. No country has implemented ex ante unemployment insurance transfers. The program that comes closest is the unemployment insurance system of the Republic of Korea, in which workers who find jobs before their unemployment benefit entitlement ends can claim part of the balance; but the impact of this feature on the length of unemployment spells has not been studied.

Nevertheless, using ex ante subsidies to help low-income workers to afford SI premiums seems likely to yield both fiscal and efficiency gains, so the experiences of the countries where such programs are being implemented should be closely monitored and evaluated. Governments in LAC should consider implementing pilots of such programs and, given the externalities associated with knowing more about their performance, donors should help to finance the impact evaluations.

**Financing mechanisms.** The two main potential sources of financing for redistributive programs are payroll taxes and the general budget. The general budget, in turn, can be financed from various taxes (such as a value added tax and consumption, income, and import taxes) or income from the exploitation of natural resources. Some countries (such as France) use earmarked taxes to finance social security. However, such earmarks still require the allocation of a portion of government revenues and can create rigidities that reduce the efficiency of public expenditures. So the key financing choice is between payroll taxes, and social security contributions, and general tax revenues.

The problem with payroll taxes is that they can reduce employment and promote informality (the next section discusses the empirical evidence for
this assertion). A better option would be to finance transfers from general revenues, unless they benefit only a well-off minority of the labor force. As noted in chapters 3 and 6, when social security coverage is limited to workers in the formal sector, using general revenues to finance redistributive programs can be regressive. In all cases, it is important to understand the opportunity cost of funding redistributive programs from general revenues. In other words, a large income transfer might require lower levels of expenditure on education, health, or infrastructure. Such opportunity costs are difficult to quantify but still need to be given careful attention by policy makers.

Human Capital Promotion and Access to Good Jobs

This section focuses on the interface between the third objective of SP—promoting human capital to increase workers’ earnings potential—and the working of the SP system as a whole. Chapter 2 showed that in many LAC countries, the main challenge is not to create jobs—employment has been growing in line with the labor force—but to improve the quality of the jobs that are being created. Quality has many dimensions, but two stand out from the point of view of SP: (1) the productivity and earnings of a given job; and (2) the level of security associated with that job, defined by its relative stability and the access that it affords to SI. The previous section discussed policies to expand access to SI (in other words, expanding social security to cover all jobs). This section focuses on SP policies that can help individuals, particularly the unskilled, to access jobs and occupations with higher productivity and earnings.

Clearly, SP policies alone are not sufficient to increase the quantity and improve the quality of the jobs that an economy creates. In the end, job quantity and quality depend on the incentives that entrepreneurs have to invest and innovate. Economic diversification and the reallocation of economic resources from low to high productivity and high-value-added sectors usually results from the entry of new firms or investors into current or new product markets (both domestic and international) accompanied by the adoption of new technologies (including management practices) and investments in training. For this process to take place, there need to be macro policies (such as fiscal and monetary policies, the exchange rate, the trade regime, and competition laws) in place that promote economic stability and create an environment where the costs of doing business are low. In addition, policy makers need to ensure that the population’s level of education increases and that the distribution of skills in the labor force responds to the demands of more diversified and productive economies.

Nevertheless, SP policy makers can also contribute to increasing the quantity and improving the quality of the jobs that an economy produces
by choosing instruments and financing mechanisms with care and by emphasizing the objective of human capital promotion. First, they should facilitate—instead of constraining—labor mobility. This step implies relying more on well-designed income protection systems (such as unemployment savings accounts) than on regulating hiring and dismissal procedures. As discussed in chapter 5, the latter reduce turnover, constrain labor mobility, and can negatively affect employment levels and labor productivity growth (and therefore the growth of earnings). Second, policy makers should avoid regulations that artificially increase the cost of labor. These include (1) minimum wages that are set without regard to the productivity of the existing workforce; and (2) the creation of payroll taxes to finance redistribution within the SI system (see previous section), training, or government programs that, if needed on social grounds, would be better financed through general revenues. Third, as was emphasized in chapters 1 and 5, there is scope for improving the use of CCTs and ALMPs to increase the access of low-income workers and the poor to higher-productivity jobs.

The rest of this section discusses in detail issues related to the regulation of labor costs and the design of interventions to increase workers’ employability and to overcome job search constraints.

**Labor Costs**

Governments affect the cost of labor through various regulations, including setting minimum wages and levying payroll taxes. The concern with these policies is that they may reduce creation of formal jobs, particularly for unskilled workers, and can thus promote unemployment and/or informality. This section discusses the empirical evidence and some of the policy implications of the findings.

**Minimum wages.** All countries in LAC set a minimum wage. The evidence suggests that, when used appropriately, this policy can contribute to reducing poverty and inequality. The minimum wage can be set to increase the wages of poorer workers without increasing unemployment. In the absence of a minimum wage, some employers might use their market power and take advantage of information asymmetries to hire workers for less than their productivity would justify. Under these circumstances, the creation of a minimum wage can lead to an aggregate increase in the labor income of poor households, because it will raise wages for low-income workers without pushing them above the level where it becomes unprofitable to hire them. It can also reduce income inequality if it increases the earnings of the less-skilled relative to higher-earning households.

However, these potential benefits are not automatic. The empirical evidence shows that whether the minimum wage favors or penalizes unskilled, low-income workers depends on the level at which it is set, relative to the
productivity of unskilled workers. When minimum wages are set too high, the most vulnerable workers (who are often young and female) are the first to be hurt, and the end result can be more, not less, income inequality. Although the wages of low-skilled workers benefit from a higher minimum wage, low-skilled workers also suffer from an increase in unemployment when the minimum wage is set too high relative to their productivity. If the resulting increase in unemployment outweighs the wage rises of those who do not lose their jobs, the total earnings of low-skilled workers (taken as a group) will fall. In contrast, the total earnings of skilled workers (whose productivity is high enough to justify the cost of the increased minimum wage) are likely to increase, because their wages will rise without an offsetting reduction in employment.

A further way in which minimum wages can lead to undesirable outcomes is through the indexing of public sector salaries and other social benefits to the minimum wage. Many countries have wage agreements that guarantee relatively well-paid public employees the same proportional rise that is assigned to the minimum wage. Such indexing further dilutes the impact of minimum wage increases on income distribution and can also lead to unsustainable increases in the public deficit and crowd out higher-priority safety net spending. For example, in Honduras, doctors are guaranteed to be paid the equivalent of between 12 and 15 minimum wages and the union contract of university staff is indexed to the minimum wage. So when the Honduran government increased the minimum wage by 60 percent in early 2009, these groups also demanded the same increase. The minimum wage is also often tied to other social benefits such as pensions. For example, in Brazil, a 10 percent increase in the minimum wage would increase pension payouts by 3.3 times more than the associated increase in contributions to the pension system. Similarly, it is estimated that a 10 percent increase in the minimum wage would increase total government expenditure by 1.4 percent in Panama.

In LAC, there is a large variation in the value of the minimum wage (figure 7.2). In Mexico, it is set around 10 percent of per capita GDP. At this level, it is likely to favor unskilled, low-income workers. In Jamaica, Brazil, Chile, and Uruguay, it is set at less than 50 percent of per capita GDP. At the other extreme, in Honduras, it is set at 170 percent of per capita GDP. It is likely that in this case the minimum wage becomes a drag on employment creation and will not contribute to improving the distribution of income. A similar situation exists in Costa Rica and El Salvador.

Tax wedges. The other main way in which government policy can affect labor demand is through setting payroll taxes and social security contributions, which increase the tax wedge. There is consistent global evidence that a high tax wedge reduces labor demand and supply in the formal sector. This result affects low-skilled and low-productivity workers most,
because demand for these workers is more elastic. In Eastern Europe and Central Asia, a 10 percentage point increase in the tax wedge is estimated to have led to a reduction of 3 to 6 percentage points in the employment/population ratio (Rutkowski 2007). A recent study of Turkey found that the pass-through of social security contributions to wages is low for low-income workers, so increases in contributions lead to increased total wage costs and reduced employment (Betcherman and Pagés 2008). It is estimated that a sharp rise in payroll taxes of over 10 percentage points (from 41 percent to 51.5 percent) in Colombia between 1989 and 1996 led to a decline in formal employment of 4 to 5 percent (Kugler and Kugler 2003).

In general, how the tax wedge affects employment depends on the structure of the labor market and its institutions. Three factors matter most. The first factor is the sensitivity of labor demand and supply to changes in the cost of labor and take-home pay, respectively. The more sensitive (or elastic) they are, the larger the impact of labor taxes on employment. The second factor is the institutions that affect the relative bargaining power of employers and employees. The third factor is the tendency of unemployment benefits and minimum wages to add downward rigidity to wages and increase the likelihood that a higher tax wedge will reduce employment.
A high tax wedge can also give low-productivity firms an incentive to stay in the informal sector. Small firms might be forced into (or forced to stay in) the informal sector if their output per worker is below the minimum official cost of labor (minimum wage plus social charges). Simulations using labor market search-matching models suggest that payroll taxes reduce the incentives for formal sector firms to hire new workers (Albrecht, Navarro, and Vroman 2006). Other things being equal, a high payroll tax reduces net earnings in the formal sector and thus makes informal work more attractive.

In many LAC countries, the tax wedge is already high, and part of the objective of moving to explicit forms of redistribution is to reduce it. It is estimated that tax wedges in the region vary between 15 percent in Chile and 55 percent in Colombia (figure 7.3). If the redistributive component of SI were removed, tax wedges could decrease. As an illustration, in the case of pensions, full-career workers should be able to finance a pension with a 60 percent replacement rate of their salary with a contribution rate ranging between 12 and 15 percent, depending on rates of return. However, in Brazil, because of redistributive programs and nonessential social security programs, the contribution rate is over 30 percent (see next section).

Active Labor Market Programs and Conditional Cash Transfers

Chapter 5 showed that various types of constraints or market failures can make it difficult for some people to get “good” jobs. From the point of view of SP policies, the two most important constraints are (1) the lack of appropriate skills and (2) both insufficient and asymmetric information in the labor market, which makes the matching of available job seekers and vacancies inefficient and leads to unnecessarily high frictional unemployment. ALMPs and well-designed CCTs can help to address these problems, although they are not a panacea that eliminates all of the employment problems faced by low-skilled and low-income workers.

A first group of ALMPs, relevant for all countries, aims to put human capital to its most productive use, given the existing distribution of skills. These include job search assistance, intermediation services, and skills certification. As discussed in chapter 5, these programs should be part of an integrated labor market risk management system that would also include income protection programs and that would help all workers (including those in the informal sector) to do the following: (1) smooth their consumption during periods of unemployment, (2) facilitate intermediation and reentry into the labor market, and (3) address mismatches that occur because of productivity and technological shocks. The design of the system and programs would vary according to local conditions, but the generic set of program types, functions, governance, and monitoring and evaluation mechanisms would be the same.

A second group of ALMPs is required to correct for structural failures in the labor market that occur when the distribution of skills is misaligned.
with potential demand. This misalignment can occur because there is an excess of unskilled workers or because workers have the wrong skills (technical, managerial, or soft) or lack experience. Failures in capital markets can allow such misalignments to persist if low-income individuals are not able to finance training and are confined to low-productivity activities, often in the informal sector, or if individuals are not able to finance transitions into self-employment or entrepreneurship that would make better use of their skills. Other failures in product markets that limit competition can also lead to suboptimal investment in skills. Chapter 5 discussed relevant interventions, including training and retraining, to meet this challenge as well as programs to promote self-employment and entrepreneurship. Current programs should do more to target vulnerable groups, including...
young people and the poor, for whom the problems discussed above can be more binding.

In the case of young people, it is important to take into account their heterogeneity in terms of skills and income, both of which affect reservation wages. Young people with more education and those from high-income households are more likely to receive income support from their families, and so they tend to have a higher reservation wage and thus experience longer unemployment spells. Once employed, they may also face lower unemployment risks and change jobs less frequently, because they tend to get more-stable and better-paying jobs. Low-income, unskilled young people, on the other hand, are more likely to work informally and face higher unemployment risks but experience shorter unemployment spells. So the labor market transitions of these two groups are different and require different policy interventions (see table 7.1).

Another important distinction is that between marketable and non-marketable skills. Graduates from universities or vocational training programs obtain a diploma for a given discipline and level of education (for example, a bachelor’s or a master’s degree). This is a tool that signals that the recipient has certain skills (such as discipline and the capacity to work under pressure). However, in many cases, where the quality of the training institution is poor, having a diploma does not necessarily show that the graduate actually acquired the skills associated with the diploma or that the person has the “soft” cognitive and noncognitive skills (such as the ability to communicate, organize, lead, or write) that employers also value. Even the skills that the graduate has indeed acquired may be in short demand (due to structural mismatch) and thus difficult to sell. In summary, there are problems of signaling as well as problems of quality and relevance, which require different types of intervention. Those workers who already have marketable skills need job search assistance and marketing (intermediation), while others might need to upgrade or add to their skills before they can market themselves successfully. Training and retraining programs—including on-the-job training—are therefore a priority for this group (see table 7.1).

Given that most LAC countries have only limited public resources to allocate to ALMPs, it is important to prioritize interventions that target young people with low reservation wages, particularly the unskilled and those with unmarketable skills. Reservation wages are a good measure of household “welfare.” Young people with high reservation wages are likely to come from middle- or high-income households. Their reservation wage is not directly observable but can be inferred from their behavior. Someone with a low reservation wage is more likely to invest in training and retraining and accept internship or job training positions with relatively low compensation than his or her peers with a higher reservation wage. The design of the program itself can therefore be the mechanism to target those individuals who are most in need.
Table 7.1 Typology of Young People and Labor Market Programs to Meet Their Needs

<table>
<thead>
<tr>
<th>Skill type</th>
<th>Middle- and high-income household characteristics and recommended ALMP</th>
<th>Low-income household characteristics and recommended ALMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled (marketable)</td>
<td>Reservation wages (+ + +)</td>
<td>Reservation wages (+)</td>
</tr>
<tr>
<td></td>
<td>Duration unemployment spell (+ + +)</td>
<td>Duration unemployment spell (+)</td>
</tr>
<tr>
<td></td>
<td>Turnover (− − −)</td>
<td>Turnover (−)</td>
</tr>
<tr>
<td></td>
<td>Intermediation</td>
<td>Intermediation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-the-job training (low subsidies)</td>
</tr>
<tr>
<td>Skilled (nonmarketable)</td>
<td>Reservation wages (+ +)</td>
<td>Reservation wages (−)</td>
</tr>
<tr>
<td></td>
<td>Duration unemployment spell (+ +)</td>
<td>Duration unemployment spell (−)</td>
</tr>
<tr>
<td></td>
<td>Turnover (− −)</td>
<td>Turnover (+)</td>
</tr>
<tr>
<td></td>
<td>Retraining (low subsidies)</td>
<td>Retraining (high subsidies)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-the-job training (high subsidies)</td>
</tr>
<tr>
<td>Unskilled</td>
<td>Reservation wages (+)</td>
<td>Reservation wages (− − −)</td>
</tr>
<tr>
<td></td>
<td>Duration unemployment spell (+)</td>
<td>Duration unemployment spell (− − −)</td>
</tr>
<tr>
<td></td>
<td>Turnover (−)</td>
<td>Turnover (− − −)</td>
</tr>
<tr>
<td></td>
<td>Training (low subsidies)</td>
<td>Training (high subsidies)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-the-job training (high subsidies)</td>
</tr>
</tbody>
</table>

Source: Authors’ design.

Note: Minus and plus signs are used to indicate in relative terms the level of the reservation wage, the duration of the unemployment spell, and the turnover; − − − is the lowest level and +++ is the maximum.
The Jóvenes programs implemented in some LAC countries demonstrate the importance of an integrated set of services in the design of ALMPs. The first element is comprehensive training—from technical to life skills and from lectures to internships. The second element is income support to help people to participate in training courses and on-the-job training. The transfers can take the form of a wage subsidy, with employers paying part of the worker’s salary and the program paying the difference. A recent example is the Chilean employment subsidy for dependent and independent young workers. The final element is counseling and job search assistance after “graduation” from the program. The ideal design features of these interventions are discussed in chapter 5.

Among the poor, the challenge is to improve the labor market opportunities of beneficiaries of welfare programs and thus reduce their dependence on assistance. Such programs have great potential in urban areas in LAC. Once again, policy makers should consider offering integrated packages of services that include some form of skills certification. The classroom and on-the-job training programs could be adapted to the needs of the targeted population and to the job opportunities that are available in the regions where they live. Just as beneficiaries of CCT programs receive cash transfers on the condition that they invest in their family’s education and health, similarly, beneficiaries of integrated ALMPs would receive cash transfers on the condition that they participate in training programs and that they search for a permanent job. To give recipients an incentive to invest in developing their own skills and in looking for work, policy makers should make sure that transfers available under the integrated ALMPs are higher than those available under the CCTs. These integrated ALMPs are likely to be particularly effective in urban areas, where work opportunities are more prevalent, than in rural areas, where, as discussed in chapter 6, standard CCTs are likely to be less effective.

Clearly, the success of ALMPs targeted to young people and the poor will depend on how the programs are implemented. Chapter 5 provides guidelines for various kinds of interventions. In general, policy makers will need to ensure (1) that the governance arrangements give program managers and service providers an incentive to meet the needs of the beneficiaries and potential employers, (2) that programs are well targeted and that program designers understand the main employability and job search constrains faced by potential beneficiaries, and (3) that proper monitoring and impact evaluation systems are in place.

Exploiting Synergies across Risks and Programs

The discussion in part II focused on the potential for increasing integration within a given risk or program. This section focuses on the issue of increasing coordination across risks and programs within the SP system as
a whole. The potential benefits of this second level of integration include (1) reducing costs by pooling savings across risks, (2) avoiding incentive problems resulting from the lack of coordination between SI programs, (3) maximizing the impact of ALMPs by linking them to insurance programs, and (4) maximizing the impact of social assistance programs by linking them to ALMPs and SI programs. This section discusses each of these issues in turn.

Moving Savings between Insurance Programs

The economic and welfare benefits that could be realized from integrating SI programs are significant. The pooling of savings across insurance programs can reduce the total amount that is needed.\textsuperscript{42} Such pooling has been done in Uruguay, where insurance savings accounts cover unemployment benefits, old-age pensions, disability, death, sickness, maternity benefits, and family allowances (Lipsett 1999).

Full integration would be difficult to implement in most countries, but the integration of income protection and pension programs might be possible. This integration would be easier to implement in countries with defined contribution, fully funded pension systems, such as Chile, Mexico, or Peru. However, it is also possible with PAYG pension systems like those in Brazil or Ecuador, if benefit formulas and eligibility conditions are reformed to make it possible to track the contributors’ pension wealth. The next two sections discuss how this integration could be done and its possible benefits. It begins by looking at the integration of different types of pensions and goes on to address the integration of unemployment benefits and pensions.

Old-age, disability, and survivorship pensions. Countries that introduced defined contribution, fully funded old-age pension systems had to reform their disability and survivorship pensions. The reform involved (1) separating the expected costs of the three programs, (2) allowing the transfer of savings among the three programs, and (3) separating contributions to finance the liabilities related to disability and survivorship benefits that are not covered by the savings accumulated in the individual accounts. The additional contributions are used to purchase insurance (usually from private companies) to cover the liabilities related to survivorship and disability pensions. For example, in Chile, when permanent disability occurs, the individual receives a DB pension. The pension fund transfers to the insurance company the savings accumulated in the person’s individual account, and the insurance company is then responsible for issuing an annuity to him or to her (James 2008).

In countries with PAYG systems, policy makers could consider introducing similar reforms for disability and (preretirement) survivorship pensions. The starting point would be to link the benefits and contributions
of pension schemes (using DB or NDC formulas). Each plan member would have an account indicating the accumulated level of their pension wealth. Then, depending on individuals’ risks of disability and death (before retirement) and the benefits that they would like to receive from their disability and survivorship pensions, their contribution rates would be computed to cover the liabilities that are not covered by their accumulated pension wealth. As in the case of funded systems, the risks associated with disability and survivorship pensions could be transferred to insurance companies. Alternatively, if the risks are managed in house, the contributions could simply constitute revenues for the pension fund. Postretirement survivorship pensions, on the other hand, would have to be offered through annuities for which, at the time of retirement, the plan member would specify which dependents were eligible to inherit the pension. The pension would then be calculated taking into account the worker’s accumulated pension wealth at retirement and the mortality risks of the plan member and the beneficiaries.

These arrangements would increase transparency, reduce costs, and reduce incentives to “game” the system. Costs would be lower than when old-age pension savings cannot be used to finance disability pensions until retirement. A recent study of an NDC system in the Arab Republic of Egypt showed that contribution rates would need to be 2 percentage points higher if disability pensions were not integrated with old-age pensions. With integration, there would be less of an incentive to game the system because costs would be internalized. For instance, specifying more eligible survivors would either reduce the level of the pension or require a higher contribution or premium in the case of preretirement survivorship pensions.

In the case of disability due to work accidents, these arrangements could also give employers an incentive to improve safety. Again, costs would be internalized. The contributions paid by employers to finance disability pensions due to work accidents could be based on observed risks (in other words, experience rating). Employers with more work injuries resulting from lax safety standards would pay higher contributions/premiums.

**Unemployment and pensions.** All countries that have implemented UISAs allow workers to use the balance in their individual accounts to finance their pensions upon retirement. This is a natural feature of the design of UISAs. Balances that were not used during a worker’s active life can either be paid as a lump sum, or added to the capital accumulated in the person’s pension account to purchase an annuity. In most countries, workers can also make withdrawals during their active lives for other reasons than unemployment (see chapter 5). In some countries (such as Chile), the system can continue to pay unemployment benefits after the balance in the individual accounts has been exhausted, but these subsidies are financed out of a separate solidarity fund. In Mexico, unemployed workers can withdraw from their individual pension accounts (AFORES)
either 10 percent of the balance or the equivalent of 75 days’ salaries, whichever is lower, but there is no connection to their unemployment savings accounts. Moreover, this type of withdrawal is allowed only once every five years.

In most SP systems, pension wealth may not be used to finance unemployment benefits during a worker’s active life. However, (as argued in chapter 5) transfers of pension wealth can improve individuals’ risk management through their life cycles and reduce their contribution rates. For a given level of unemployment benefits (given by the replacement rate and the duration of benefits), employees and employers can contribute less and the government subsidize less if the rules allow the use of surplus pension wealth to finance benefits. The potential for reducing contribution rates and subsidies will depend on the actual level of contribution rates and densities but could be significant. Similarly, simulations have shown that, for a given contribution rate and a targeted replacement rate, allowing individuals to use part of their pension wealth can significantly improve their welfare as measured by their level of consumption over their life cycle (Robalino, Vodopivec, and Bodor 2009).

At the same time, individuals would have more flexibility in setting their desired level of pension wealth. One of the classic problems resulting from having a common mandate for the pension system is that individuals may have different preferences regarding their desired level of savings for retirement. For some, the current mandate may simply be too large, even after controlling for myopia, and they would be glad to be allowed the flexibility to reallocate their savings from the future to the present. Such added flexibility would give them more of an incentive to contribute to social insurance. However, low earners—who tend to have lower contribution densities and less pension wealth—would benefit less from the added flexibility. The risk that myopic individuals might deplete their pension wealth could be countered by setting a minimum level of pension wealth, for example, the capital amount needed to finance the minimum pension guarantee. The implicit assumption is that in most countries the mandate of the pension system is too large, but it is also reasonable to give individuals some choice as long as they are required to maintain a minimum level of pension wealth.

To implement this idea, countries with UISAs could allow workers to borrow from their UISA to finance unemployment income using their pension wealth as collateral. The UISA program administrators would keep track of the level of borrowing (a negative balance in the person’s savings account) and not allow it to surpass the value of the surplus pension wealth. To prevent individuals from defaulting on the debt and to minimize any incentives to evade the system, individuals would be required to repay any balance from their pension wealth when they retire. They could also repay it during their active life, thus keeping up the full value of their pension.
Cross-Effects in Program Design

It should not come as a surprise that the performance of a given SI program depends on the design of the other SI programs. After all, the choices made by workers (regarding, for example, their labor supply, formal versus informal sector jobs, and the amount to invest in savings) are influenced by the entire bundle of social security benefits, not just the features of a particular program. So it is natural that the design of one insurance program within the bundle might enhance or diminish the impact of another. This section discusses some of the interactions that could be exploited or avoided if there were more coordination between different programs.

Designing the bundle of social insurance benefits. The first issue is to specify the content of the bundle of benefits offered by the SI system. The set of possible benefits includes health, pensions (old-age, disability, and survivorship), and unemployment insurance, family allowances, maternity leave, sick leave, funeral expenses, child care, housing, and more ad hoc programs, such as training and sports and recreation benefits. In several countries in LAC, including Colombia and Mexico, social security packages include up to eight separate benefits. Normally, there is no explicit financing mechanism for each program. Contribution rates are sometimes set for specific benefits (for example, old-age, disability, and survivorship pensions), but in most cases, the “purchase” of the whole bundle is an all-or-nothing deal.

However, each individual puts a different value on each of the benefits included in the bundle. Childless individuals, for instance, are not interested in family allowances and child care benefits. Many people are not interested in using sports facilities. When the (subjective) perceived benefit of any element in the bundle is zero, the social security contribution that finances it becomes a pure tax on that person’s labor income, thus increasing the tax wedge and worsening the problems discussed above.

Unfortunately, deciding which benefits should remain in the mandatory bundle is not straightforward. First, some social security benefits (such as family allowances and maternity leave) are required under international labor standards or conventions. Second, policy makers and technicians might disagree about the mandatory elements depending on which area is their specialty. For instance, those working in pensions might like to see health benefits included in the mandatory bundle if they think such benefits would give those with high discount rates (who tend not to value pensions very highly) more of an incentive to enroll.

One possible approach would be to limit the mandatory bundle to programs that cover social risks (as opposed to private ones), and where private arrangements are likely to fail. This approach would limit the mandate of the social security system to health insurance, pensions (the three types), and unemployment benefits. Benefits such as family allowances—which
are pure transfers and do not involve risks—would be removed from the bundle. Family allowances might have a role to play in assisting large low-income families, but they would be integrated with other targeted transfers in the social assistance system and financed out of general revenues.

In many countries, the tax wedge could be considerably reduced by trimming the bundle of benefits. Contributions for “excess” benefits (beyond the basic set suggested in the previous paragraph) range between 3 percent in Peru and 23 percent in Colombia (figure 7.4). In most LAC countries, there is scope for reducing contributions by at least 3 percentage points. The exception is Chile, where the potential reduction would be less than 1 percentage point.

Unemployment and old-age pensions. Analyzing the cross-effects of programs on beneficiaries’ and service providers’ behavior can be complex. Rigorous assessment is difficult, since the programs are already operating and there are no data that track how behavior changed when they were introduced or reformed. Nevertheless, analysis based on behavioral models suggests that there are several significant ways in which pensions and income protection systems interact to affect behavior. Changes in the income protection system are likely to affect contribution densities in the

Figure 7.4 The Share of the Contribution Rate Allocated to Nonessential Benefits

<table>
<thead>
<tr>
<th>Country</th>
<th>Share of contribution rate</th>
<th>Impact on tax wedge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>20%</td>
<td>2%</td>
</tr>
<tr>
<td>Argentina</td>
<td>15%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Uruguay</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>Venezuela, RB</td>
<td>7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Chile</td>
<td>5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Peru</td>
<td>3%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations.

Note: Nonessential benefits are defined as those not related to pensions, unemployment insurance, and health insurance.
addressing cross-cutting challenges

pension system, retirement ages, and ultimately program costs. Similarly, changes in the pension system can affect contribution densities in the income protection system, benefit take-up rates, and also expenditures (Robalino et al. 2008).

In the case of Brazil, for instance, it is likely that the (unfunded) unemployment insurance system increases retirement ages and reduces the contribution densities of high-income workers to the pensions system. Indeed, if the unemployment insurance systems were “removed,” contribution densities would increase while retirement ages would fall (see figure 7.5).47 In essence, traditional unemployment insurance can increase the length of the unemployment spell and promote informal work (see chapter 5), which reduces contribution densities to the social security. The change in contribution densities, in turn, leads to adjustments in retirement ages. Individuals willing to reduce contribution densities are

![Figure 7.5 The Predicted Effect of Removing Unemployment Insurance on the Contribution Densities and Retirement Ages of Average Earners in Brazil](image)


*Note:* Each point is related to a given set of individual preferences (risk aversion, time preferences, preferences for consumption over leisure, or preferences for formal versus informal work) and two exogenous factors (the baseline probability of choosing formal sector work and the probability of working when retired).
also more likely to delay retirement. In contrast, the unemployment individual savings accounts system (Fondo de Garantia por Tempo de Serviço, FGTS) increases contribution densities across the board, because savings are financed exclusively by the employer. It has little effect on the retirement ages of high-income workers but likely increases the retirement ages of low-income workers, because individuals are willing to work for longer to receive the additional subsidies. Because both unemployment insurance and FGTS affect how much individuals contribute and when they retire, they also affect the finances of the pension system. The reverse is true as well: the pension system affects retirement ages and contribution densities and therefore the finances of the unemployment insurance system and FGTS.

These findings suggest that the reform of any component of the SI system should not be conducted in isolation. Analysts should consider the potential cross-effects of changes on other programs. The policies to increase transparency and reduce implicit redistribution that are advocated in this chapter should help to reduce negative cross-effects between programs by making the core contributory programs as incentive neutral as possible. At the same time, improving the targeting and limiting the size and scope of explicit redistributive arrangements would reduce distortions.

**Unemployment and disability benefits.** The take-up of disability benefits fluctuates across countries, even after controlling for coverage differences, and policy differences appear to account for this fluctuation (Gillian et al. 2000). Depending on the rules of the SP system, a worker who becomes disabled has as many as five options: (1) take early retirement, (2) reenter the labor market through programs that provide rehabilitation, (3) use health insurance during temporary incapacity and invalidity (to replace lost wages and pay for health care), (4) receive unemployment insurance (in countries where temporarily disabled workers are regarded as regular unemployed beneficiaries), and (5) take up social assistance benefits (if ineligible for contributory health or unemployment benefits). In the face of this panoply of options, disabled workers’ choices will depend on disability insurance replacement rates, the rules of the pension system, and the rules of other income transfer programs such as unemployment benefits and social assistance. Where social assistance or unemployment benefits are low or difficult to obtain, the number of claimants for disability insurance tends to rise. Thus, the interaction between disability insurance and rules for other programs helps to determine whether disabled workers remain in the labor force or apply for some form of benefit.

In Argentina and Chile, disability claims are correlated with unemployment rates, suggesting that they may be working in part as a substitute for insufficient unemployment insurance. Chile (in 1981) and Argentina (in 1994) adopted fully funded pension schemes (since then Argentina has
returned to a PAYG system). Under these reforms, the disability program was financed separately and managed by private insurers. The rules for evaluating claims and determining benefits also changed, making the system more transparent and introducing explicit benefit criteria. Nevertheless, disability claims continue to be correlated with unemployment (figure 7.6).

The increase in disability claims observed when unemployment rises does not seem to be due to fraud, since the proportion of approved claims is stable over time. In Argentina, for example, the proportion of accepted claims ranged between 55 and 62 percent between 1998 and 2007 (SAFJP 2008). The increase in claims seems to come instead from people who can qualify as disabled under the rules at any time, but who, in good times, prefer to continue working because they can earn more than they would receive in disability benefit. The underlying problem is that the design of disability insurance does not take account of this relationship with the unemployment rate. Rather, the cost calculations simply reflect the prevalence of covered disabilities and cost of the associated benefits, together with the maturity of the pension system (which determines the level of balances in the individual accounts). To correct this design flaw, policymakers need to coordinate the design of the mandate (coverage) of both the disability and unemployment benefits system. If individuals with disabilities prefer to continue working—and apply for disability benefits only

Figure 7.6 Correlation of Disability Claims and Unemployment in Argentina

Source: Authors’ estimations based on data from Encuesta Permanente de Hogares (for unemployment data) and SAFJP 2008 for claim rate.
when they become unemployed—then the eligibility criteria may be too lax, since the system provides benefits to people whose disability does not preclude earning a living when labor market conditions are favorable. The other apparent problem is the insufficiency of unemployment insurance coverage or benefits.

Social Insurance and Social Assistance Programs

All LAC countries have dual redistributive systems. The working of redistribution within the contributory SI system was analyzed above. The argument was made for replacing opaque and distortionary subsidies with transparent and targeted transfer programs to subsidize contributions or to top up benefits. However, as discussed in chapter 6, LAC also has a growing set of redistributive safety net programs, such as CCTs and workfare, which target households that are excluded from SI.

This duality provokes the question: If the central mandate of SI is to smooth consumption rather than to prevent poverty, and the purpose of redistribution is to prevent poverty, why not focus redistribution entirely on antipoverty programs? The answer is that, in LAC there is a strong case for including a redistributive component in the SI system. As argued earlier in this chapter, there are two reasons for this. First, antipoverty transfers are likely to be insufficient to provide enough consumption smoothing to the nonpoor. Second, transfers can be used to provide incentives to enroll in contributory programs to individuals with limited savings capacity, potentially generating savings on antipoverty transfers in the future. A system where safety net programs are the only fallback for those unable to save enough to fully insure themselves would be the wrong approach for most LAC countries. Rather, there is an urgent need to address the yawning gap of the “missing middle” of households that are neither covered by SI nor extremely poor and vulnerable and unable to make any contribution toward their own insurance. This gap should be closed by including carefully designed, incentive-compatible redistributive components in SI systems to subsidize contributions or top up benefits to expand the coverage of low-income workers by contributory SI programs.

If this vision were to become a reality, the SP system would continue to have two tiers of redistribution. The first layer would be a general social assistance system that acts as a safety net for all poor people. The second layer would include redistributive programs, the benefits of which would be conditional on recipients’ participation in the social security system. For this two-tiered system to work, however, transfer amounts would need to be carefully calibrated. If noncontributory antipoverty programs are too generous, they will reduce households’ incentives to participate in the social security system; on the other hand, if SI subsidies are too high or are also available to the nonpoor, they may be regressive.
A separate question is whether there is a good case for creating special redistributive programs for the elderly, disabled, or unemployed, instead of programs simply based on general household poverty criteria. Some possible problems might arise from such special programs. First, they create overlaps and increase administrative costs. Second, inequalities can arise, since poor households are treated differently from each other depending on which programs cover them. Third, the income effects of “double dipping” can aggravate labor market distortions.

For instance, is there a good case to be made for social pensions, or should the elderly poor be covered by general antipoverty programs? A recent study argued that the most efficient strategy would be to include the elderly within general antipoverty programs, and it showed that this approach is already used in transfer programs in Brazil, Ecuador, Jamaica, and Mexico (Grosh and Leite 2009). Concerns that the elderly might not be reached or empowered by cash transfer programs could be addressed by reviewing targeting systems or by adding conditions. However, since noncontributory pensions are normally given to those without contributory pensions, they tend to be quite well targeted. So long as entitlement to other transfer programs is computed taking into account pension income, the outcome is not likely to be regressive. Of more concern is the potentially negative impact of generous noncontributory pensions on the demand for contributory pensions among low-income workers.

The case for social pensions is strong only in specific circumstances. As discussed in chapter 4, social pensions might make sense (1) when the elderly face a higher risk of poverty than the rest of the population or represent a large share of the poor, (2) when political economy factors constrain the creation of effective general antipoverty programs, and (3) when a direct transfer would be a way to empower the elderly against discrimination. These three cases are not mutually exclusive. In the absence of such factors, however, the rationale for specific transfer programs for the elderly is weak.

The Way Forward

This book has reviewed the challenges facing LAC’s SP systems and possible ways to overcome them. The first challenge is to extend the coverage of SI systems and increase the adequacy of benefits, while containing adverse incentive effects and maintaining fiscal discipline. The second is to strengthen safety nets for the extremely poor. The third is to promote human capital and improve income-generating opportunities for unskilled workers, low-income young people, and the poor. The policies that have been recommended here involve separating access to SI from the labor contract; streamlining contributory systems, reviewing their mandates, and opening them up to everyone; moving from implicit to explicit forms
of redistribution; and more effectively coordinating the design of policies within and across risks and programs. They also include improving labor market programs and conditional cash transfer programs to reduce poverty, promote investments in human capital, facilitate access to better-quality jobs for the poor, and provide a robust basis for flexible responses to crises such as the present global downturn.

However, countries across the LAC region face these common challenges from very different starting points. There are great variations in size, demographics, economic structure, income levels, income distribution, human development indicators, and likely fiscal costs and benefits. This final section attempts to sketch out possible priorities for three groups of countries, taking into account their existing programs, their poverty reduction and human development challenges, their demographic structures, and their institutional constraints.

Initial Conditions and Constraints across Countries

One way to group LAC’s countries is according to the SP reforms that they have introduced to date. Three broad groups can be distinguished: (1) reformers, where policy makers have implemented major initiatives across risks and programs; (2) partial reformers, where policy makers have introduced important innovations in some areas; and (3) traditional systems, where no major innovations have taken place. Table 7.2 summarizes the initial conditions in these three groups of countries. The first group consists of Argentina, Brazil, Chile, Colombia, Mexico, Panama, and Peru, all of which have transformed their pensions, unemployment, health, and social assistance systems over the past two decades. The second group consists of Bolivia, Costa Rica, Ecuador, the Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, República Bolivariana de Venezuela and Uruguay. Some of these countries have reformed their pension systems, others have reformed their unemployment insurance systems, and others have reformed their social assistance programs. Finally, in Guyana, Haiti, Nicaragua, Paraguay, St. Lucia, Suriname, and Trinidad and Tobago, no major interventions have been made in the SP system.

There is little correlation between what reforms have been introduced and per capita income levels (see figure 7.7). Although the reformers include some of the richest countries in the region and many countries with traditional systems are among the poorest, there are also rich countries, such as Trinidad and Tobago and Venezuela, where there have been very few innovations. Also, Bolivia, which is among the poorest countries in LAC, has carried out a major reform of its pension system. Full analysis of what determines a country’s willingness and ability to introduce reforms is outside the scope of this study, but the idea that reforms are viable only in richer countries appears to be wrong.
Table 7.2 Initial Conditions Shaping Policy Options in the Social Protection System

<table>
<thead>
<tr>
<th>Countries</th>
<th>Income level (US$)</th>
<th>Poverty or income concentration</th>
<th>Government effectiveness and regulatory quality</th>
<th>Aging</th>
<th>Infant mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1: Reformers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina, Brazil, Chile, Mexico, and Panama</td>
<td>5,900–8,400</td>
<td>+ (Mexico –)</td>
<td>+ (Argentina =)</td>
<td>= (Argentina + Chile +)</td>
<td>– (Brazil =)</td>
</tr>
<tr>
<td>Colombia and Peru</td>
<td>3,300–3,500</td>
<td>+</td>
<td>+ (Peru =)</td>
<td>=</td>
<td>Colombia – Peru +</td>
</tr>
<tr>
<td><strong>Group 2: Partial reformers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica, Uruguay, and Venezuela, RB</td>
<td>5,500–7,300</td>
<td>+ (Costa Rica –; Uruguay –)</td>
<td>+ (Venezuela, RB –)</td>
<td>= (Uruguay +)</td>
<td>–</td>
</tr>
<tr>
<td>Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, and</td>
<td>1,300–3,700</td>
<td>+ (Jamaica –)</td>
<td>= (El Salvador + Jamaica + Bolivia –)</td>
<td>= (Bolivia – Honduras – Guatemala –)</td>
<td>(Bolivia + Jamaica –)</td>
</tr>
<tr>
<td>Jamaica</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Group 3: Traditional systems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Lucia, Suriname, and Trinidad and Tobago</td>
<td>5,500–14,100</td>
<td>+</td>
<td>St Lucia + Suriname =</td>
<td>=</td>
<td>St Lucia –; Suriname =</td>
</tr>
<tr>
<td>Guyana, Haiti, Nicaragua, and Paraguay</td>
<td>600–1,700</td>
<td>+</td>
<td>– (Guyana =)</td>
<td>– (Guyana =)</td>
<td>= (Haiti +)</td>
</tr>
</tbody>
</table>

Source: Authors’ design.
Note: Plus, minus, and equal signs indicate above, below, and equal to the average, respectively.
Among the most important constraints on any future SP reforms are overall poverty and skewed income distribution (which can generate a higher incidence of poverty than would be expected for a given level of income). Among the countries most affected by these constraints are (1) Colombia (which is affected by skewed income distribution); and (2) Bolivia, Honduras, and, particularly, Haiti (which are affected by both factors). Human development indicators in health and education have improved considerably in LAC, but infant mortality rates remain high in Bolivia and Haiti and are well above average in the Dominican Republic, Guatemala, and Paraguay. Another factor that will influence reforms is the aging of the population, particularly in the case of the remaining PAYG pension systems and the health systems. Yet another common factor across the region is the limited tax base from which to finance subsidized programs. Most LAC countries raise around 15 percent of their GDP from income and consumption taxes, which is just half of what most high-income countries achieve. Some—like Ecuador and Venezuela—mobilize revenues from natural resources such as oil, but these form a volatile and unreliable base for financing long-term SP commitments. Finally, many countries where reforms are most needed are plagued by weak governance and institutional capacity, as in the case of Nicaragua and Paraguay.

**Figure 7.7 Policy Innovations and Per Capita Income**

Source: Authors’ calculations.
Note: UB = unemployment benefits.
Group 1: Reformers. The seven countries in group 1 have led LAC in the reform of their pension, health, income protection, and social assistance systems. The great majority of their populations have access to education, health, and basic infrastructure. The challenge now is to consolidate existing SP programs and institutions rather than to create new ones. Institutional capacity is relatively strong. A priority area for reform is the horizontal integration of contributory SI, and policy makers should begin by slimming down the bundle of SI benefits to reduce the tax wedge. Another challenge is to integrate parallel systems to improve equity and increase efficiency. Recent reforms in Brazil and Mexico are good examples of how this challenge can be met.

Some reforms are urgently needed in pensions and health insurance. In Brazil, the pension system needs to become more equitable and financially sustainable so it can be expanded to cover more of the population. Many other countries have problems with the control of administrative costs in funded systems, the regulation of investment portfolios during workers’ transition into retirement, and the design of the pay-out phase. In Argentina, following the decision to step back from a funded defined contribution system, the immediate challenge is to design a new pension system that does not use flawed and unsustainable DB formulas. In health, the main challenges are to extend good-quality basic health insurance to the whole population and to integrate parallel public SI and national health programs, to reduce duplication and costs.

Countries in this group have the potential to strengthen their income protection systems by converting them into integrated labor market risk management systems. Chile is leading reform in this area by improving the balance between the savings and the redistribution elements of unemployment insurance and implementing innovative programs such as Jóvenes. Argentina should consider expanding UISAs beyond construction workers. Mexico should consider moving beyond an unemployment benefit system based on individual pension accounts (AFORES) and adopting fully fledged UISAs, while preserving the link between the two. In Brazil, Colombia, and Peru, there is room to improve the design of UISAs. In all of these countries, unemployment insurance needs to be better integrated in a structure that also offers job search assistance, intermediation services, skills recertification, and retraining.

Perhaps the most important challenge of all is finding a way to use redistributive subsidies to leverage the expansion of SI, using ex ante transfers as incentives. The starting point is to review the noncontributory elements of social insurance in order to remove incentives for workers to prefer informal sector work. Chile has initiated a second round of reforms in pensions and income protection that move in this direction. Other countries should consider similar arrangements, especially in the area of income protection, where informal workers are usually not covered. At the same time, care should be taken when expanding safety net programs
into urban settings, since some programs, like the CCT, are better suited to rural areas. Subsidized unemployment insurance coupled with ALMP strategies to help beneficiaries to access sustainable employment offers a more promising avenue. Finally, the possible labor market fragmentation that results from parallel contributive social health insurance and noncontributive (national health service [NHS]) health insurance programs also merits attention.

**Group 2: Partial reformers.** Group 2 countries can be divided into two groups. The low-middle-income countries (Bolivia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, and Jamaica) face fiscal and institutional constraints and public demands for the reduction of poverty and for improvements in income distribution and human development indicators. For the high-middle-income countries (Costa Rica, Uruguay, and Venezuela), the challenges imposed by aging populations are more acute.

A priority for the low-middle-income group should be to effect savings by removing implicit, regressive redistribution from the social insurance system and then to spend more resources on preventing poverty and on increasing the adequacy of health services. Those with DB pension systems should link contributions to benefits and make these systems financially self-sustainable. This goal could be achieved without necessarily changing financing mechanisms, for example, by adopting NDC systems. The bundle of social security benefits should also be simplified and streamlined.

Reforms in health should likewise be a priority. These countries (except Jamaica) have fragmented systems with a low proportion of prepaid or pooled expenditures (below 50 percent). This low proportion of prepaid and pooled expenditures is a particular problem in Ecuador, El Salvador, and Guatemala. There are also concerns about the adequacy of the benefits provided by national health services. In income support, the priority should be to expand ALMPs to upgrade the skills of and increase the labor market opportunities of the poor and low-income young people. Policy makers in these countries should also concentrate on increasing the supply of education and health care to meet the increased demand that CCTs engender.

A special case is Venezuela, which is in the high-middle-income group and has been an innovator in income protection but now faces challenges both in social insurance and in social assistance. The health system remains fragmented, and prepaid/pooled expenditures are less than 60 percent. As in low-middle-income countries, there are concerns about the adequacy of the benefits provided by the NHS. The pensions and unemployment benefits systems are very generous by international standards and threaten to create unfunded liabilities that would need to be covered by general revenues and future generations, even though coverage is still below 50 percent of the labor force. In spite of the continuing high
poverty rate and skewed Gini coefficient, Venezuela has still not introduced a CCT or any other well-targeted income support system. Using oil windfalls, the government has developed large infrastructure and transfer programs for the poor (misiones), but it is unclear how efficient and equitable these programs have been, whether they have reached the poorest of the population, and if they have had any negative labor market effects.50

Costa Rica and Uruguay need to complete their reforms in SI while rethinking the design of social assistance. Costa Rica already has an integrated health insurance system, and the proportion of prepaid and pooled expenditures in that country—close to 80 percent—is among the highest in the region. It has solved the main problems with its contributory pension system (the remaining problems are similar to those that continue in the reformer countries). More could be done to strengthen the income protection system, but the recently created CCT program is a step in the right direction. In Uruguay, pension reform has been implemented, and significant advances have been made in providing income support through the Plan de Atención Nacional a la Emergencia Social (PANES) program. The main challenge is now the health system, which remains fragmented with low levels of prepaid/pooled expenditures. There is also scope for improving unemployment insurance by building on the infrastructure of individual accounts to implement UISAs and to allow savings to be used flexibly among the UISAs, pensions, and the health system. A common challenge for both Costa Rica and Uruguay is to expand the coverage of pensions and income protection systems. Although they have among the highest pension coverage in LAC (over 60 percent in both cases), nevertheless, they remain well below the level that should be attainable for countries at their level of development. In Uruguay, there are also major concerns about low contribution densities that may leave one-third of plan members with no pension (Forteza, Lucchetti, and Pallares 2009). At the same time, the minimum pension guarantee in both countries is quite modest.

Group 3: Traditional systems. Group 3 includes both low-income and relatively high-income countries. The low-income countries—Guyana, Haiti, Nicaragua, and Paraguay—face many challenges and severe financial and institutional constraints.

Haiti is a special case. The focus in Haiti should remain on creating effectively administered and well-targeted antipoverty programs (both transfers and income generation programs) and on widening access to good-quality basic services, including health care, through an integrated national health service. Given fiscal constraints, it is also important for policy makers in Haiti to control the public sector wage bill and the cost of civil service pensions.

In Guyana, Nicaragua, and Paraguay, the first priority should be to create well-targeted transfer programs for the poor. Nicaragua’s poverty
rate is among the highest in the region. In Paraguay, it is lower, but income distribution is more inequitable. Given fiscal constraints and the high concentration of income in the upper deciles, these three countries also need to start reforming their pension systems. In demographic terms, they are among the countries with the youngest populations in the region, but the limited coverage of the pension system has already led to high dependency ratios. Increasing the adequacy of NHS health benefits is also an important priority.

In contrast, St. Lucia, Suriname, and Trinidad and Tobago have ample resources and institutional capacity to introduce the needed structural reforms in their SP systems. Their demographic structures are similar to those of Argentina, Chile, and Uruguay, and their unfunded PAYG pension systems are a major fiscal threat. Trinidad and Tobago is an anomaly. It has the highest level of income in the region, a large industrial sector (and therefore less informality than comparable countries), and low poverty rates, but it retains a badly designed DB pension system and has no unemployment benefit system beyond severance pay. However, it does have an integrated health system. Although prepaid or pooled expenditures are somewhat low (around 50 percent) for the country’s level of income, infant mortality rates are among the region’s lowest. So the main immediate priority is to tackle pension reform and expand income protection programs. Similarly, in St. Lucia and Suriname, there are serious concerns about the fiscal sustainability of unreformed pension systems. Although poverty rates are high, no targeted transfer programs have been created, little is known about the performance of labor markets, and little has been done to develop ALMPs. Health systems remain fragmented and prepaid/pooled expenditures are low. Infant mortality rates are low in St. Lucia but are above the regional average in Suriname.

These countries have the economic resources and institutional capacity to establish much better and more integrated SP systems. They need a reform strategy on all three fronts and should seek (1) to tackle the fiscal overhang of unfunded obligations in their unreformed pension systems; (2) to meet the needs of the uninsured poor with income support, labor market programs, and crisis-response safety nets; and (3) to increase the financing and improve the quality of their health services.

**Political Economy of Reform**

Why have some countries been able to introduce innovative policies and improve the performance of their SP systems while others have not? A full analysis of the factors that determine the ability of any country to reform its SP policies is beyond the scope of this chapter (and of the book as a whole). Nevertheless, some useful insights emerge from the literature on the political economy of reform (Schmidt-Hebbel 2009; Stein and Tommasi 2008).
The emerging consensus in the literature is that much depends on the quality of the policy-making process, understood as the process of discussing, approving, and implementing public policies. The quality of the policy-making process depends on the set of political actors and the incentives that they face, which, in turn, are determined, at least in part, by institutions (such as congress, the party system, and the judiciary) and institutional rules governing elections. The countries that have been able to introduce successful reforms have in common a policy-making process in which political actors cooperate and have been able to reach and enforce agreements.

Cooperation is more likely to exist where (1) leadership is strong, (2) there are good “aggregators” to reduce the number of actors who have a direct influence on policy making, (3) the main actors plan for the long term and interact repeatedly with one other (giving them an incentive to respect agreements), (4) there are institutionalized arenas for political exchange, (5) there are credible institutions to enforce agreements and prevent corruption (such as an independent judiciary), and (6) there is a strong state bureaucracy to which the analysis and implementation of policies can be delegated.

The countries of LAC vary considerably in terms of these six dimensions, and it would be futile to attempt to suggest a prescriptive list of institutional reforms for the whole region. Nevertheless, the importance of communication and political exchange is clear, as is the role played by the line ministries in ensuring continuity in the design and implementation of policies. Reforms that are prepared behind closed doors have little chance of surviving the political process. When the rationale for reforms, their implementation arrangements and expected outcomes are widely discussed with the participation of nonpolitical actors (such as public personalities, academics, and independent consultants), they tend to succeed. This strategy was adopted in Chile during the recent second wave of reforms to the pensions and unemployment benefit systems. Building institutional capacity within the line ministries and ensuring that their executive leadership is independent of the legislative process can also improve the quality of the policy-making process at a relatively low cost.

Two further elements that affect the success of reforms are the policy issues discussed and the content of the proposed policies. Not surprisingly, reforms are more likely to be adopted if they address the concerns of a majority of the population. The present socioeconomic environment in LAC countries appears to be open to reforming SP systems, and there is a growing consensus about the need for more-equitable income distribution. There is also a general recognition that social SP can contribute to reversing the trend of income concentration. In addition, the financial crisis has shown that many SP systems in the region remain ill prepared to deal with the economic shocks that have affected large parts of the population. Therefore, there is a demand for reform; and basing reform on the goal of
more transparent and equitable redistribution could bring together different sides of the political spectrum.

It is also important to separate the discussion of objectives and the general principles that drive a given reform from the discussion about how it will be implemented. Social preferences are very important in reaching agreement on principles and objectives, but, at the implementation level, it is essential to base discussions on technical and economic analysis while being pragmatic about what works and does not. Universal models of how programs should be designed should be avoided. In this chapter (as well as in the book as a whole), the emphasis has been on clarifying the objectives of SP systems and outlining general principles and approaches to guide reforms that would extend the systems’ coverage and increase their effectiveness. The specific policies chosen to achieve those objectives, however, will depend on each country’s initial conditions and priorities.

The challenges presented by SP reform in the LAC region are, of course, complex. The problems laid out here will not be resolved overnight, and advances will sometimes be small. What is important, however, is that those small steps be taken in the context of a clear long-term vision of a more coherent, integrated, effective, and equitable SP system. The worst mistake would be to introduce piecemeal reforms in response to short-term concerns and minority interests, in the absence of any long-term strategic vision.

The political context in LAC today is marked by a growing consensus about the need to improve income distribution. This book has reviewed the lessons learned from the successes (and failures) of past reforms in SP to provide policy makers with workable strategies for a new phase of reforms to support that goal. The central idea is very simple. To turn the right to social protection into a universal reality, the countries of LAC need to expand access to effective SI to the whole workforce. This access can be achieved by opening up contributory plans to informal sector workers and making sure that subsidies to SI are transparent, equitable, and consistent with incentives to work and save. The countries of the region also need to provide a robust and well-targeted safety net for those who remain excluded.

Notes

1. These are called national health services (NHSs) in the case of health.
3. It would be eliminated unless the reform involves an increase in income taxes, which would also affect the tax wedge.
4. The justifications for public intervention in pensions and unemployment insurance are myopia (individuals are bad planners and do not save enough or do not buy enough insurance), liquidity constraints (some cannot afford savings
or insurance), and, in the case of unemployment insurance, correlated risks (as a result of which private systems might become insolvent in a recession). In the case of health, an additional justification arises from the potentially large positive externalities associated with a healthy population, such as the reduced risk of transmitting illness to others and increased economic productivity.

5. It is sometimes assumed that the idea of a social protection floor, as proposed in the 2009 response of United Nations agencies and international financial institutions to the economic and financial crisis, necessarily implies establishing noncontributory, tax-funded programs. But the alternative of developing a coherent set of contributory and noncontributory programs is equally consistent with the SP floor initiative. Either way, the goal is to ensure access to basic social services, alongside the empowerment and protection of the poor and vulnerable and access to decent work for all. The case for tax funding, as opposed to contributory approaches, should be made program by program, taking account of the opportunity cost of fiscal resources and of the scope for avoiding negative incentive effects. Of particular importance is the need to promote savings-based SI for those risks (such as old-age income support) that are not best insured through pooling (due to the high probability that all workers will eventually need such support).

6. Mesa-Lago (2008a, 2008b) provides detailed recommendations, similar to those suggested here, for how to incorporate informal workers.

7. See Sluchinsky (2009) for a discussion of new systems that can facilitate the registration of contributors and the collection of contributions.

8. Theoretically, one can argue that, given a welfare function, the mandate of the various SI programs should be endogenous, taking into account the extent of various market failures (externalities, myopia, and liquidity constraints). In practice, however, welfare functions remain elusive, and it is very difficult to assess the extent of the market failures. Therefore, the mandates of the SI programs tend to be the result of negotiations between different stakeholders.

9. The next section discusses the role played by redistributive programs in securing this minimum.

10. The part covered by the SI system may be 100 percent. However, some health insurance systems specify a copayment, which makes the insured person responsible for the first tranche of health costs in any period. The idea is that the insurance aims to limit health expenses to a given ceiling, not to cover them totally. There can also be user fees, which are levied per service, to reduce the problem of overconsumption associated with facing a zero marginal cost from consumption of health services.

11. As with other types of insurance, the rationale for this variation is that high-income individuals can diversify risks outside the public system.

12. In the case of health, given the positive externalities associated with the consumption of health services, a fixed share of the cost of the plan could be used to subsidize all individuals regardless of income.

13. This outcome would not be affected by whether systems are fully funded or pay-as-you-go. NHS systems and social health insurance systems are essentially pay-as-you-go, in the sense that current and future liabilities are not backed by financial assets, or are backed only partially.

14. It is also necessary to review benefit formulas, eligibility conditions, and financing arrangements for survivorship and disability pensions. These requirements are discussed in the third section.

15. A good proxy is the growth rate of the average covered wage (Robalino and Bodor 2009).

16. The accrual rate is the share of preretirement earnings that individuals receive as a pension for each year (12 months) of contributions.
17. For more detailed discussions about how to set benefit formulas and eligibility conditions in earnings-related systems with PAYG financing, see Robalino and Bodor (2009).

18. For a description of how this kind of system operates, see Holzmann and Palmer (2005).

19. In essence, the value of the pension (annuity) is given by \((\text{total contributions} + \text{accumulated interest})/\text{annuity factor}\). The annuity factor depends on life expectancy at the age of retirement.

20. Although this discussion refers mainly to social health insurance, similar principles could apply to NHS systems. Although by design there are no contributions involved, the system would keep track of expected unit costs by broad population groups and use these to plan budgets and allocate resources regionally. Thus, it would be necessary to modify how providers are paid. Instead of providers being paid based on historical budgets, their reimbursement would reflect real service production together with negotiated flat rates by procedure or diagnosis.


22. For a discussion of this point, see Perry et al. (2007) and Levy (2008).

23. The net benefit of an insurance program is defined as the expected value of the benefit minus the cost of the contribution. In noncontributory programs, by definition, net benefits equal gross benefits.

24. See Piggot, Robalino, and Jimenez-Martin (2009) for a discussion of this point.


26. In Chile, the recent reform has reduced this EMTR.

27. Some studies have attempted to estimate the semielasticity of self-employment with respect to a change in relative formal sector earnings; the ranges are between 0.03 (Maloney 1998) and 0.05 (Loayza and Rigolini 2006). See also the discussion in Perry et al. (2007, chap. 4).

28. See Poblete (2005). The results imply a decreasing tax as a function of income, which is consistent with the literature on optimal taxation. For a more detailed discussion of the issues, also see Valdés-Prieto (2008) and Piggot, Robalino, and Jimenez-Martin (2009).

29. The important general question “What is the best way to finance the budget?” is beyond the scope of this report. See Auerbach (2009) for an overview of the literature.

30. For a discussion of social pensions, see Jousten (2009).

31. For a more extensive discussion of this issue in the case of the design of social pensions, see Piggot, Robalino, and Jimenez-Martin (2009) and Jousten (2009).

32. See chapter 1 for a discussion of the conceptual framework within which policy makers should operate.

33. For a review of the impact of regulations on the minimum wage in LAC, see Cunningham (2007).

34. In technical parlance, wages are set below the marginal value product of the worker, leading to excess profits, and market imperfections prevent wages moving toward equilibrium levels.

35. This will happen so long as incomes of higher-earning workers are not increased as an indirect effect of the increase of the minimum wage. In labor markets where the minimum wage is used as a formal or informal indexing mechanism for wages of workers who earn above the minimum, this effect of reducing wage dispersion will not be observed.

36. The tax wedge is defined as \((\text{employers’ costs of labor} – \text{employees’ take-home pay})/\text{total labor costs}\) and is expressed as a share of total labor costs. Formally, we have \(tw = ((w + w\beta_l) – (w – w\beta_l – w\tau)/(w + w\beta_l)) = ((\beta_e + \beta_l + \tau)/(1 + \beta_e))\), where
$w$ is the gross wage, $\beta$ is the contribution rate paid by the employer ($e$) and the employee ($l$), and $\tau$ is the income tax.

37. Technically, this sensitivity is measured by labor demand and labor supply elasticities. These elasticities give the percentage change in the demand (supply) of labor as a percentage change in the cost of labor (take-home pay).

38. Outside the LAC region, there is evidence in Algeria and Morocco that more than 30 percent of firms in the manufacturing sector have productivity levels below the official cost of labor (World Bank 2007a, 2007b).

39. ALMPs such as public works are very relevant as responses to demand shocks but are not part of the long-term programs that are the focus of this section.

40. The concept of potential demand takes into account the fact that employers may not offer some high-quality jobs because they assume that finding the right skills will be difficult or expensive.

41. See Shimer and Werning (2006). The insight applies to risk-averse workers for whom, theoretically, after-tax reservation wages encode all of the relevant information about their welfare.

42. See Orszag et al. (1999). For other studies on the issue of integration, see Stiglitz and Yun (2008).

43. In PAYG systems with DB formulas, pension wealth is the present value of future pension payments (in other words, acquired rights to date). In PAYG systems with NDC formulas, it is simply the value of the notional balance in the individual account.

44. See Lindeman et al. (2006) for a more detailed discussion.

45. For a more extensive discussion, see also Perry et al. (2007, chap. 4).

46. International Labour Organization conventions include as basic benefits of the social security system the following: health insurance, unemployment insurance, old-age pensions, disability pensions, survivorship pensions, and maternity leave.

47. The predicted impact on the contribution densities of low-income workers is ambiguous.

48. Eventually, this option merges with the retirement benefit program.

49. A recent analysis of capacity in LAC countries to design and implement effective public policies is Stein and Tommasi (2008).

50. For a discussion of this point, see D’Elia and Cabezas (2008).

51. See Santiso (2006) for a discussion of the importance of pragmatism in the successful reforms in Brazil, Chile, and Mexico.

References


Doing Business Indicators (database). World Bank, Washington, DC.


Poblete, Dante. 2005. “Grado de focalización óptimo de las pensiones no contributivas en el Tercer Mundo.” Tesis de economia, Instituto de Economia PUC.


Glossary

**accrual rate**: Percentage of salary to be paid as a pension accrued for each year of contribution.

**active labor market program (ALMP)**: Initiative aimed at increasing the skills, employability, and long-run earning potential of participants through training, apprenticeships, job search assistance, subsidized job placements, and the like.

**contribution density**: Share of earnings in the active phase of life on which the individual contributes to some contributory pension system for old age.

**contributory program**: A plan under which the employee is required to pay part of the cost either for participating or for increased benefits, generally through payroll deduction.

**defined benefit (DB)**: A pension plan with a guarantee by the insurer or pension agency that a benefit based on a prescribed formula will be paid. Such plans can be fully funded or unfunded.

**defined contribution (DC)**: A pension plan in which the periodic contribution is prescribed and the benefit depends on the contribution plus the investment return on accumulated contributions.

**effective marginal tax rate (EMTR)**: In the context of government transfers, the percentage loss in the value of a subsidy resulting from an increase in total earnings or contributory benefits.

**fully funded plan**: A plan in which the accumulation of pension reserves totals 100 percent of the present value of all pension liabilities owed to current members.

**implicit pension debt**: The present value of pension rights (among contributors and retirees) accrued to date.

**informal**: Sector of the economy that includes a wide range of unregulated economic and extralegal activities, generally involving work for pay that does not come in the form of wages, and employment conditions that are not regulated by local, state, or national governments.
internal rate of return (IRR): In the context of pensions, the discount rate that equates the present value of contributions with the present value of pensions.

mandate: An official order from an authority to implement an action.

mandatory: Required or commanded by authority.

noncontributory program: A pension plan in which participating members or employees are not required to support the plan with their own contributions.

notional defined contribution (NDC): A scheme in which benefits are determined by the accumulation of contributions and notional, legislatively defined “interest.”

pay-as-you-go (PAYG): A method of financing in which current outlays on pension benefits are paid out of the current revenues from an earmarked payroll tax.

pay-as-you-go asset: In the case of pay-as-you-go pensions, the present value of future contributions net of the pension rights accruing from those contributions. In a solvent pay-as-you-go system, the pay-as-you-go asset plus any disposable financial assets should be equal to the implicit pension debt.

replacement rate: Ratio of pension benefits to average wage.

risk-pooling: Collection and management of financial resources in a way that spreads financial risks from an individual to all pool members.

social assistance (SA): Income-tested cash benefits targeted to poor households.

social insurance (SI): Contributory programs designed to help households insure themselves against sudden reductions in income. Types of social insurance include publicly provided or mandated insurance against unemployment, old age (pensions), disability, the death of the main provider, and sickness.

social protection (SP): Set of public interventions aimed at supporting the poorer and more vulnerable members of society, as well as helping individuals, families, and communities manage risk. Social protection includes safety nets (social assistance), social insurance, labor market policies, social funds, and social services.

social safety net: Noncontributory transfer programs targeted in some manner toward the poor and those vulnerable to poverty and shocks.

take-up rate: The proportion of those entitled to a benefit who actually claims it.
**targeted program**: Initiative for which a special effort is made to focus resources on those most in need of them.

**tax wedge**: Difference between the cost of labor to the firm and the worker’s net remuneration or take-home pay.

**unemployment individual saving accounts (UISAs)**: Unemployment benefit system in which individuals (and employers) are mandated to contribute to funded individual accounts. Savings accumulated in the accounts can be withdrawn in the case of job loss.

**vesting period**: The number of years or months of contributions necessary to qualify (vest) for pension benefits.

**voluntary**: Nonmandatory.

**zero pillar**: Noncontributory social assistance financed by the state.
ECO-AUDIT

Environmental Benefits Statement

The World Bank is committed to preserving endangered forests and natural resources. The Office of the Publisher has chosen to print *From Right to Reality: Incentives, Labor Markets, and the Challenge of Universal Social Protection in Latin America and the Caribbean* on recycled paper with 50 percent postconsumer fiber in accordance with the recommended standards for paper usage set by the Green Press Initiative, a nonprofit program supporting publishers in using fiber that is not sourced from endangered forests. For more information, visit www.greenpressinitiative.org.

Saved:
• 6 trees
• 3 million BTUs of total energy
• 555 pounds of net greenhouse gases
• 2,502 gallons of waste water
• 159 pounds of solid waste
Inequality and entrenched poverty has been decreasing in countries of Latin America and the Caribbean, due in significant part to expansion of social protection programs within the region. Innovations such as well-targeted conditional cash transfer programs and noncontributory pensions or health insurance systems have been adopted by several countries. Yet several challenges remain. The majority of informal sector workers lack access to social protection; programs tend to be fragmented and operate with little or no coordination; and redistributive arrangements are nontransparent and can distort labor markets by inducing informality, lowering labor participation, or producing longer unemployment spells.

From Right to Reality: Incentives, Labor Markets, and the Challenge of Universal Social Protection in Latin America and the Caribbean addresses these challenges in a thorough yet accessible manner. Building on careful, detailed analysis of a wealth of data, this book takes stock of current social protection systems in the Latin America and the Caribbean region, highlighting their interaction with labor markets. The book presents an in-depth assessment of the main social protection programs including pensions, health, unemployment insurance, active labor market interventions, and safety net transfers. A central theme is that a well-functioning social protection system must take into account both the realities of labor markets, including high levels of informal sector employment where governments are unable to impose compulsory social insurance, and the effects of policies on the behavior of their beneficiaries, employers, and service providers. Of interest to policy makers, academics, and practitioners, From Right to Reality presents practical recommendations to expand the coverage of social protection programs, improve their design, and create conditions that enable more and better jobs.

“Welcome realism and breadth, emphasizing that poverty relief, insurance, and consumption smoothing all matter; that the system must be effective in terms of the level and coverage of benefits; and that close attention needs to be paid to the incentive effects of benefits and the way they are financed.”

— Nicholas Barr, Professor of Public Economics, London School of Economics and Political Science

“This stimulating book calls for rethinking how savings, risk-pooling, and redistributive arrangements are designed and coordinated within Bismarckian social insurance systems. The authors show convincingly that current programs are not well adapted to labor markets with large informal sectors. They make a compelling case to move to systems that link individual contributions to benefits. They rely on explicit redistributive arrangements to protect low income workers and their families who would be financed through general revenues. A strong contribution to the debate and a must-read for researchers and policy makers.”

— Klaus F. Zimmermann, Director, Institute for the Study of Labor (IZA)