# FALLING INEQUALITY IN LATIN AMERICA

POLICY CHANGES AND LESSONS

# Edited by Giovanni Andrea Cornia

UNU-WIDER STUDIES IN DEVELOPMENT ECONOMICS

# Falling Inequality in Latin America

UNU World Institute for Development Economics Research (UNU-WIDER) was established by the United Nations University as its first research and training centre and started work in Helsinki, Finland, in 1985. The purpose of the institute is to undertake applied research and policy analysis on structural changes affecting developing and transitional economies, to provide a forum for the advocacy of policies leading to robust, equitable, and environmentally sustainable growth, and to promote capacity strengthening and training in the field of economic and social policy making. Its work is carried out by staff researchers and visiting scholars in Helsinki and via networks of collaborating scholars and institutions around the world.

*United Nations University World Institute for Development Economics Research* (UNU-WIDER)

Katajanokanlaituri 6 B, 00160 Helsinki, Finland www.wider.unu.edu

# Falling Inequality in Latin America

# Policy Changes and Lessons

Edited by Giovanni Andrea Cornia

A study prepared by the United Nations University World Institute for Development Economics Research (UNU-WIDER)



#### **OXFORD**

UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP, United Kingdom

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and in certain other countries

© United Nations University – World Institute for Development Economics Research (UNU-WIDER) 2014

The moral rights of the editor and authors have been asserted

First Edition published in 2014

Impression: 1

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by licence or under terms agreed with the appropriate reprographics rights organization. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above

You must not circulate this work in any other form and you must impose this same condition on any acquirer

Published in the United States of America by Oxford University Press 198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data Data available

Library of Congress Control Number: 2013951375

ISBN 978-0-19-870180-4

Printed and bound in Great Britain by CPI Group (UK) Ltd, Croydon, CRO 4YY

Links to third party websites are provided by Oxford in good faith and for information only. Oxford disclaims any responsibility for the materials contained in any third party website referenced in this work.

#### **Foreword**

This volume addresses a major issue in regional economic development with profound implications for many developing regions and possibly also for the beleaguered OECD countries mired in a long-lasting financial crisis and economic stagnation. For at least the last quarter of the twentieth century, Latin America suffered from very low rates of growth, high and rising inequality, and frequent financial and currency crises. However, since the turn of the century, the region's growth rates have improved, income inequality declined to the level of the early 1980s, poverty fallen, and macroeconomic stability improved, all this in parallel with the spread of centre-left political regimes in three-quarters of the countries of the region.

This decline in inequality has taken many by surprise. Indeed, the region has for long been a symbol of a deeply entrenched unequal distribution of assets, incomes, and opportunities, limited or no state redistribution, and a deeply embedded authoritarianism enforcing an unjust status quo. The recent Latin American experience is also particularly valuable as the inequality was reduced under open-economy conditions and in a period of intensifying global integration, which has often been considered by many as a cause of rising inequality.

In this sense, however imperfect, the Latin American experience in the aftermath of its redemocratization may be of interest to other developing countries completing their transition to the market and liberal democracy (such as some of the former socialist countries of Europe), facing a political transition (such as those affected by the Arab Spring, Myanmar, and some countries in sub-Saharan Africa), or recording rises in income inequality and social tensions in spite of rapid economic growth.

The causes of the recent higher economic growth in the region are clear enough and include the rebound from the severe regional crisis of 2001–2, improvement in the international environment (in terms of commodity prices, capital inflows, and migrant remittances), but also better domestic policies in the field of macroeconomic stability, exchange rates, taxation, financial regulation, minimum wages, human capital formation, social assistance, and deeper intra-regional trade integration.

#### **Foreword**

Until recently there was not much agreement on the drivers of the decline in inequality, which was alternatively attributed to changes in the supply/ demand of skilled workers, improvements in terms of trade (though no decline in inequality was observed on the occasion of prior commodity bonanzas), the spread of social assistance schemes, or 'luck'. In this respect, the volume offers the first scholarly and systematic exploration of this unexpected change on the basis of three pairs of comparative case studies and eight policy chapters that point to the slow emergence of a 'new policy model' in the aftermath of the social-democratization of many countries of the region. In view of the fact that income inequality has been rising and is currently rising in many parts of the world, a good understanding of the Latin American experience and policies over the 2000s, including the different approaches followed within the region, is a topic that will attract a lot of attention. As such this volume is of interest not only to scholars and students of development economics but also to policy makers and people interested in the understanding of inequality dynamics in developing nations. I thus strongly recommend this volume to all of them as well as to the general reader interested in development issues. I would also like to take this opportunity to convey my sincere thanks to the authors of this volume, including the many distinguished scholars working in the field of development economics.

> Finn Tarp UNU-WIDER Director Helsinki, October 2013

#### Acknowledgements

This volume would not have seen the light of the day without the collective effort of a large array of people working together in many ways, and without the inputs of many scholars. To start with, I would like to thank Juan Carlos Moreno Brid who as early as the mid-late 2000s drew my attention to the deep economic and political changes which were emerging in Latin America. My most sincere thanks go to all contributors to this volume for the time they dedicated with scholarly application to this undertaking, for their ground-breaking analyses, and for the patience shown in revising their chapters over and over again. Many thanks also to those participants at the UNU-WIDER 25th anniversary held in Helsinki in May 2010—including Tony Addison, Roberto Frenkel, Nora Lustig, José Antonio Ocampo, Andres Solimano, and Finn Tarp—who took part in the discussion on the framing of the main research hypotheses which have inspired this volume.

Heartfelt thanks also to all the participants of the two project research workshops held in New York (December 2010) and Buenos Aires (September 2011). These workshops offered the opportunity to provide comments and frank criticism on the preliminary drafts of the various chapters, and on the articulation of the project as a whole. The New York workshop strongly benefited from logistical support from the UNU office in New York and UNDESA. The Buenos Aires workshop also offered the opportunity to organize a well-attended UNU-WIDER-initiated roundtable held at the University of Buenos Aires with the co-sponsoring of CEDLAS (University of La Plata) and CEDES (Buenos Aires). Saúl Keifman and Cecilia Arena from the University of Buenos Aires and Annett Victorero of UNU-WIDER are especially to be thanked for the smooth organization of that event. Tony Addison also provided important inputs to the organization of the roundtable and helped substantially with the management of the Buenos Aires scientific workshop. Several colleagues from CEPAL, UNDP, the World Bank, and the New School University need to be thanked for sharing some of their research material with me, in particular Luis Beccaria, Luis Felipe López-Calva, Michael Cohen, Francisco Ferreira, Martin Hopenheim, and Ricardo Martner. The formulation of the working hypotheses of the project benefited also from very useful comments received from scholars and policy makers attending the conference organized in Pocantico by the New School University and the Rockefeller Foundation in November 2010. I would also like to acknowledge the hospitality of Nuffield College of the Oxford University during the 2010 Michaelmas term. During this period, I was able to set the project under way, formalize in detail the research hypotheses on which this study is based, and present and discuss them in various seminars held at the college itself, at the Latin American Centre of the University of Oxford, and at Queen Elizabeth House. In this regard, I would like to acknowledge the help of Diego-Sanchez Ancochea, Nancy Bermeo, Edmund Valpy Fitzgerald, Gwendolyn Sasse, and Frances Stewart for organizing and hosting such presentations which helped me revise some of my initial research ideas. While at Nuffield College I also had useful discussions on some of the topics of this volume with Tony Atkinson and Susan Stokes, who kindly shared with me some of their research ideas on top incomes and the politics of inequality.

Sincere thanks go to two anonymous referees whose detailed, constructive, and supportive comments helped to revise and improve this volume. The volume has also substantially benefited from an in-house refereeing process, by which all drafts were commented on in detail by other members of the research team.

At UNU-WIDER, steady support and guidance to the project was provided by the top echelon of the organization, in particular Finn Tarp and Tony Addison. Paul Silfvenius and Janis Vehmann-Kreula smoothly handled all logistical and organizational aspects of the project, and Lisa Winkler gave a much-appreciated helping hand in the final stages with the manuscript proofs. Lorraine Telfer-Taivainen played, with her usual efficiency and smile, a key role in the publication of the working papers that emanated from the project and in managing the refereeing process and contacts with Oxford University Press. Last but not least, I would also like to express my deeply heartfelt gratitude to Liisa Roponen for her expertise, patience, and cheerfulness in editing and formatting the working papers that emanated from the project and the volume chapters. Without her steady work this volume would be in a much worse shape than it is. I am deeply indebted to her for her excellent, tireless, patient, and always cheerful support.

Giovanni Andrea Cornia University of Florence October 2013

## Contents

List of Figures	X1
List of Tables	XV
Acronyms and Abbreviations	xxi
Notes on Contributors	xxiii
Part I. Inequality Changes and the Surfacing of New Policy Approaches	
1. Recent Distributive Changes in Latin America: An Overview <i>Giovanni Andrea Cornia</i>	3
<ol> <li>Inequality Trends and Their Determinants: Latin America over the Period 1990–2010 Giovanni Andrea Cornia</li> </ol>	23
3. The Politics of Inequality and Redistribution in Latin America's Post-Adjustment Era Kenneth M. Roberts	49
Part II. Recent Inequality Changes in Six Representative Latin American Countries	
4. Redistribution without Structural Change in Ecuador: Rising and Falling Income Inequality in the 1990s and 2000 <i>Juan Ponce and Rob Vos</i>	73
5. Policy Regimes, Inequality, Poverty, and Growth: The Chilean Experience, 1973–2010  Dante Contreras and Ricardo Ffrench-Davis	94
6. Uruguay's Income Inequality and Political Regimes over the Period 1981–2010 Verónica Amarante, Marco Colafranceschi, and Andrea Vigorito	118

#### Contents

7.	The Rise and Fall of Income Inequality in Mexico, 1989–2010 Raymundo Campos-Vazquez, Gerardo Esquivel, and Nora Lustig	140
8.	Social Policies or Private Solidarity? The Equalizing Role of Migration and Remittances in El Salvador Carlos Acevedo and Maynor Cabrera	164
9.	The Dynamics of Inequality Change in a Highly Dualistic Economy Stephan Klasen, Thomas Otter, and Carlos Villalobos Barría	188
Par	t III. Main Policy Changes and Inequality During the Last Dec	ade
10.	Macroeconomic Policies, Growth, Employment, Poverty, and Inequality in Latin America Mario Damill and Roberto Frenkel	213
11.	Trade and Income Distribution in Latin America: Is There Anything New to Say? Miguel Székely and Claudia Sámano-Robles	234
12.	Changes in Labour Market Conditions and Policies, and Their Impact on Wage Inequality During the Last Decade Saúl N. Keifman and Roxana Maurizio	251
13.	What Can Latin America Learn from China's Labour Market Reforms? <i>Richard B. Freeman</i>	274
14.	Tax Policy and Income Distribution During the Last Decade Giovanni Andrea Cornia, Juan Carlos Gómez-Sabaini, and Bruno Martorano	295
15.	Inequality in Education: Evidence for Latin America Guillermo Cruces, Carolina García Domench, and Leonardo Gasparini	318
16.	On the Distributional Implications of Social Protection Reforms in Latin America Armando Barrientos	340
Inde	ex	361

# **List of Figures**

1.1	household income per capita, early 1980s–2010	5
2.1	Changes in the Gini coefficient of income distribution by type	
	of economic structure, 1990–2002 and 2002–2009	27
3.1	Support for privatizations and a market economy, 1998–2007	58
3.2	Public opinion towards income distribution, 1997–2007, Latin America	59
3.3	Support for state and private control of economic activities, 1995–2008	60
4.1	National, urban, and rural inequality in per capita household incomes, 1990–2010, Ecuador	76
4.2	Trends in income inequality by income source	78
4.3	Urban poverty, real wages and real exchange rate, 1990–2010, Ecuador	85
4.4	Rural poverty, real incomes and relative prices, 2001–2010, Ecuador	88
5.1	Income distribution in Santiago, 1960–2009 (Q5/Q1, three-year moving average)	95
5.2	National unemployment rate, 1960–2010, Chile	97
5.3	Gini index by source, 1957–2010, Chile	98
5.4	Poverty evolution, 1987–2009, Chile (% of the population)	103
5.5	Gini index by income source, 1990–2009, Chile	106
5.6	Relative contribution to inequality by source, 1990–2009, Chile	107
5.7	Gini index, 1990–2009, Chile	107
6.1	Economic growth and income inequality, urban areas,	
	1981–2012, Uruguay	121
6.2	Growth incidence curves, urban areas, 1981–2010, Uruguay	122
6.3	Distribution of income by source and per capita decile, urban areas, 1981, 1984, 1989, 2004, and 2010, Uruguay	123
6.4	Shapley inequality decomposition by income source per capita household income, urban areas, 1981–2010, Uruguay, absolute	
	contributions to Theil's index	125

#### **List of Figures**

7.1	Evolution of the Gini coefficient, 1989–2010, Mexico	141
7.2	Decomposition of overall inequality, 1994, 2000, 2004, 2006,	
	and 2010, Mexico	144
7.3	Relative returns and relative supply, 1989–2010, Mexico	146
7.4	Decomposition of differences in the distribution of earnings, 1989–2010, Mexico	149
7.5	Relative returns and relative supply, 1989–2010, Mexico (high school and more vs. secondary or less)	151
7.6	Real minimum wage and unionization, 1988–2010, Mexico	152
7.7	Wage distribution with respect to median wage, 1989 and 2010, Mexico	153
8.1	Evolution of Gini coefficient, 1994–2009, El Salvador	176
8.2	Gini coefficient of household income per capita with and without remittances, 2000–2009, El Salvador	170
9.1	Average labour earnings in the tradable and non-tradable sectors, 1991–2007, Honduras	191
9.2	Growth incidence curves in the tradable and non-tradable sectors in rural areas, 1991–2007, Honduras	192
9.3	Index of remittances across quantiles of the total per capita household income, 1997–2007, Honduras	198
9.4	Structure and returns to education, 1991–2007, Honduras	201
9.5	Growth incidence curves for the inter-sectoral earnings gap in rural areas, 1991–2007, Honduras	205
10.1a	Real bilateral exchange rates against the US dollar, 1990–2010, South America	216
10.1b	Real bilateral exchange rates against the US dollar, 1990–2010, Central America	217
10.2	Primary fiscal results as percentage of GDP by subregions, 1990–2009 (non-financial public sector, average)	218
10.3	Actual and forecasted 2009 GDP rates of growth for Latin American countries (per cent)	226
11.1	Trade flows and average tariffs in Latin America, 1980–2010	235
11.2	Evolution of variables characterizing the stock, use, and market price of human capital in Latin America, 1980–2009	241
11.3	Evolution of variables characterizing the stock, use, and market	
	price of physical capital in Latin America, 1980–2009	242
11.4	Evolution of variables characterizing the stock, use, and market price of land assets in Latin America, 1980–2009	243

11.5	Decomposition of the change in inequality in Latin America between the 1980s and the 1990s and between the 1990s and the 2000s	248
12.1	Annual GDP growth and unemployment rates (per cent), Latin America, 2003–2009	253
12.2	Mean real wages for Latin American countries, 1990–2009	256
12.3	Gini coefficients of hourly wages around 2000 and 2010, Latin America	257
12.4	Kernel density functions hourly labour income, Argentina and Brazil	258
12.5	Minimum wages in PPP-adjusted US\$ and per cent of per capita GDP, 2010	263
12.6	Growth incidence curves of real hourly wages in the 2000s	267
14.1	Trend in the average tax/GDP ratio, Latin America, 1973–2009	296
14.2	Changes in people's perception of economic performance, country progress, and fairness in income distribution during the late 1990s,	
	early 2000s, and late 2000s, Latin America	298
14.3	Fiscal revenues originating from primary commodities (% of GDP)	301
14.4	Fiscal indicators (% of GDP), 1990–2009, Latin America	306
15.1	Changes over time in the average years of education for selected Latin American countries, adults aged 25–65 years	322
15.2	Change in education inequality Gini of years of education and years gap between Q5 and Q1, adults aged 25–65 years in Latin American	
	countries	323
15.3	Effect of change in distribution of education on earnings inequality (Gini index), results from microeconometric decompositions for	
	selected Latin American countries	329
15.4	Skilled–unskilled wage premium and relative supply over time, net of country effects, 1989–2009, 16 countries, Latin America	330
16.1	Pension reform in Latin America	343
16.2	The reach of human development conditional transfers, 2000s, Latin America	347
16.3	Difference in difference estimates of the impact of Progresa on poverty	349
16.4	Social protection: financing requirement and transfers, 2008–2009, Brazil	352
	· ' '	

## **List of Tables**

1.1	six country case studies of the volume, 1990s and 2000s	9
1.2	Inequality changes during the 2000s by ideological profile of governing parties	15
1.3	Net tertiary enrolment rates, total and by income quintiles, 1990–2010	20
2.1	Trends in survey-based Gini coefficients of the distribution of household disposable income per capita	26
2.2	Trend in the Gini coefficient of the distribution of household disposable income per capita, 1980–2000 and 2000–2010	28
2.3	Labour market trends for Latin America as a whole, 1990–2009	32
2.4	Trend in the index of real minimum wages $(2000 = 100)$	35
2.5	Regression results using three different estimators, 18 Latin American countries for 1990–2009	37
2.6	Alternative regression specifications to capture subregional effects on inequality in 18 Latin American countries for 1990–2009	40
3.1	Changes in trade union density in Latin America (trade union members as a percentage of the total labour force, rank-ordered by peak level)	53
3.2	Political and economic trends in Latin America (selected countries), 1980–2010	63
4.1	Per capita household income distribution by deciles (income shares in %), 1990–2010, Ecuador	77
4.2	Distribution of Ecuador's cash transfer programme by deciles, %, 2000–2010, Ecuador	80
4.3	Distribution of worker remittances from abroad by decile, % (shares of total remittance incomes by income deciles of total	
	per capita income distribution), 2000–2010, Ecuador	81
4.4	Decomposition of the Gini coefficient and the marginal effect of each source of income, 1990–2010, Ecuador	83
4.5	Skill-based wage premium by gender, 1990–2010, Ecuador	
	(Beta coefficients estimated using Mincerian wage equation)	91

#### **List of Tables**

5.1	Wages, family allowances, and public social expenditure, 1970–2010, Chile (real indexes, 1989 = 100)	96
5.2	Macro and social indicators, 1974–2010, Chile (average annual growth rates, $\%)$	104
5.3	Participation of the income sources in total household income, 1990–2009, Chile (%)	105
5.4	Relative contribution of skilled and unskilled labour to inequality, 1990–2009, Chile	108
5.5	Relative contribution of skilled and unskilled labour to inequality by gender, 1990–2009, Chile	109
6.1	Main features of the policy regimes in Uruguay in 1981–2010	120
6.2	Shapley decomposition results: non-contributive public transfers per capita household income, 2001–2009, Uruguay, absolute contributions to Theil's index	125
6.3	Average years of schooling by quintile of per capita household income, 1981–2010, Uruguay	126
6.4	Pre- and post-tax returns to education, all workers, 2006, 2008, and 2010, Uruguay	128
6.5	Pre- and post-tax hourly labour earnings inequality indexes, 2006, 2008, and 2010, Uruguay	129
6.6	Labour earnings IPRF tax rates, 2010, Uruguay	130
6.7	Coverage and progressivity of tax and transfers, 2010, Uruguay	132
6.8	Distributive impact of the income tax and transfers total, 2010, Uruguay	132
6.9	Simulation results of different income tax modification scenarios on hourly labour earnings inequality, total, Uruguay	133
6.10	Microsimulation results on the distributional impact of the different policy scenarios, Uruguay	134
6.11	Simulation scenarios of income gains and losses by income decile, Uruguay	135
6.12	Simulated scenarios of changes in tax revenue and public spending, Uruguay	135
A6.1	Income distribution indicators, urban areas, 1981–2010, Uruguay	137
7.1	Effects of relative labour supply on relative wage, 1989–2010, Mexico	155
7.2	The impact of cash transfers on inequality and poverty, 1996, 2000, and 2010, Mexico	156
7.3	Policy regimes, 1989–2010, Mexico	159

8.1	Remittances, services, workers, and population, 1989–1999, El Salvador	166
8.2	Macroeconomic importance of remittances, 1991–2010, El Salvador	167
8.3	Percentage of households in poverty, 1991–2009, El Salvador	171
8.4	Average wage by level of education and skill premium 1991–1999, El Salvador	174
8.5	Decomposition of Gini coefficient by sources of income, 1994–1999, El Salvador	175
8.6	Effects on inequality of income structure in 1991, El Salvador	175
8.7	Income distribution by deciles, 2000–2009, El Savador	178
8.8	Decomposition of the variation in the FTG index into growth and distribution, El Salvador	178
8.9	Income shares in total income, by source, 2000–2009, El Salvador	180
8.10	Concentration coefficients for different income components, 2000–2009, El Salvador	180
8.11	Results from the income decomposition exercise, El Salvador	181
8.12	Skill premium by region and gender, and urban–rural labour income ratio, 2000–2009, El Salvador	184
8.13	Comparison of remittances, social expenditures, and conditional cash transfers, 2001–2010, El Salvador	185
9.1	Relevant macroeconomic indicators for selected periods, 1991–2007, averages in Honduras	190
9.2	Changes in the educational structure of the labour force, 1991–2007, Honduras	194
9.3	Structures of education for migrants, urban and rural residents, 1994–99, Honduras	194
9.4	Percentage contribution of the proximate determinants to inequality changes of the household per capita income, 1991–2007, Honduras	196
9.5	Basic data on the conditional cash transfer (PRAF) programme, selected years, Honduras	199
9.6	Gini coefficient changes of monthly earnings distribution, Honduras	200
9.7	Decomposition of the changes in the Gini coefficient, labour earnings, selected periods, Honduras	202
9.8	The 'macroeconomic' (between sector) earnings-gap effect on labour income inequality changes (using Ginis), 1991–2007, Honduras	206
A9.1	Gini coefficient for household per capita income and monthly labour earnings, 1991–2007, Honduras	208

#### **List of Tables**

10.1	OLS estimate of the impact of the 2009 crisis on growth performance, selected countries	224
11.1	Trade flows and average tariffs, 1980–2009, Latin America	236
11.2	Basic regression model of the effect of trade on income distribution, 1980–2009, Latin America	244
11.3	Regression model of the effect of trade on income distribution with interaction effects, 1980–2009, Latin America	246
11.4	Estimates with groups of countries, 1980–2009, Latin America	247
12.1	Household per capita income by source, selected Latin American countries	260
12.2	Decompositions of the variations in Gini indexes by sources of income, selected Latin American countries, various years	261
12.3	Impact of minimum wages on the variances of log wages, 2003–2010, Argentina	269
13.1	Shares of informal employment in non-agricultural employment in Latin America and China, selected years	276
13.2	Gini coefficients and rankings of labour market and related indicators of labour-related practices for selected countries and years	278
13.3	Enrolments and degrees in tertiary education in USA, China, and Latin America, 2007	279
13.4	Percentage of workers covered by contracts and with social insurance, and percentage reporting rights violations before and after the Contract Labour Law, China, selected years	286
14.1	Revenue loss as a share of GDP due to tax exemptions and upper income bracket as shares of GDP per capita, 1985, 2001, and 2009, selected Latin American countries	299
14.0		299
14.2	Tax collection in simplified tax regimes, selected Latin American countries and years	299
14.3	Administrative structure of Latin American countries, 2008–2009	300
14.4	Tax revenue/GDP (including social security contributions) by Latin American country groups, 1980–2009	303
14.5	Tax pressure and structure (as a share of GDP) in three Latin American country groups, selected years	304
14.6	Regression results on 18 Latin American countries, 1990–2008	307
14.7	Reynolds-Smolensky index (in Gini points) for Latin American	300

14.8	Effective tax/GDP, revenue effort index, and additional revenue that could be raised to reach the potential tax/GDP ratio, averages for 1999–2007, Latin America	311
14.9	Regression analysis of the determinants of the Reynolds-Smolensky index, 1990–2000s, Latin America	313
14.10	Indexes of efficiency of tax administrations, 2009, Latin America	314
15.1	Alternative education inequality indicators, years of education, adults aged 25–65 years, 1992–2009, Uruguay	320
15.2	Years of education by gender and income quintile and inequality in education, adults aged 25–65 years, selected Latin American countries and years	322
15.3	Changes in average years of education and in education inequality measures, adults aged 25–65 years, selected Latin American countries and years	324
15.4	Coefficients of model for earnings inequality, dependent variable: Gini coefficient for the distribution of earnings for Latin America, early 1980s to 2010	327
15.5	Change in net enrolment rates and gap Q5–Q1 by decades, selected Latin American countries and years	333
15.6	Public spending in education (in US\$ PPP) per child aged 0–14 years, 1990–2010, selected Latin American countries	334
15.7	Share of public spending in education in GDP, 1990–2010, selected Latin American countries	336
15.8	Decomposition in the change of public spending in education per child aged 0–14 years, 1990–2010, selected Latin American	
	countries	337
16.1	Estimated impact of Bolsa Família on inequality, 2001–2009, Brazil	351

#### **Acronyms and Abbreviations**

3SLS 3-stages least squares

ACFTU All China Federation of Trade Unions

AD Acción Democrática (Venezuela)

AFAM Asignaciones Familiares Plan de Equidad (system of family allow-

ances, Uruguay)

AFPs private pension fund management companies

BDH Bono de Desarrollo Humano (conditional cash transfer programme,

Ecuador)

CAFTA Central American Free Trade Agreement

CCTs conditional cash transfers

CEDLAS Centre for Distributive Labour and Social Studies at the Universidad

Nacional de La Plata (Argentina)

CIT corporate income tax

EAP economically active population

ECH Encuestas Continuas de Hogares (household surveys, Uruguay)

EHPM Encuestas de Hogares de Propósitos Múltiples (Multiple Purpose

Household Surveys of El Salvador)

EIS employment in the informal sector

EMCs emerging-market countries

ENIGH Encuesta Nacional de Ingresos y Gastos de los Hogares (National Survey

of Household Incomes and Expenditures, Mexico)

ENOE National Survey of Labour and Employment (Mexico)

EPFs household budget surveys FDI foreign direct investments

FEES social and economic stabilization fund (Chile)

FMLN Frente Farabundo Martí para Liberación Nacional (El Salvador)

FONASA Chile's national health fund

GATT General Agreement on Tariffs and Trade

GCR Global Competitiveness Report by the World Economic Forum

GDP gross domestic product GICs growth incidence curves

#### **Acronyms and Abbreviations**

IASS Impuesto de Asistencia a la Seguridad Social (social security assistance

tax, Uruguay)

ID Izquierda Democrática (Ecuador)

IE informal employment

ILO International Labour Organization
INE Chile's National Bureau of Statistics

INEC Instituto Nacional de Estadística y Censos (Ecuador's National Statistical

Office that collects the National Employment, Unemployment, and

Underemployment Survey data (ENEMDU))

IRPF Impuesto a la Renta de las Personas Físicas (dual personal income tax

system, Uruguay)

IS informal sector

ISI import substitution industrialization
LAC Latin America and the Caribbean

LCSPP LAC Poverty Reduction and Gender Sector of the World Bank

LSDV least square dummy variable

MNR Movimiento Nacionalista Revolucionario (Bolivia)

MST Brazil's Landless Workers Movement NAFTA North American Free Trade Agreement

NER nominal exchange rate

OB Oaxaca-Blinder type of decomposition

PAN Partido Acción Nacional (Mexico)

PANES Plan Nacional de Atención a la Emergencia Social (Uruguay)

PCHI per capita household income

PEM minimum employment programme (Chile)

PIT personal income tax

PLN Partido de Liberación Nacional (Costa Rica)

POHJ employment programme for household heads (Chile) PRAF conditional cash transfer programme (Honduras)

PRI Partido Revolucionario Institucional (Mexico)

PT Partido dos Trabalhadores (Brazil)

RER real exchange rate

RIF re-centred influence function SBTC skill-biased technical change

SCRER stable and competitive real exchange rate

SEDLAC Socioeconomic Database for Latin America and the Caribbean

SMEs small and medium-sized enterprises

ToT terms of trade VAT value added tax

#### **Notes on Contributors**

Carlos Acevedo is the president of the Central Bank of El Salvador. Previously, he worked for the United Nations Development Programme (UNDP). He holds an MA in Economics from Duke University and a PhD from Vanderbilt University. He has worked in the economic development field, and particularly on fiscal policy, trade policy, poverty and income distribution, economic growth, and competitiveness issues.

**Verónica Amarante** is an economist at the Social Development Division in ECLAC, Santiago de Chile. Prior to joining ECLAC in 2012, she worked at the Instituto de Economía at the Universidad de la República in Uruguay. Her main research areas are inequality, poverty, labour markets, and social policies.

**Armando Barrientos** is professor and research director at the Brooks World Poverty Institute at the University of Manchester in the UK. His research interests focus on the linkages existing between welfare programmes and labour markets in developing countries, and on policies addressing poverty, vulnerability, and population ageing.

Maynor Cabrera is senior economist at the Instituto Centroamericano de Estudios Fiscales (ICEFI). His research focuses on tax policy, macroeconomics, and development. He also worked as economic advisor to UNDP and the Secretary of Planning. He has worked as a consultant for ECLAC, UNDP, and IDB and as a lecturer in the University Rafael Landivar. He is an economist at the University San Carlos and holds an MA in Economics from the Catholic University of Chile.

**Raymundo Campos-Vazquez** is a professor at the Center of Economic Studies in El Colegio de Mexico. He has a PhD in economics from the University of California, Berkeley, and his main areas of interest are labour economics and applied microeconomics.

Marco Colafranceschi works a research assistant at the Instituto de Economia, Facultad de Ciencias Económicas y de Administración, Universidad de la República (Uruguay). His main areas of interest are income inequality, poverty, and macroeconomics.

**Dante Contreras** is an economist at the Universidad de Chile. He has also worked at the World Bank and UNDP. His main areas of interest are poverty, inequality, economics of education, and programme evaluation.

**Giovanni Andrea Cornia** has taught economics at the University of Florence since 2000. Prior to that he was the director of UNU-WIDER and held research positions

in several UN agencies. His main areas of interest are macroeconomics, inequality, poverty, political economy, and child wellbeing. Since 2010 he has been a member of the Committee for Development Policies of the United Nations.

Guillermo Cruces is a researcher at the Center for Distributive, Labor and Social Studies at the Universidad Nacional de La Plata, Argentina. His main areas of interest are poverty, inequality, labour markets, and social protection in Latin America and the Caribbean.

Mario Damill is a researcher in economics at CEDES (Centro de Estudios de Estado y Sociedad) and Conicet (Consejo Nacional de Investigaciones Científicas y Técnicas) in Buenos Aires. He is also a teacher of macroeconomics at the University of Buenos Aires, with main areas of interest in macroeconomic policies, financial crises, financial development, and Latin American economies.

**Carolina García Domench** is an economist and researcher at the Center for Distributive, Labor and Social Studies (CEDLAS-UNLP) in Argentina. Her areas of research interest include inequality and poverty, and labour markets.

**Gerardo Esquivel** is professor of economics at El Colegio de México in Mexico City. He has a PhD in economics from Harvard University and was a Tinker Fellow at the Harris School of Public Policy of the University of Chicago in 2010–11. He has written in areas related to economic growth and economic development.

**Ricardo Ffrench-Davis** is professor of economics at the University of Chile. He has been awarded the Chilean National Prize for the Humanities and Social Sciences. His most recent book is *Economic Reforms in Chile: From Dictatorship to Democracy* (2010).

**Richard B. Freeman** is a professor of economics at Harvard University, head of the Science and Engineering Work Force Project at NBER, and senior economist at the Centre for Economic Performance, London School of Economics. He works on the economics of science, trade unions, labour markets and institutions around the world, and shared capitalism.

Roberto Frenkel is principal research associate at CEDES and honorary professor at the University of Buenos Aires. He has published numerous books and articles on macroeconomic theory and policy, money and finance, inflation and stabilization policies, and labour markets and income distribution, with special focus on Argentina and Latin America.

**Leonardo Gasparini** (PhD in economics, Princeton) is the founder and director of the Center for Distributional, Labor and Social Studies (CEDLAS) at the Universidad Nacional de La Plata in Argentina. His main areas of interest are poverty, inequality, and social policies in Latin America.

**Juan Carlos Gómez-Sabaini** is currently a consultant on tax policy working for international agencies (IDB, ECLAC, and IMF), with extensive experience in all Latin American countries, especially in Central America. On three different occasions he served as Deputy Minister of Tax Policy in Argentina. He teaches in the Master of Economics programme at the University of Buenos Aires.

**Saúl N. Keifman** is professor of economics at the Universidad de Buenos Aires in Argentina. He holds a PhD in economics from the University of California at Berkeley, and his main areas of interest are growth and development, labour economics, and international economics.

**Stephan Klasen** is professor of development economics at the University of Göttingen, Germany. He also coordinates the Courant Research Center 'Poverty, equity, and growth in developing and transition countries' and the Ibero-America Institute of Economic Research. He holds a PhD from Harvard University and has previously held positions at the World Bank, King's College (Cambridge, UK), and the University of Munich, Germany.

**Nora Lustig** is the Samuel Z. Stone Professor of Latin American Economics at Tulane University. She is also a non-resident fellow at the Center for Global Development and the Inter-American Dialogue and senior associate research fellow of Tulane's Center for Inter-American Policy and Research (CIPR). Dr Lustig's research and teaching have focused on economic development, poverty and inequality, social policies, and social protection with particular emphasis on Latin America.

**Bruno Martorano** is a social policy consultant at UNICEF IRC in Florence. He holds a PhD in development economics from the University of Florence. His main areas of interest are in the fields of economic development, poverty, inequality, social policy, and fiscal policy.

**Roxana Maurizio** is a researcher at the University of General Sarmiento and at the National Council for Science and Technology of Argentina. Her areas of interest are labour economics, income distribution, poverty, and social policies in Latin America.

**Thomas Otter** is a freelance economist working mostly on development cooperation. He is an associated researcher at the Ibero-American Institute for Economic Research of Göttingen University (Germany). He is a lecturer at UNDP School for Human Development in Bogotá, Colombia. His main areas of research interest are human development, growth and economic development, and inequality.

**Juan Ponce**, an economist from the Institute of Social Sciences in The Hague, is currently the director of FLACSO, Ecuador. His main areas of interest are the economics of education, labour economics, impact evaluation, and poverty and inequality.

**Kenneth M. Roberts** is professor of government at Cornell University, specializing in the political economy of Latin America. His current research explores the transformation of party systems and political representation in the aftermath of market liberalization in Latin America.

Claudia Sámano-Robles received a bachelor's degree in economics from the Universidad Nacional Autónoma de México (UNAM) in 2005. In 2010 she graduated with honours, receiving her master's degree in government and public affairs from the Facultad Latinoamericana de Ciencias Sociales (FLACSO, Mexico). Her master's degree dissertation on inequality and government was published in 2011 by Editorial Académica Española. At the same time she became part of the Institute

#### **Notes on Contributors**

for Innovation in Education at the Tecnológico de Estudios Superiores de Monterrey. Her research interests are in the areas of inequality, poverty, and education.

**Miguel Székely** is director of the Institute for Innovation in Education at the Tecnológico de Monterrey. He served as Under Secretary for Middle Education and as Under Secretary for Planning and Evaluation at the Ministry of Social Development of Mexico between 2000 and 2010. He has a PhD in economics and a master's degree in development economics from the University of Oxford, and has 76 academic publications including 9 books, 25 refereed articles in academic journals, and 42 chapters in edited volumes.

Andrea Vigorito is a researcher at the Instituto de Economia, Facultad de Ciencias Económicas y de Administración, Universidad de la República (Uruguay). Her main areas of interest are inequality, poverty, and social policies.

Carlos Villalobos Barría is an economist at the Ibero-American Institute for Economic Research of the University of Göttingen. He has worked on consultancy assignments for the World Bank, DIW Berlin, and lectured at the Universities of Heidelberg and Talca. His research focuses on the analysis of poverty, inequality, labour markets, and migration.

Rob Vos is presently Strategic Programme Leader for Rural Poverty Reduction (SO3) and Director of the Gender, Equity and Rural Employment division at the Food and Agricultural Organization (FAO) in Rome. At the time of writing he was Director of Development Policy Analysis at the United Nations Department of Economic and Social Affairs. He is also professor of finance and development at the International Institute of Social Studies at Erasmus University, The Hague. His areas of policy research cover a broad field, including global macroeconomic policy issues, international finance, trade and poverty, food security and rural development and poverty reduction, inequalities and social policies, climate change and sustainable development, and population and development.

# Part I Inequality Changes and the Surfacing of New Policy Approaches

#### 1

# Recent Distributive Changes in Latin America: An Overview

Giovanni Andrea Cornia

#### 1.1 The Decline of Income Inequality During the 2000s

This volume aims to document and explain the sizeable decline of income inequality that has taken place in the majority of Latin American countries<sup>1</sup> during the last decade. It does so through a systematic exploration of inequality changes in six countries characterized by different economic structures, political regimes, and inequality trends. Structured comparisons between three pairs of these countries broadly similar in most respects except for their policy approaches or the external shocks endured can help to disentangle the region's recent inequality dynamics. The three country comparisons concern: (i) Ecuador (which was run by a centre-left government for most of the decade and which experienced a large decrease in inequality) versus Chile (also run by a centre-left regime, but which recorded only a moderate fall in inequality); (ii) Uruguay (centre-right till 2005 and featuring a large increase in inequality until 2007 followed thereafter by a moderate decline) versus Mexico (also centre-right, but exhibiting a sizeable fall in inequality during the 2000s); and (iii) Honduras (centre-right, characterized by a large rise in inequality) versus El Salvador (also centre-right, but registering a large decrease in inequality). These comparisons are integrated by analyses of policy changes in the field of macroeconomics, foreign trade, labour markets, education, taxation, and social assistance. In addition, Chapter 3

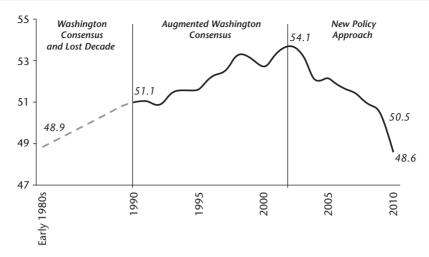
<sup>&</sup>lt;sup>1</sup> The volume focuses on 18 countries, i.e. all the South American countries (except for the Guyanas) and all the Central American countries. Caribbean countries are excluded except for the Dominican Republic.

(by Kenneth M. Roberts, a political scientist) explores the factors explaining the re-politicization of inequality following the return to democracy in the late 1990s and the subsequent election in the 2000s of centre-left regimes in many countries. In this sense, however imperfect, the Latin American policy experience in the aftermath of its redemocratization may be of interest to other developing countries facing a political transition or recording rises in income inequality and social tensions in spite of rapid economic growth. The recent Latin American experience is particularly valuable as it shows that inequality can be reduced under open economy conditions and in a period of intensifying global integration if a new policy model (called for convenience 'open-economy growth with equity') is adopted.

The recent decline of inequality in Latin America has taken many by surprise. Indeed, the region has for long been a symbol of a deeply entrenched unequal distribution of assets, incomes, and opportunities, limited or no redistribution by the state, and authoritarian regimes enforcing an unjust status quo. The root causes of such a situation were to be found in the high concentration of land, human capital, credit, production opportunities, and political power in the hands of a tiny oligarchy. This high asset concentration was perpetuated well into the post-Second World War period by the creation of institutions which facilitated the diversification of the elites' agricultural, mining, and commercial assets into industrial and financial assets. As a result, with rare exceptions, the Gini coefficient of the distribution of income per capita in the 1950s and 1960s ranged between 0.47 and 0.65 (Chapter 2: Table 2.1), the highest in the world and matched only by a few countries in Southern and Eastern Africa.

As argued by Giovanni Andrea Cornia in Chapter 2, such high structural inequality rose on average by 0.32 Gini points a year during the 1980s, the decade that witnessed a prolonged recession and the dominance of Washington Consensus-type adjustment policies. Inequality continued rising on average by 0.16 Gini points a year during the 1990s, a decade of sluggish growth and the prevalence of the augmented Washington Consensus (Figure 1.1).

The inequality trend of the 1980s and 1990s came to a halt in the first decade of the twenty-first century, a period of major reversals of prior political, economic, and distributive trends. Indeed, as noted in Chapter 2, inequality fell between 2002 and 2010—albeit to different extents and with different timing—in all 18 countries of the region. Exceptions were Nicaragua, where it rose, and Costa Rica, where it stagnated. The average regional decline in the Gini coefficient over 2002–10 was a sizeable 5.5 points (Figure 1.1), but the fall was much more pronounced in Argentina, Paraguay, Peru, and Venezuela. Overall, inequality improved more in South America than in Central America (Chapter 2: Table 2.1).



**Figure 1.1.** Trend in the average regional Gini index of the distribution of household income per capita, early 1980s–2010

*Source*: Author's elaboration based on the IDLA dataset (Martorano and Cornia 2011), which is based on SEDLAC data and on other sources for years with missing SEDLAC data.

The average drop in inequality was particularly marked during the 2003–4 recovery, particularly in countries that had experienced a sharp rise in income polarization during the 2001–2 crisis, and then slowed somewhat over 2004–8. Inequality, however, did not rise during the 2009 crisis, and fell sharply during the recovery of 2010 in half of the 13 countries with available data (Chapter 2: Table 2.1). Overall, over 2003–10 the region offset the inequality rises of the prior twenty years, thus returning to its average level of the early 1980s.

It has been argued that such a startling decline was facilitated by the high international prices of commodities exported by the region. This factor certainly played a role in reducing inequality in eight countries, and particularly in four (see Chapter 14 and Chapter 4 on Ecuador) heavily dependent on commodity exports (thanks to a rise in public expenditure and aggregate demand leading to a rise in the demand for unskilled labour). Yet, the evidence in Chapter 2 and the country studies in Chapters 4 to 9 indicate that such a decline was as pronounced in the semi-industrialized economies of the region, in remittance-dependent countries such as El Salvador (see Chapter 7), and in economies with a mixed production structure. The uniqueness of the recent inequality decrease in Latin America is underscored also by the fact that no other region experienced comparable distributive gains despite similar improvements in terms of trade, migrant remittances, financial flows, and economic growth. Neither can the recent inequality decline be closely associated with growth, as the fast-growing Asian countries experienced steep inequality rises during this period. It is thus unlikely that the recent distributive gains of Latin America were only due to a favourable external environment, world growth, or 'luck'. Other factors, including changes in public policies, must help to explain this encouraging trend.

# 1.2 Determinants of the Decline in Inequality in the Case Studies Analyzed

What, then, explains the recent decline in inequality? To answer this question, the country studies of this volume follow a two-step approach. Changes over time in the Gini coefficient of household income per capita are first decomposed<sup>2</sup> into changes in their 'proximate determinants', i.e. changes in the shares of different types of income and in their concentration coefficients, corrected when possible for changes in activity and participation rates. Next, changes in the shares and concentration coefficients of labour, transfer, capital, and remittance income are analysed in relation to their 'underlying determinants', i.e. exogenous shocks to the national economy, changes in domestic policies and institutions, and shifts in political regimes.

# 1.2.1 Proximate Causes of the Inequality Changes During 1990–2010 Emerging from the Country Case Studies

There are several similarities among the factors which explain the inequality changes of the last two decades in the six countries analysed in this volume (Table 1.1) or in the related literature (López-Calva and Lustig 2010). These conclusions, however, are biased by the grossly incomplete accounting in household surveys of capital incomes and the labour income of the 'working rich'. As the analyses of income distribution changes based on tax-return data by Atkinson and Piketty (2010) and Alvaredo (2010) show, it is possible (but not necessary) that a decline in the survey-based Gini coefficient G\* goes hand in hand with an increase in G, the survey-based G\* corrected with the percentage income share S of the top income earners (1 or 0.1 per cent).<sup>3</sup>

 $<sup>^2</sup>$  The most common decompositions used are those proposed by Lerman and Yitzhaki (1985), Milanovic (1998), and Bourguignon, Ferreira, and Lustig (2005). These works are respectively referenced in chapters 4, 2, and 7.

 $<sup>^3</sup>$  When commenting on the differences between the household-survey-based Gini and that corrected on the basis of the following formula  $G = G^*$  (1–S)+S, Alvaredo (2010: 7) notes on Argentinean data that '...not only can [Gini] levels be different, but also the trends of G and  $G^*$  can diverge. According to the survey's results,  $G^*$  displays virtually no change when 2001 and 2003 are compared, going from 51.1 to 50.9. However, G 'corrected' with the top 1 per cent income share ... was 57.4 in 2001 and 59.2 in 2003 (an increase of almost two percentage points). Finally, the discrepancy between the two formulas is larger, the larger the top group considered.' In contrast, in the case of the United States, both  $G^*$  and G rose between 1976 and 2006, though the latter displayed a faster rate of increase.

Given the scarcity of information on capital incomes and the income of the 'working rich' in household surveys, this volume is thus unable to establish formally whether the distributive changes discussed in the various chapters concern also the top percentiles of the income distribution. Given all this, analyses of the country studies suggest that much of the shifts in overall survey-based inequality over the period 1990-2010 was explained by variations in the Gini coefficient of labour incomes (Table 1.1). The upward (during the 1990s) or downward (during the 2000s) changes in the latter were accompanied in all cases but one by parallel shifts in the skill premium (the ratio of the wage of secondary- or tertiary-educated workers to that of workers with less than secondary education). In turn, the drivers of the surge and subsequent decline in the skill premium (analysed in detail in the country studies according to a similar methodology) depended on several factors such as: a stagnation in the demand for skilled labour during the 2000s (after its rapid increase during the prior decade); an increase in the supply of skilled workers following a surge in educational investments by governments during the 1990s and 2000s and the subsequent decline of educational inequality, which favoured the low-income groups; the increase in the demand of unskilled workers following the adoption of a more competitive exchange rate, which favoured the unskilled labour-intensive traded sector; and the decline in the supply of unskilled labour due to rising education, a fall in birth rates, and an increase in the rate of emigration.

Third, with the exception of Chile and Uruguay, where the number of agricultural workers is comparatively low, the decline in labour-income inequality was accompanied by a drop in the urban–rural wage gap driven by the adoption of competitive exchange rates or increases in world prices of agricultural commodities. In practically all countries, part of the decline in inequality was also explained by a rise from low levels in the share of social assistance transfers in total household income due to improved revenue collection (as discussed in Chapter 6 on Uruguay), and by the better targeting of social assistance transfers. While these inequality changes were not as large as those resulting from the enhancement in the distribution of labour income, they nevertheless made a significant contribution to the recent decline of income inequality. Finally, contrary to expectations in the literature, the increase in migrant remittances in total household income appears to have had an equalizing effect in El Salvador and Mexico but an unequalizing one in Honduras.

# 1.2.2 Underlying Causes of Inequality Changes During 1990–2010 in the Country Studies

Hereafter are summarized the underlying factors responsible for the changes in the proximate determinants of inequality in the six case studies included in this volume. They are discussed for pairs of similar countries which were affected by different macroeconomic shocks or followed dissimilar policy approaches.

#### ECUADOR VERSUS CHILE

During the 2000s, both countries were run by centre-left governments and both recorded a fall in inequality, although the drop recorded by Ecuador far exceeded that of Chile (Table 1.1). A possible explanation, as Juan Ponce and Rob Vos argue in Chapter 4, is that only Ecuador in the 2000s fully offset the large inequality rise experienced during the earlier liberalization of trade and finance, which strengthened the traditional capital-intensive sector (oil and traditional agriculture). This appreciated the exchange rate and raised modern sector wages but did not create new formal sector jobs, leaving the task of absorbing the surplus labour to the informal sector. Later, floods caused by El Niño and falling oil prices pushed the economy into a tailspin while the 1999 banking crisis triggered a further surge in inequality and a large outflow of migrants, as public transfers did not adequately compensate for the loss of wages due to the crisis. The recovery of the 2000s raised real wages, including those of unskilled and rural workers, and reduced the Gini of labour income. This decline was helped by an expansion in the supply of educated workers, a fall in the skill premium, and more proactive income-transfer policies. As a result, by the end of the 2000s the economy-wide Gini coefficient had returned to the pre-liberalization level of the early 1990s.

In contrast, as noted by Dante Contreras and Ricardo Ffrench Davis in Chapter 5, inequality in Chile rose sharply between 1973 and 1987 when the military regime liberalized foreign trade (a measure which raised the skill premium and reduced employment in the traded sector), introduced labour reforms biased against workers and unions, and lowered taxes on wealth, capital gains, profits, and VAT on luxuries. Those years were also characterized by a sweeping educational reform that favoured private schools and increased educational inequality. Despite the return to democracy in 1990, income inequality stagnated during the entire decade (Table 1.1) but fell moderately over 2000–10 (i.e. 4.3 points as opposed to ten in Ecuador) despite the initial introduction of a competitive real exchange rate, capital controls, a prudent macro policy, an increase in average and minimum wages, a rise in expenditure on social assistance, and expanding social security coverage. During the 1990s, however, inequality in secondary education stagnated and access to tertiary education became more skewed. In brief, while Ecuador offset most of the initial increase in inequality recorded during the liberal era, in the 2000s Chile offset only part of the 1973–87 inequality surge, mainly because of only limited equalization of educational opportunities. In addition, at the end of the 1990s, the previous prudent macroeconomic approach was replaced by

Table 1.1. Changes in the proximate determinants of income inequality in the six country case studies of the volume, 1990s and 2000s

Country	Political regime	Period considered	Absolute changes in Gini index of overall income	Absolute changes in Gini index of all labour income <sup>b</sup>	% change in skill premium	% change in rural– urban wage gap	Absolute change in the Gini of:		Absolute change in the share of:				
							Capital income	Public transfers	Remittances	Labour income	Capital income	Transfer income	Remittance income
Chile	CL	1990–2000	+0.7	+2.4 <sup>b</sup>	+34.2 <sup>9</sup>	not relevant	_	stable	not relevant	+2.0	_	rising	not relevant
	CL	2000–10	-4.3	-3.8 <sup>b</sup>	-35.1 <sup>g</sup>	not relevant	_	equalizing	not relevant	+5.0	_	rising	not relevant
Ecuador	R	1990-2001	$+14.0^{a}$	$+14.0^{a}$	+25.4 <sup>h</sup>	_	$+15.0^{a}$	negligible	negligible	negligible	declining	rising	rising
	CL, L	2001-10	$-10.0^{a}$	$-11.0^{a}$	-21.5 <sup>h</sup>	$-10.0^{1}$	$-18.0^{a}$	equalizing	equalizing	declining	rising	declining	declining
El Salvador	R	1994–9	+4.0	+2.5 <sup>b</sup>	$0.0^{g}$	rising	_	_	-3.7	−0.5°	_	negligible	+0.5
	R	2000–9	-7.0	-3.2 <sup>b</sup>	$-16.0^{g}$	-21.0	-9.0	-8.0	$-3.2^{e}$	$-1.0^{d}$	-0.1	+2.0	+2.0
Honduras	R	1991–2005	+6.9	+6.2	+32.1	+12.4	_	negligible	+5.0	-15.9	_	negligible	up to 10.3
	CL	2005–7	-5.2	-2.0	-33.7	-4.3	-9.6	-2.7	+2.6	-0.8	+0.3k	+0.9	+1.2
Mexico	CR	1989–94	+1.3	+13.4	+50.5 <sup>g</sup>	+42.6	_	-4.3	+0.2	-3.0	_	+1.4	-0.3
	CR	1995–2010	-8.2	-8.0	-10.9 <sup>g</sup>	-36.9	_	-9.0	-0 4	+7.0	_	+3.6	+0.2
Uruguay	CR	1990–2007	+3.3	+6.7	+42.2	not relevant	+2.0	+ 0.6	not relevant	-5.0	-0.9	7.0	not relevant
	CL	2007–11	-4.0	-4.4	-14.2	not relevant	+3.0	-1.59	not relevant	0.8	1.6	2.3	not relevant

Notes: C, L, R, CL, CR, respectively, refer to centre, left, right, centre-left, and centre-right political regimes; —means not available; a = urban sector; b = based on SEDLAC data on all types of labour income; c = labour and non-labour income; d = skilled labour only; e = the years 2001–9; d = data based on the CASEN survey; d = based on SEDLAC data on the ratio between the salaries of workers with tertiary versus primary education; b = urban male workers; the country was run during the years 1990–2005 by right or centre-right regimes, and by a centre-left regime during 2005–11. The different periodization chosen in the table better permits the highlighting of the turnaround in income inequality in the latter period; e = calculated as a residual, which includes other private transfers; e = refers to the period 2003–10.

Source: Author's compilation on the basis of chapters 4 to 9, unpublished background data supplied by the chapters' authors, and SEDLAC data where indicated.

a totally open capital account and a free-floating exchange rate which may have hampered employment creation in the labour-intensive traded sector. Inequality started to decline with the recovery in 2004 and the strengthening of targeted social programmes financed with progressive taxes, a further rise in the minimum wage and the wages of different types of workers, the effect of increased public expenditure on education, and greater formalization of employment and coverage of social security.

#### URUGUAY VERSUS MEXICO

Both of these middle-income countries were run for most of the last twenty years by conservative governments. Yet, while income inequality in Mexico rose in the first decade and declined during the second, in Uruguay inequality started declining only in 2007 after the election in 2005 of a centre-left regime and the adoption in 2006 of redistributive policies. As noted in Chapter 6 by Verónica Amarante, Marco Colafranceschi, and Andrea Vigorito, the rise of inequality in Uruguay since the early 1990s was driven by the current and lagged effects of rapid trade liberalization, suppression of centralized wage-setting and reduction in minimum wages (which contributed to raise the skill premium and wage inequality), as well as by the suppression of personal income tax and lack of social protection for the poor. In contrast, between 2007 and 2011 inequality fell by four Gini points (Table 1.1) due to a drop in returns to education (a phenomenon also observed in Mexico) and a decline in earnings inequality. The decline in returns to education, however, can be ascribed only partially to the lagged effects of educational policies (which, unlike in Mexico, raised educational inequality in tertiary education and did not reduce it in secondary education), to the fall of spatial inequality, or to shifts in personal characteristics of workers, as a considerable portion of the returns-to-education variation remained unexplained. Hence, the authors attribute much of this unexplained decline in inequality to institutional and policy changes such as increased minimum wages, restoration of centralized wage-setting, and inception of a progressive personal income tax that reduced net returns to education. In turn, an expansion of well-targeted non-contributory benefits improved the distribution of public transfers.

As shown by Raymundo Campos-Vazques, Gerardo Esquivel, and Nora Lustig in Chapter 7, Mexico experienced a modest rise of the overall Gini coefficient between 1989 and the mid-1990s, a period characterized—as in Uruguay—by widespread trade liberalization and privatization, the dismantling of price supports and generalized subsidies, and reductions in minimum wages and unionization rates. In contrast, between the mid-1990s and 2010, overall inequality declined markedly following an improvement in the distribution of labour income and, to a lesser extent, non-labour income. During this period, the policy regime was characterized by limited structural reforms,

rising global integration (as signalled by the signing of the North American Free Trade Agreement, NAFTA), and the introduction of large-scale cash transfer programmes. During both periods, the main driver of the total inequality change was a shift in earnings inequality explained by the swings in returns to education. In particular, over 1995–2010 both the supply of skilled workers and the distribution of years of schooling among workers improved markedly following past and current rises in secondary and tertiary enrolments, including rises among the poor. As a result, between 1994 and 2006 the supply of highly skilled workers outpaced its demand, while the demand of unskilled workers (driven by an expansion of assembly-line activities or *maquiladoras*) exceeded its supply. In turn, the decline in non-labour income inequality benefited from the launch of large transfer programmes such as Progresa and Oportunidades which transformed a neutral distribution of public subsidies into a highly progressive one. In contrast to the case of Uruguay, minimum wages became non-binding and the unionization rate remained low and did not affect the trend in relative wages over 1996-2010.

#### EL SALVADOR VERSUS HONDURAS

These two fairly similar lower-middle-income countries were run for most of the last two decades by right-wing governments. Yet, the first experienced a major inequality decline while the second recorded a major increase until 2005. As argued in Chapter 8 by Carlos Acevedo and Maynor Cabrera, despite extensive liberalization and rapid growth driven by high post-war capital inflows, growing remittances, and urban growth, overall inequality stagnated during the 1990s as the impact of growing participation rates, falling unemployment, and rising urban wages was offset by the fall of agriculture's relative wages and employment. In contrast, the overall Gini coefficient fell sharply between 2000 and 2009 (Table 1.1). Yet, unlike in most Latin American countries, this decline coincided with a decade-long economic stagnation and dominance of an extreme right government. The inequality reduction was mainly due to a fall in the concentration coefficient of skilled and unskilled labour income mainly caused by the massive outmigration of both types of workers (and the ensuing slowdown in the rate of increase in their domestic supply), the slow rise in the urban demand for skilled labour due to a lengthy economic stagnation, and the slow but steady increase in the supply of skilled workers. These factors drove up the reservation wage of unskilled workers, reduced the skill premium and the urban-rural wage ratio, and triggered a rise in equalizing remittances since the mid-2000s. In contrast, the inequality-reducing effect of public transfers was relatively modest.

In contrast to El Salvador, in the highly dualistic economy of Honduras, income inequality rose between 1991 and 2005 and then fell between 2005

and 2007. As argued by Stephan Klasen, Thomas Otter, and Carlos Villalobos Barría in Chapter 9, the steep increase in inequality during the first 15 years was mainly the result of the surge in rural earnings inequality (while urban inequality remained unchanged) due to a fall in the demand for agricultural goods. The latter was caused by the persistent neglect of rural areas and large inflow of remittances and aid funds for reconstruction after hurricane Mitch which appreciated the real exchange rate. In addition, labour mobility between an increasingly less dynamic agricultural tradable sector and the more dynamic non-tradable service sector remained low because of high moving costs and stagnant educational achievements of rural workers over 1991–2007. The inequality trend has changed in part (Tables 1.1 and 2.1) since the mid-2000s, thanks to an increase in commodity prices that helped to raise wages in the tradable sector, while the rise in remittances also played an equalizing role. The increase in public transfers by the Zelaya government played an additional, if small, equalizing role.

# 1.3 Underlying Causes of the Inequality Decline of the 2000s: A Regional Perspective

The lessons emerging from the six case studies and the literature on the underlying factors explaining the recent inequality trends are discussed next for the region as a whole.

#### 1.3.1 An Improvement in International Economic Conditions

As noted above, it has been argued at times that the recent inequality gains were due to the improvement of global economic conditions over 2002–8. Indeed, the region as a whole benefited from a significant rise in export receipts for primary commodities. Likewise, the region experienced an inflow of foreign capitals at declining interest rates amounting to 2.4 per cent of the region's GDP (Ocampo 2008), which exerted downward pressure on domestic rates and triggered a boom in regional stock markets. Finally, official remittances grew substantially in some countries from the late 1990s and have come to represent at least 17 per cent of GDP in El Salvador, 10–12 per cent in Nicaragua and Costa Rica, and a major item in the Mexican current account balance.

What was the direct impact of these changes on income inequality? A partial equilibrium analysis suggests that, given the high concentration of ownership of land and mines and in access to finance prevailing in the region, the above improvements had, *ceteris paribus*, a unequalizing effect on the pre-tax distribution of income. In addition, production in the primary commodity

sectors is land-, skilled labour-, and capital-intensive, and the absorption of unskilled labour is limited. At the same time, the increased availability of finance did not ease the access of small, labour-intensive enterprises to credit. In addition, the surge in capital inflows appreciated the real exchange rate in most countries, with the effect of slowing growth and employment creation in the labour-intensive non-commodity traded sector. As for the effect of remittances, the literature suggests that their short-term impact tends to be unequalizing, as only middle-class people are able to finance the high costs of migration. Yet, as argued in Chapters 2, 7, and 8, migration may become equalizing in countries where it is state-sponsored or where large migrant networks develop in destination countries. This all suggests that the partial equilibrium effect of the improvement in external conditions is unlikely to explain the recent decline of inequality, with the exception of countries where such transactions were sizeable or the structure of these flows evolved over time.

# 1.3.2 The Growth Acceleration of 2003–2008 and 2010 and its Impact on Job Creation

While the partial equilibrium impact of a more favourable global environment is unlikely to explain much of the region's recent fall of inequality, there is evidence that this positive macro shock relaxed the foreign-exchange constraint to growth and lowered interest rates, thus increasing employment, incomes, and revenue collection, subsequently helping (together with the policy changes discussed below) to improve regional unemployment, job informality, social security coverage, average wages, the ratio of informal/formal sector wages, and income inequality (see Chapter 2 as well as the evidence on Argentina and Brazil reported in López-Calva and Lustig 2010).

#### 1.3.3 A Decline in Educational Inequality

As noted by Guillermo Cruces, Carolina García Domench, and Leonardo Gasparini in Chapter 15 and as confirmed by the country studies included in this volume, a main determinant of the fall in wage inequality was the increase in secondary enrolment and completion rates that began in the early 1990s and accelerated during the 2000s, thanks to a substantial increase in public expenditure on education. This trend benefited in particular children from low-income families. For instance, SEDLAC data show that for the region as a whole, the probability that a child from the lowest quintile completed secondary education relative to that of a child from the top quintile rose from 27 per cent in 1990 to 59 per cent in 2009/10. The increase in secondary school attainments contributed to a near universal decline in wage inequality due