Latin American Economic Outlook 2008

OECD

DEVELOPMENT CENTRE

Latin American Economic Outlook 2008

DEVELOPMENT CENTRE OF THE ORGANISATION
FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation, the OECD Development Centre or of the governments of their member countries.

Also available in French and in Spanish under the title:
Perspectives économiques de l'Amérique latine 2008
Perspectivas Económicas de América Latina 2008

Corrigenda to OECD publications may be found on line at: *www.oecd.org/publishing/corrigenda*.

THE DEVELOPMENT CENTRE

The Development Centre of the Organisation for Economic Co-operation and Development was established by decision of the OECD Council on 23 October 1962 and comprises 22 member countries of the OECD: Austria, Belgium, the Czech Republic, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Korea, Luxembourg, Mexico, the Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey and the United Kingdom, as well as Brazil since March 1994, Chile since November 1998, India since February 2001, Romania since October 2004, Thailand since March 2005 and South Africa since May 2006. The Commission of the European Communities also takes part in the Centre's Governing Board.

The Development Centre, whose membership is open to both OECD and non-OECD countries, occupies a unique place within the OECD and in the international community. Members finance the Centre and serve on its Governing Board, which sets the biennial work programme and oversees its implementation.

The Centre links OECD members with developing and emerging economies and fosters debate and discussion to seek creative policy solutions to emerging global issues and development challenges. Participants in Centre events are invited in their personal capacity.

A small core of staff works with experts and institutions from the OECD and partner countries to fulfil the Centre's work programme. The results are discussed in informal expert and policy dialogue meetings, and are published in a range of high-quality products for the research and policy communities. The Centre's *Study Series* presents in-depth analyses of major development issues. *Policy Briefs* and *Policy Insights* summarise major conclusions for policy makers; *Working Papers* deal with the more technical aspects of the Centre's work.

For an overview of the Centre's activities, please see www.oecd.org/dev

ISBN: 978-92-64-03826-4

Foreword

Recent economic developments in Latin America show a mixed scenario. As elsewhere, globalisation has been a powerful engine for economic development and growth. Structural reforms adopted over the past decades in the region's countries have contributed to market opening and improved macroeconomic management. In 2006, Latin America received a record $72.5 billion in foreign direct investments and growth rates in some countries are now catching up with those of Asian countries.

As Latin America's role in the world economy increases, the region is becoming a major partner for the OECD. Mexico was the first Latin American country to join the OECD in 1994; now Chile is in the process of accession to the OECD and Brazil is a candidate for enhanced engagement with the organisation, with a view to possible membership in the future.

This first edition of the new annual series *Latin American Economic Outlook*, published by the OECD Development Centre, is a tribute to Latin America and a further step for the OECD in fulfilling its mandate to act as a hub for the discussion of global issues. The OECD has a key role to play in understanding and explaining globalisation and offers a wealth of information and analysis to policy makers based on the experience countries share in addressing common economic and social challenges.

In spite of the positive outlook, the challenges to achieve a much higher and sustainable growth rate remain substantial. Growth in Latin America has been too low and overall performance sub-optimal. There are many opportunities to take advantage of the huge potential of this region. Its two main economic engines, Mexico and Brazil, are losing ground to their Asian competitors. Over the past decade, China and India have been taking off with average economic growth rates of 9 and almost 7 per cent, respectively, while Mexico grew at 3.5 percent and Brazil recorded only 2.5 per cent. Inequality remains high in Latin America and poverty is still widespread. To improve this outlook will require a sound understanding of the challenges and a combination of good policy design and effective implementation.

Four key policy areas are addressed in this first edition of the *Latin American Economic Outlook*: fiscal policy; pension funds and financial-sector development; foreign investment and telecommunications; and the growing trade relation with China and India. Fiscal reforms in the 1980s and 1990s have produced first results and need to be carried further. Latin American countries are worldwide pioneers in pension reform, but the reforms need to be refined. The telecommunication sector has attracted a major share of total foreign direct investment inflows in Latin America; establishing appropriate regulatory frameworks to promote competition should now be a priority. A close look at the impact of the world's rapidly growing trade with China and India reveals that the region has more to gain than to lose, provided that the right measures are taken to enhance competitiveness.

The policy dialogue between the OECD and Latin America has a long tradition. It will intensify further over the coming years as new members join the organisation and the region's countries are drawn closer into the global debate. The OECD Development Centre hopes to contribute to such dialogue with this new publication.

Angel Gurría
OECD Secretary-General

ISBN: 978-92-64-03826-4

Acknowledgements

The Development Centre is grateful to the Spanish Ministries of Finance and Foreign Affairs, the Swiss Agency for Development and Co-operation, Telefónica S.A. and the Telefónica Foundation for their generous support, without which this first edition of the *Latin American Economic Outlook* (*LEO*) would not have been possible. We extend our particular gratitude to the people who believed in this project from its initial steps: José María Álvarez Pallete (Telefónica Latinoamérica), Régis Avanthay (Swiss Agency for Development and Cooperation), Fernando Ballestero (Spanish Ambassador to the OECD and Chairman of the OECD Development Centre Governing Board), Ramón Guzmán (International Monetary Fund, formerly with the Spanish Ministry of the Economy), Milagros Hernando Echevarría (Spanish Ministry of Foreign Affairs), Isabel Riaño (Spanish Finance Ministry) and Alejandro de la Sota (Telefónica S.A.). Their vision and continued support enabled the Development Centre to create a Latin American unit.

LEO is the culmination of a series of activities and policy dialogue events carried out by the Development Centre working closely with other leading international institutions. Both this *Outlook* and the Centre's work on Latin America as a whole have benefited in particular from consultation with our colleagues at the U.N. Economic Commission for Latin America and the Caribbean (ECLAC), the World Bank and the Inter-American Development Bank (IADB).

LEO also benefits greatly from its Informal Advisory Board. Composed of individuals with peerless knowledge and expertise on Latin America, it enhances the quality and political relevance of LEO and is an invaluable source of advice. Co-chaired by the Secretary-General of the Secretaría General Iberoamericana (SEGIB), Enrique Iglesias, and OECD Secretary-General Angel Gurría, the Board's eminent membership includes (in alphabetical order) César Alierta (President of Telefónica S.A.), Joaquín Almunia (European Commissioner for Economic and Monetary Affairs), Guillermo Calvo (Professor of International and Public Affairs, Columbia University), Agustín Carstens (Minister of Finance of Mexico), Pamela Cox (Vice President for the Latin American and Caribbean Region at the World Bank), Luciano Countinho (President of Brazil's Banco Nacional de Desenvolvimento Econômico e Social), Alejandro Foxley (Minister of Foreign Affairs of Chile), Walter Fust (Director-General of the Swiss Agency for Development and Cooperation), Ricardo Hausmann (Professor of Economic Development, Harvard University), José Miguel Insulza (Secretary-General of the Organization of American States), Marta Lagos (Executive Director of Latinobarómetro), José Luis Machinea (Executive Secretary of the UN Economic Commission for Latin America and the Caribbean), Eduardo Lora (Principal Advisor at the Inter-American Development Bank Research Department), Luis Alberto Moreno (President of the Inter-American Development Bank), Leire Pajín (Spain's Secretary of State for International Cooperation), Erik Solheim (Minister of International Development of Norway), David Taguas (Director of the Economic Bureau of the President of the Government of Spain), David Vegara (Secretary of State for Economic Affairs of Spain) and Andrés Velasco (Minister of Finance of Chile).

Within the OECD, our special thanks go to Val Koromzay (Director of Country Studies in the Economics Department), André Laboul (Head of the Financial Affairs Division), Joaquim Oliveira Martins (Head of the Prices and Structural Economic Statistics Division) and Odile Sallard (Director of Public Governance and Territorial Development), who are also members of *LEO*'s Informal Advisory Board. Neither the Informal Advisory Board nor any of its members is responsible for the contents of LEO. We are also particularly grateful to our colleagues in the Directorate for Financial and Enterprise Affairs whose major contribution on pension reform made the second chapter possible.

ISBN: 978-92-64-03826-4

Each chapter benefited from comments and suggestions from colleagues who reviewed the manuscript at different stages of production. Chapter 1, written by Pablo Zoido, benefited from comments and suggestions from Carlos Santiso (DFID), Teresa Curristine (OECD/GOV), Carlos Elizondo (Centre for the Research and Teaching of Economics and former Mexican Ambassador to the OECD), Christopher Heady (OECD/CTP), Blanca Heredia (OECD Mexico Centre), Bénédicte Larre (OECD/ECO), Humberto López (World Bank), Eduardo Lora (Inter-American Development Bank) and Ángel Melguizo (Economic Bureau of the President of the Government of Spain).

For the second chapter, jointly produced by the Development Centre and the OECD Directorate for Financial and Enterprise Affairs, Charles Oman co-ordinated an OECD team comprising Felipe Alonso, Pablo Antolín, Daniel Blume, Waldo Tapia and Juan Yermo. This chapter also benefited greatly from the comments by Ángel Melguizo (Economic Bureau of the President of the Government of Spain), Monika Queisser (OECD/ELS), Helmut Reisen (OECD/DEV), Joaquin Vial (BBVA) and Edward Whitehouse (OECD/ELS).

Juan Ramón de Laiglesia and Patrizia Labella, who wrote the third chapter, thank Renato Amorim (CVRD), Manuel Balmaseda (Cemex), Áurea Bartolomé (Telefónica), Marcos Bonturi (OECD/STI), Miguel Campillo (Telefónica), Lourdes Casanova (INSEAD), Pedro Egea (BBVA), Dina Franco (Bolsa de Madrid), Domingo J. García Coto (Bolsa de Madrid), Andrea Goldstein (OECD/DEV), Andrés Font (Enter), Manuel Gonzalez Cid (BBVA), Mauro Guillén (The Wharton School of the University of Pennsylvania), Jean Guinet (OECD/STI), Juan Antonio Mielgo Carrizo (Telefónica), Diego Molano Vega (Telefónica), Javier Nadal (Fundación Telefónica), Laura Recuero Virto (Université de Toulouse), Enrique Rueda Sabater (Cisco), Mercedes Temboury (Telefónica), Pablo Ybarra (Bolsa de Madrid) and Dimitri Ypsilanti (OECD/STI).

Chapter 4, written by Rolando Avendaño and Gøril Havro, was improved by comments from Csilla Bartok (OECD/TAD), Jorge Blázquez-Lidoy (Economic Bureau of the President of the Government of Spain), Federico Bonaglia (OECD/DEV), Marcos Bonturi (OECD/STI), Luis Felipe Céspedes (Ministry of Finance, Chile), Sebastián Claro (Universidad Católica de Chile), Juan Carlos Guajardo (Centro de Estudios del Cobre y la Minería), Jean Guinet (OECD/STI), Mikio Kuwayama (ECLAC), Bénedicte Larre (OECD/ECO), Eduardo Lora (IADB), Mario Marcel (CIEPLAN), Nanno Mulder (ECLAC), Osamu Onodera (OECD/TAD), Marcelo Olarreaga (World Bank), Javier Rodriguez (BBVA), Stefano Scarpetta (OECD/ECO), Rodrigo Valdéz (Central Bank of Chile), Joaquín Vial (BBVA) and Ana Isabel Zuñiga (Chilean Copper Commission)

Production of this first volume of the OECD *Latin American Economic Outlook* was conducted by a Development Centre team led by OECD Chief Development Economist and Acting Development Centre Director Javier Santiso, and co-ordinated by Juan Ramón de Laiglesia, Charles Oman and Pablo Zoido. Core *LEO* team members included Ángel Alonso Arroba, Rolando Avendaño, Chloé Coussen Dauban, María Leticia Guelfi, Gøril Havro, Patrizia Labella, Ricardo López and Sebastián Nieto Parra. Valuable support was also provided by Michèle Girard, Andrea Goldstein, Louka T. Katseli, Helmut Reisen and Henri-Bernard Solignac Lecomte. The Centre's Publications and Media Unit, headed by Colm Foy and comprising Vanda Legrandgérard, Sheila Lionet and Kate Bailey, helped turn the original manuscript into the final publication. Thanks also to our editor, Marina Urquidi, who helped give LEO its final form, to Claudia Esteve, who translated it into Spanish, to Architexte, who translated it into French, and to Luiz Gonzaga, who translated it into Portuguese.

LEO would have not been possible without the invaluable support of OECD Secretary-General Angel Gurría, whose determination to advance the Organisation's work on Latin America was decisive in moving this project forward. Our gratitude goes also to his private office, in particular to Rolf Alter and Gabriela Ramos, for their support and critical feedback. All remaining errors or shortcomings are the sole responsibility of the Development Centre's *LEO* team.

ISBN: 978-92-64-03826-4

Table of Contents

ISBN: 978-92-64-03826-4

Preface

Latin America matters. It matters because its development is built on the twin pillars of democratic government and pro-market policies to be found in the OECD countries' own development trajectories.

Consistently positive growth rates and democratic stability are now the norm in the region rather than the exception. Pragmatism has replaced dogma as the guide towards sustained economic development. This is the great and positive news coming from Latin America; and it applies to most governments across the political spectrum. Through a sound combination of fiscal orthodoxy and social progressiveness, many Latin American governments are following a "political economy of the possible", far from short-cut solutions based on rigid models and paradigms.

The vocation of the 2008 *Latin American Economic Outlook* (*LEO 2008*) is clear: providing a guide for the OECD's work on the region and serving as a catalyst for dialogue and the exchange of best practices between Latin America and OECD countries.

The first three chapters of *LEO 2008* reflect the three areas of the OECD Development Centre's current research: policy coherence for development; financing for development; and business for development, each of which is the subject of a separate thematic "flagship" Development Centre publication. *LEO*'s fourth chapter analyses trade issues affecting Latin America's development, particularly those concerning China and India.

LEO 2008 demonstrates how tackling poor fiscal performance can be a driving force for democratic legitimacy and governance in the region, while financing the region's development involves adequate pension-fund governance and institutional innovation to foster domestic capital markets and stimulate national saving. In *LEO 2008* we see how market-seeking investment in an area such as telecommunications has helped improve access conditions for the middle and poorer classes. Finally, *LEO 2008* provides new evidence on how the growing trade with Asia both opens new export opportunities for Latin America, and offers a strong incentive to invest in innovation and infrastructure in order to achieve global competitiveness.

This volume reinforces the foundations of a growing relationship between OECD countries and Latin America. It will be a tool for OECD members to engage and learn more from the region. Because Latin America's strategy of development is profoundly linked to the strengthening of democratic institutions and the pro-market policies the OECD has traditionally advocated, the Latin American experience with these policies will be of special interest for OECD market democracies.

LEO 2008 will also be useful for the peoples, governments and private sector of Latin America. The messages of *LEO 2008* are intended to guide all stakeholders in the region, and are expected to be used to compare experiences within the region and with countries in the OECD area when looking for the best across countries and applying the solutions that work.

ISBN: 978-92-64-03826-4

The OECD Development Centre's *Latin American Economic Outlook* has been an exercise of co-operation and cross-fertilisation with experts from Latin America and many other international institutions and organisations. An important role was performed by members of the Informal Advisory Board, formed by renowned academics, policy makers and regional stakeholders. This process enriched the result and reinforced networks both inside and outside the OECD.

LEO 2008 has an unashamed *bias for hope*, as Albert Hirschman would have said; it also has a bias towards deepening dialogue both with OECD countries and within Latin America.

Javier Santiso
OECD Chief Development Economist and Acting Director,
OECD Development Centre
Paris, August 2007

ISBN: 978-92-64-03826-4

Introduction and Overview

Latin America is showing the world a face with attractive new features: more stability in its macroeconomic environments, and greater pragmatism in policy and institutional reform. Regional success, measured in terms of economic growth, foreign investment inflows or export dynamism, may not yet be as impressive as in parts of Asia, but many significant developments are quietly under way.

In this volume, the spotlight is directed at some of the most exciting experiences taking place in the region today: reinforcement of the link between democratic governance and public finance; the emergence of private pension funds and their positive impact on financial development; the impact of multinational corporate activity in the telecommunications sector; and trade complementarities and competition with China and India. What role does fiscal policy play in Latin American democracies today? Can private pension funds provide countries in the region with much-needed domestic savings? How can international investment in the telecommunications sector help improve conditions for Latin Americans to access communications services? Is the world's growing trade with Asian emerging economies having a positive effect on the integration of Latin America into the global economy?

Such are the questions addressed in this first edition of the *Latin American Economic Outlook*. Future editions will explore other issues, just as crucially important for policy makers and private decision makers, in an effort to indicate the best paths for development.

Chapter 1 of this volume looks at the coherence of policies for development, with a focus on the role that fiscal reform and greater fiscal legitimacy can play in fostering governance and democratic consolidation. Chapter 2 examines new areas of financing for development, and specifically the growth of funded pension systems. Chapter 3 considers how business and the private sector can help foster development, in particular how competition and foreign investment can spur access to telecommunications services and improve living conditions amongst the middle-income and poorer segments of the population. Chapter 4, which looks at issues of trade for development, refutes the frequent claims that growing world trade with China and India poses a threat to most Latin American countries. On the contrary, new global trade patterns and Latin America's own growing engagement with emerging Asian economies offer the region an opportunity and incentives to strengthen competitiveness by investing more in infrastructure and innovation.

Policy Coherence for Development

Fiscal policy and legitimacy in Latin America

Democracy puts fiscal policy at the heart of the relationship between citizens and the state. Fiscal policy, one of the region's main challenges today, will continue to be a major development issue for Latin America, as it is in the OECD countries. Latin America has the

ISBN: 978-92-64-03826-4

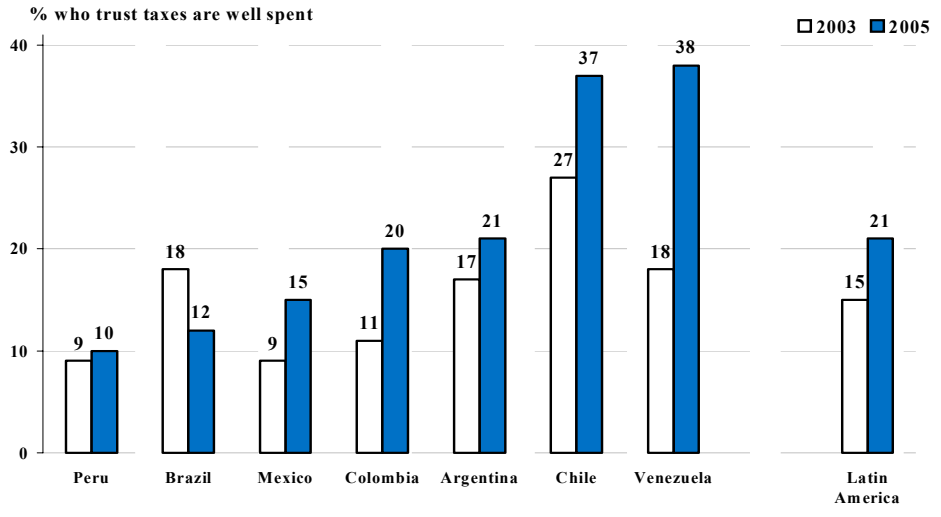
most inequality of any region in the world. Close to 40 per cent of the population, or more than 200 million people, live in poverty. Governments cannot ignore the challenges involved in fighting poverty and inequality while at the same time promoting stable and sustainable economic growth and development.

In many Latin American countries, fiscal performance and democratic governance suffer from low fiscal legitimacy. Good democratic governance paves the way to democratic legitimacy by building people's faith in democracy over all other forms of government and ensuring their acceptance of the way democracy works in their country. Analogously, fiscal legitimacy is a reflection of the confidence people grant their government's performance in collecting and spending its tax revenue.

Fiscal legitimacy is low in many Latin American countries. Less than 25 per cent of Latin Americans trust that their taxes are being well spent, according to Latinobarómetro surveys of local voters in the mid-2000s. Even allowing for some volatility or measurement error in those opinion surveys, there can be no doubt of the low orders of magnitude of fiscal legitimacy in most countries in the region, as those scores are corroborated by the views of local and multinational enterprises operating there. According to similar indicators and business-climate measures that allow for cross-regional comparisons, these companies consistently rate Latin American countries worse than those in other regions. An important explanation for this lack of trust in fiscal policy is that, in contrast to an important effect of fiscal systems in most OECD countries, taxes and transfers play little or no redistributive role in most Latin American states. When taxation fails to help bridge the gap between the rich and the poor, the credibility of the fiscal system suffers. Poor-quality fiscal policy hinders the generation of tax revenue, frustrates public expenditure, and undermines fiscal and democratic legitimacy.

Figure 1. **Percentage of Population Trusting That Taxes Are Well Spent**

Selected Latin American countries and average



Source: OECD Development Centre (2007); based on Latinobarómetro (2003, 2005) data.

StatLink http://dx.doi.org/10.1787/120484410425

ISBN: 978-92-64-03826-4

Fiscal reform in the 1980s and 1990s has already made significant progress and produced positive results in Latin America, where many governments are now trying to do a better job in terms of improving fiscal efficiency and promoting socio-economic equity. Successful reforms to strengthen fiscal institutions include the introduction of new rules to control public deficits, new fiscal-responsibility laws, and measures to enhance transparency. In part as a result of these reforms, much of the region now offers the world a new face: stable and predictable macroeconomic environments thanks to lower inflation, sounder public finances, more reasonable debt management and lower risk premiums.

Yet much remains to be done. A comparison of Brazil and Mexico serves to illustrate the challenges the region faces today in trying to improve the quality of fiscal policy. Brazil collects and spends a lot: at about 35 per cent of GDP, its tax revenue is close to the average for OECD countries and far above the average of 17 per cent for Latin America as a whole. More is not better, however, as Brazil does not rank much better than most other Latin American countries — and does poorly by OECD standards — on numerous social indicators that reflect the quality or effectiveness of public spending. Mexico, whose tax revenue is below 15 per cent of GDP, stands at the opposite end of the spectrum in terms of the ratio of tax revenues to GDP, by regional as well as OECD standards. But less is also not better, as Mexico, like Brazil, scores poorly on numerous measures of the quality of public goods. At opposite ends of the regional spectrum in terms of their tax-revenues-to-GDP ratios, Brazil and Mexico, like many other countries in Latin America, need both better collection systems and better public spending.

Looking ahead

Latin America's fiscal reforms can succeed by strengthening democratic governance. People will support fiscal reform, including tax reform, if they see results. First, public spending should be targeted better. The region needs better, fairer and more public spending, certainly on health and education, but also on infrastructure and innovation. In many countries, fiscal policy is regressive because wealthier households receive most of the benefits. Social-insurance programmes, in particular, are notably regressive throughout the region. Conditional cash-transfer programmes, such as *Bolsa familia* in Brazil or *Oportunidades* in Mexico, on the contrary, are very progressive but still relatively minor.

In terms of tax reform, a major pending challenge is to make collection systems fairer and more balanced through elimination of special exemptions from direct and indirect taxes. Such reforms will operate as a disincentive for tax evasion and increase revenue, and thus broaden the tax base. Revenues from indirect taxes, value-added taxes (VAT) in particular, play a large role in tax collection.Tax structures can only be balanced by increasing the share of revenue coming from direct taxation.

Fiscal performance and democratic governance

Having experienced major fiscal reforms in the 1980s and 1990s, the region is now moving into a new set of reforms. An open debate on public policies will enhance not only the approval process of reforms and new tax mechanisms but also their implementation. Expectations are growing for measures that can help strengthen accountability mechanisms and bring official policies closer to the population and public scrutiny. Transparency should reinforce citizens' perceptions that they are getting value for their money and that taxes are being well spent.

ISBN: 978-92-64-03826-4

Local think tanks can play a very important part here. Their independent monitoring of public spending and fiscal policy-making can strengthen a sense of public ownership over democratic processes. In many Latin American countries, think tanks already play an important role, but their ability to criticise is limited by scarce funding and limited human resources. The creation of larger endowments would be an important step in providing Latin American think tanks with greater and better resources they need to analyse and evaluate public policies. Financial means and stability are also important elements for securing their independence from public players, so allowing them to exert their watchdog functions and express dissenting views.

Decentralisation can also play an important role in strengthening accountability and democratic governance by reinforcing the capacity, authority and accountability of sub-national governments, especially through direct taxation. New ways of empowering local governments in taxation need to be explored, as these are not without challenges. In Brazil, for example, where states have been granted authority over VAT rates, there is evidence of harmful "tax wars" amongst different states

Governments can enhance fiscal legitimacy, in sum, by: *i)* involving independent third parties in the auditing and evaluation of public policies to strengthen transparency and accountability; *ii)* promoting better, fairer and more public spending; *iii)* broadening the tax base and making tax systems fairer and more balanced; and *iv)* reinforcing the capacity, authority and accountability of sub-national government bodies, especially with regard to direct taxation. Fiscal legitimacy is not only an issue of capacity, however, and strengthening administrative capabilities can only take tax administration part of the way. The case of Peru during the Fujimori administration shows that even the most capable administration can be manipulated and misused. While tax administration and tax *policy* may be one and the same thing, as some fiscal experts have asserted, tax administration is not the same as tax *politics*.

In their efforts to enhance fiscal legitimacy and reinforce democratic governance, Latin American countries need to bring politics back into tax and fiscal policy-making, explicitly and transparently. Fiscal reform should aim at broadening benefits and bringing people and the state closer. An open and informed political debate, which can only happen if there is more transparency in the system and more public access to information, is an excellent way of achieving this goal. Independent actors with the capacity and the financial independence to carry out a critical evaluation of policies and proposed reforms can powerfully enrich such a debate. In the process, fiscal policy will help strengthen democratic governance.

Finance for Development

Pension reform, capital markets and corporate governance

Latin America leads the developing world in pension reform. Chile launched the process in 1981 with its radical pension reform. Since the early 1990s, that reform has been a model for nine other countries in the region, as well as for a number of countries outside the region, including OECD countries. Amongst Latin America's large countries, only Brazil has not undertaken a similar reform.

These pension reforms involve a transition from unfunded, publicly managed "pay-as-you-go" pension systems to privately managed, fully funded defined-contribution systems of individual accounts for beneficiaries. While some countries have replaced their previous system with the new one, others have introduced it on a voluntary basis.

ISBN: 978-92-64-03826-4

The reforms pursue several objectives. The most important have been to provide a reliable source of retirement income for workers and to reduce the fiscal drain on governments caused by existing systems. Further objectives, to which this chapter gives particular attention, have been to boost local savings, provide a stable domestic source of development finance and promote the development of local capital markets. The importance of these objectives reflects the fact that many economies in Latin America have long suffered from low domestic savings and financial fragility. These have slowed growth and increased dependence in the region on volatile international capital flows.

The reforms have also sought to rely on competition amongst private interests — notably the pension and insurance companies, which are the institutional investors that manage retirement savings in the new pension systems — to enhance real economic efficiency by channelling savings into more productive uses. The subsequent accumulation of significant amounts of savings in pension funds has drawn attention to the considerable potential for pension funds to induce companies outside the pension sector, in whose equities they may invest, to make significant improvements in the quality of their corporate governance, which would be of major benefit to all stakeholders — including active and retired workers — and to long-term productivity growth in the economy as a whole.

The impacts of pension reforms

Results of the reforms vary amongst countries, in part because the reform was launched much more recently in some countries than in others. In Chile and more recently Peru, pension reform has been accompanied by fiscal consolidation and by increased national saving. In Chile, it has also contributed to financial development — notably by increasing both the role of the stock market and the size of the mortgage bond market — and, together with other reforms, has helped to improve local corporate governance.

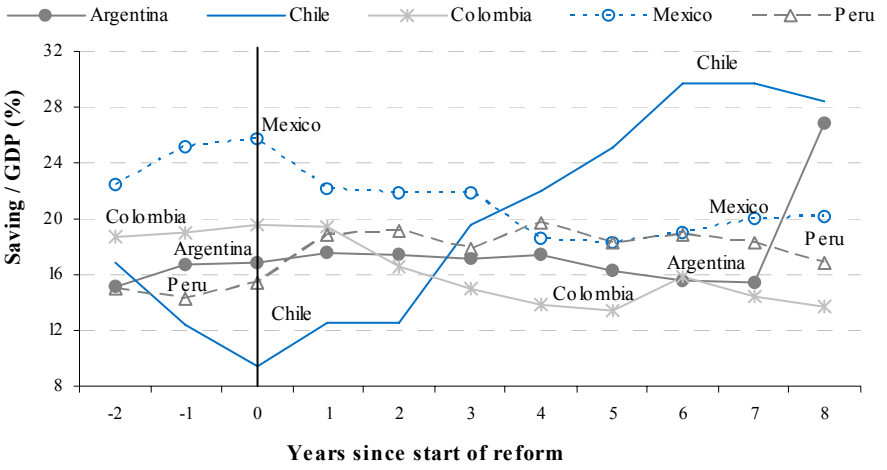
In other countries, the picture is less encouraging. Argentina and Bolivia succumbed to fiscal pressures that weakened their pension-fund systems. In many countries, saving has failed to increase, or even fallen. The impact of pension reform on capital markets has also been constrained by regulations that limit pension funds' investment options and drive them to invest in government debt. As for the expected impact on corporate governance, in most countries, pension funds have yet to become the drivers of improved economy-wide corporate governance that some experts think they may still become.

Analysis of the impact of pension reform on national saving is made difficult in Latin America by the fact that the reform has coincided with other major policy changes that may have had a large impact on saving. In Chile, for example, saving has grown strongly since 1985, after the country recovered from its financial crisis of the first half of the 1980s, but this rise might not have materialised without the important reforms Chile implemented in other areas of the economy. Figure 2, which gives countries' saving rates during the ten-year period running from two years before to eight years after they launched their pension reform, shows that after the pension reform, besides Chile, only Peru has experienced an increase, albeit small, in national saving as a share of GDP. In Argentina, saving remained virtually unchanged, and in Colombia and Mexico it declined.

Pension reform in Latin America has had considerable impact, on the other hand, on local capital markets. The accumulation of large financial resources by the new pension funds has quickly allowed these funds to gain a dominant position in their domestic financial systems. By the end of 2006, pension-fund assets under management in the region amounted to $390 billion.

ISBN: 978-92-64-03826-4

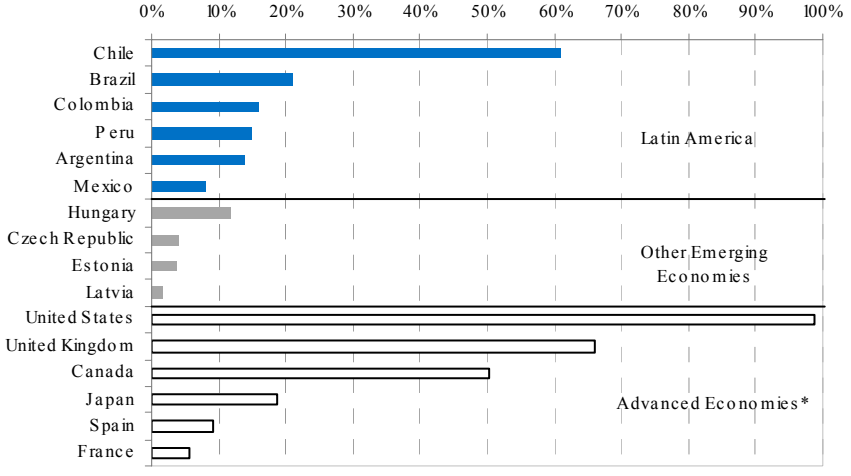
Figure 2. **Trends in Gross Domestic Saving as Percentage of GDP**



Source: OECD Development Centre (2007); based on World Bank, *World Bank Development Indicators* (2006) data.
StatLink http://dx.doi.org/10.1787/120676251351

Brazil — which has not followed Chile's route to pension reform but did create voluntary pension funds in the 1970s, of which there are now more than 400 — and Chile have the largest pension-fund industries, accounting for approximately 65 per cent of all pension assets in the region. The early establishment, by regional standards, of pension funds in these two countries, plus the large size of Brazil's economy, explains the large size of these countries' pension industries. Chile has by far the largest pension industry in the region relative to the size of its economy, with assets as of December 2006 worth more than 60 per cent of GDP — a size comparable to those found in OECD countries with well-developed private-pension industries. Brazil's private pension-fund assets, the second largest in the region and now worth about 20 per cent of GDP, have grown more slowly than Chile's primarily because of the voluntary nature of contributions to those funds.

Figure 3. **Pension Fund Assets as Percentage of GDP, 2006**



Note: (*) 2005
Source: OECD Development Centre (2007); based on OECD Global Pension Statistics database data.
StatLink http://dx.doi.org/10.1787/120755578734

ISBN: 978-92-64-03826-4

Looking ahead

Policy makers throughout the region have moved to ensure better regulation of their pension-fund industries, but significant room for improvement remains both in the regulation and in the governance of these industries. Clearly written mission statements, codes of conduct and mechanisms for enhancing the accountability of pension-fund administrators, for example, could help improve the alignment of incentives amongst members (that is, active and retired workers), sponsors (employers) and administrators (the private companies that manage pension funds), and provide better protection of members' interests.

As governments move to liberalise their restrictions on pension-fund administrators' investment options, the quality of administrators' self-regulation, together with effective governance of pension-fund administrators, will become even more important. This applies especially to the many countries where pension-fund administrators have become entrenched in dominant local-market positions as the largest institutional investors. Greater attention to their governance and self-regulation should also induce a healthy reorientation in their investment strategies towards seeking higher returns from less liquid but potentially profitable and socially necessary investments, for example in housing, infrastructure and innovative technologies.

The probably inevitable high degree of market concentration in strictly regulated, mandatory, funded pension systems further highlights the need for much greater attention to the quality of the governance of pension-fund administrators. Equally important is the potential those administrators have to induce widespread improvement in the quality of governance in the enterprises whose equities they acquire as assets.

Combined, the result of such enhanced governance — of both pension-fund administrators and the corporations in which they invest members' pension monies — should be a far more productive economy-wide use of real capital and human resources. Countries throughout the region would thus enhance national saving and reduce their financial fragility and dependence on volatile international capital markets.

Policy recommendations

To achieve such results, policy makers in different countries would benefit through learning more actively from one another's experiences. Policy makers should exchange their experiences and lessons learned within the frameworks of the OECD Principles of Corporate Governance and the OECD Guidelines for Pension Fund Governance, with the active support of the OECD. Five policy areas deserve particular attention:

First, given that pension-fund assets are likely to continue to grow in Latin America, priority must be given to strengthening local financial-market infrastructure and financial regulatory frameworks.

Second, regulations that hamper a healthy diversification of pension assets should be re-examined with a view to facilitating asset diversification while maintaining high prudential standards. Increasing the share of equities and/or foreign assets allowed in the investment portfolios of pension funds, in countries where current limits on such assets are close to zero, would contribute not only to better pension-fund risk management through enhanced asset diversification but also to reducing the undesirable side-effects of current pension-fund investment patterns on domestic asset prices. And, regarding equities, for pension funds to become active shareholders capable of exercising effective voice in the quality of the governance of the companies in which they invest money, regulators in

ISBN: 978-92-64-03826-4

countries that limit pension funds' equity investment to indexed funds should consider allowing pension funds to buy and sell the shares of individual companies. Any such relaxation of investment limits must be accompanied by effective incentives and tools for asset managers to diligently monitor and be held accountable for the investments of their funds.

Third, policy makers should consider the benefits of allowing pension-fund asset managers the possibility to offer members a diversity of funds in terms of risk-yield profile, which today only Chile, Mexico and Peru allow. In addition to giving individual members a broader range of investment options, such multiple funds enhance the incentive for members to seek information on performance differences amongst fund investments, which may in turn help improve resource allocation.

Fourth, governments must give attention to the high administrative fees and costs that pension funds charge members in some countries. The two principal policy options for addressing this problem are: *i)* to strengthen competitive pressures on funds by liberalising the market to allow banks, insurance companies and perhaps other financial organisations to compete directly with pension funds for members' contributions; and *ii)* to reduce administrative costs through economies of scale by centralising, for the country as a whole, the collection of members' contributions, record keeping and reporting to members, and reduce administrative fees by limiting incentives for members' costly and inefficient switching between administrators. While the former option relies more on the competitive market mechanism, it requires careful evaluation to avoid exposing workers' pension assets to the excessive risk-taking that may plague the investment and management behaviour of non-specialised financial organisations.

Fifth, the laws and regulations that govern private pension funds need to be revised to strengthen the role and responsibilities of institutional investors as fiduciaries of other people's retirement assets. Transparency and effective rules of communication between fund managers and members are required for the governing bodies of pension funds to act consistently in the best interest of their members. Improved governance of pension funds can in turn greatly enhance the positive impact and simultaneously lower the risk of investment by pension funds in the equity of enterprises active in all sectors of the local economy, as well as internationally. By serving as powerful agents for improved corporate governance throughout their economies, well-governed pension funds can thus also contribute forcefully to long-term real economy-wide productivity growth. Workers, active and retired, and employers alike should benefit significantly.

Business for Development

Multinationals, telecommunications and development

Foreign direct investment (FDI) flows have stepped up dramatically around the world since the mid-1980s. In Latin America, the 1990s were a period of accelerated FDI inflows, led by the entry of developed-country multinationals into newly privatised or liberalised sectors.

The real change, however, is not in the game but in the players. Of worldwide FDI stocks, the share emanating from developing countries has increased by half, growing from 8 per cent in 1990 to 12 per cent in 2005. Latin American enterprises now also play away from home. Since 2006, the value of annual outward FDI flows from the major countries in the region has flirted with the $40 billion mark. This explosion of outward investment is

ISBN: 978-92-64-03826-4

largely the result of the rapid internationalisation of a small number of large enterprises, mainly from Brazil and Mexico. Indeed, in 2006, Brazil was a net source of FDI, with outward flows amounting to $26 billion, as compared to inflows of $18 billion.

The largest Latin American multinationals are in primary commodities and related activities; Mexico's cement producer, CEMEX, and Brazil's Petrobras, in oil, and Companhia Vale do Río Doce (CVRD), in mining, are important examples. Services and final goods have also become key areas of multinational activity by Latin American firms, first regionally, and now, for a small number of very successful enterprises, globally. While these firms' multinational growth reflects diverse corporate strategies, scopes and ambitions, it places Latin America firmly on the new global map of home countries for multinational corporate activity.

The telecommunications contribution

The telecommunications sector is at the crossroads of these new trends in multinational investment. While several multinationals from Europe and North America entered the sector aggressively in Latin America during the region's privatisation and liberalisation period in the 1990s, consolidation and competition have given the upper hand amongst these firms to Spain's Telefónica. Since 2000, successful expansion within the region by Mexico's América Móvil and its sister company Telmex has in turn created a formidable new regional competitor for Telefónica. The role of these two multinationals from opposite sides of the Atlantic, who now dominate telecommunications in Latin America, sheds valuable light on the contribution of multinational enterprise to sector-specific and broader economic development in the region.

Telecommunications contribute to the economic performance of countries as a whole because of the importance of the services they provide. By increasing the availability and speed of information flows to a broad range of potential users, the sector can transform both economic and political life. For the sector to play this transformational role, however, much depends on the extent of its coverage of the population and the degree of access it provides to different segments of the population. It is precisely in its impact on coverage and access that FDI in telecommunications has played a transformational role in Latin America.

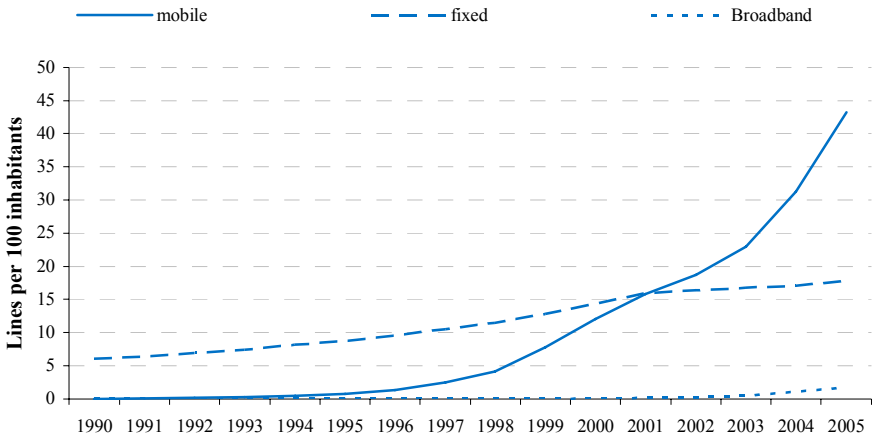
Since privatisation started in the region at the turn of the 1990s, cumulative FDI flows in the sector — including the entry of foreign enterprises through privatisations, capital expenditures and the establishment of new mobile operations — have exceeded $110 billion. FDI in this sector has thus been a major source of Latin America's total FDI inflows. Equally important is the fact that in such non-tradable services as telecommunications, where responsiveness to local conditions is crucial for success, multinational investors have pursued strategies adapted to individual host countries ("multi-domestic strategies") that have in turn generated significant employment and fiscal revenues in host countries.

FDI in this sector has also helped bring about the rapid progress of connectivity in Latin America. Telephone density (lines per 100 inhabitants) has not only increased significantly: it has increased most where the sector has received the most FDI per capita. Figure 4 shows the impressive speed at which mobile telephony has spread in the region since the late 1990s. The growth in landline density is also significant, especially during the 1990s, although it has visibly slowed since then (and at 18 lines per 100 inhabitants, remains far below universal service). By 2005, the region thus attained a combined teledensity of 61, above the world average of 54, and well above South Asia's 12 for example (although still a long way from average levels in OECD countries of 130).

ISBN: 978-92-64-03826-4

Figure 4. **Mobile, Landline and Broadband Penetration**

Latin America population weighted average

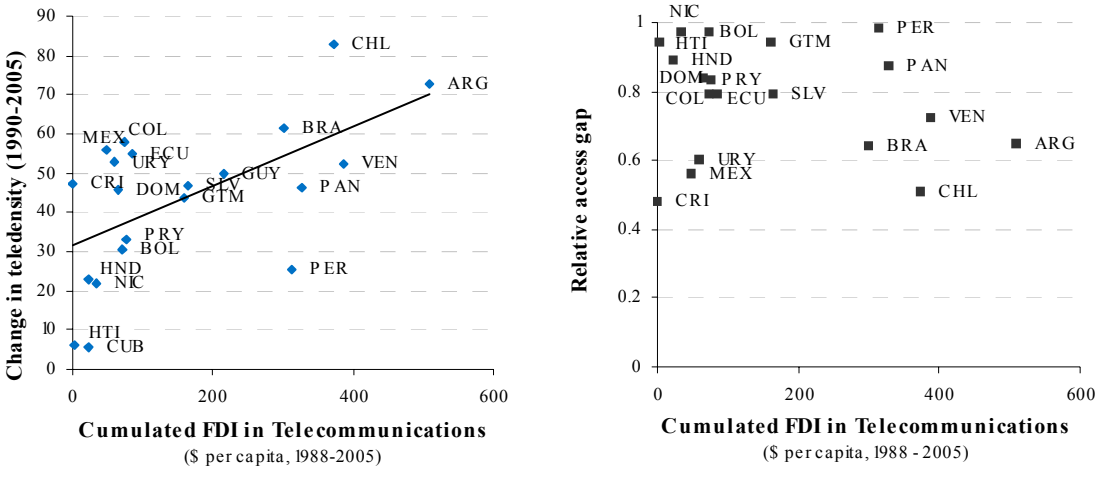


Source: OECD Development Centre (2007); based on ITU (2006) data.

StatLink http://dx.doi.org/10.1787/121327185628

Privatisations, sizeable flows of market-seeking FDI and competition amongst investors in the sector have combined to play a key role in bringing about this growth in connectivity. Also important has been the rapid spread of mobile technology — sizeable investments have gone into telecommunications infrastructure, especially linked to the spread of mobile technologies — together with process innovation (e.g. pre-paid phones) and regulatory innovation (e.g. calling-party-pays charging). Figure 5 confirms that teledensity has increased the most in countries that have received the most FDI per capita in the sector.

Figure 5. **FDI Impact on Telecommunications Outcomes**



Source: OECD Development Centre (2007); based on ITU (2007), IADB (2007), SEDLAC (2007) and World Bank PPI Database (2007) data.

StatLink http://dx.doi.org/10.1787/121701322488

ISBN: 978-92-64-03826-4

Figure 5 also shows, however, that this impressive growth in connectivity has not significantly lowered the access gap between the rich and the poor in most countries of the region. The increase in service initially benefited mostly the better-off, while the poor remained underserved. Inequality — as measured by the difference in the proportions of rich and poor people who have telephones at home — remains high. For the region as a whole, an individual in the highest income quintile is more than three times more likely to have a phone than one in the lowest income quintile.

The importance of regulatory frameworks

In countries with a particularly dynamic telecommunications sector, such as Brazil or Chile, some reduction in inequality occurred more recently (e.g. a rich Brazilian was 10 times more likely to have a phone than a poor one in 1997, but only 2.5 times by 2004). Contributing to this reduction in inequality have been moves by government regulators in these countries to supplement market mechanisms in the telecommunications sector with universal-access obligations on incumbent suppliers, or to constitute funds for the promotion of universal access. Chile's innovative project-selection mechanisms are an important example.

The most successful regulatory models for telecommunications in Latin America, in terms of increasing coverage and simultaneously lowering inequality of access between rich and poor, have ensured competitive behaviour in the sector through careful but determined regulation. While the performance of public monopolies ranges from good to dismal in countries where those monopolies still exist, even the better performers are less responsive to the new opportunities offered by mobile technologies. The privatisation of those same monopolies or the granting of long exclusivity periods to incumbents, as in Mexico, Nicaragua and Peru, while attractive in terms of revenue generation, has created uncompetitive markets that are seriously underperforming for users, especially in landline coverage.

The gap in access to telephone services between rich and poor thus remains substantial in most countries in the region, and while the provision of voice service can go a long way towards strengthening social ties and increasing mobility, it is only the first step in bridging the communications and digital divide between rich and poor. Undeveloped telecommunications networks will also remain a bottleneck for broadband access, notwithstanding the value of communal approaches to providing internet access, which are helping internet services outpace landline expansion.

The bottom line is that the spectacular progress of mobile telephony constitutes an important opportunity to reach (including through mobile banking) major segments of Latin America's population hitherto largely excluded from productive integration into the modern economy. Only a regulatory framework that ensures contestable-market behaviour by the suppliers of telecommunications services can ensure the affordability of those services for large numbers of poor households and small enterprises. The combination of such a regulatory framework, technological innovation, and competition by multinational investors for local consumers holds a significant potential for enhancing the productivity and living standards of large numbers of people.

ISBN: 978-92-64-03826-4

Trade for Development

China, India, and the challenge of specialisation

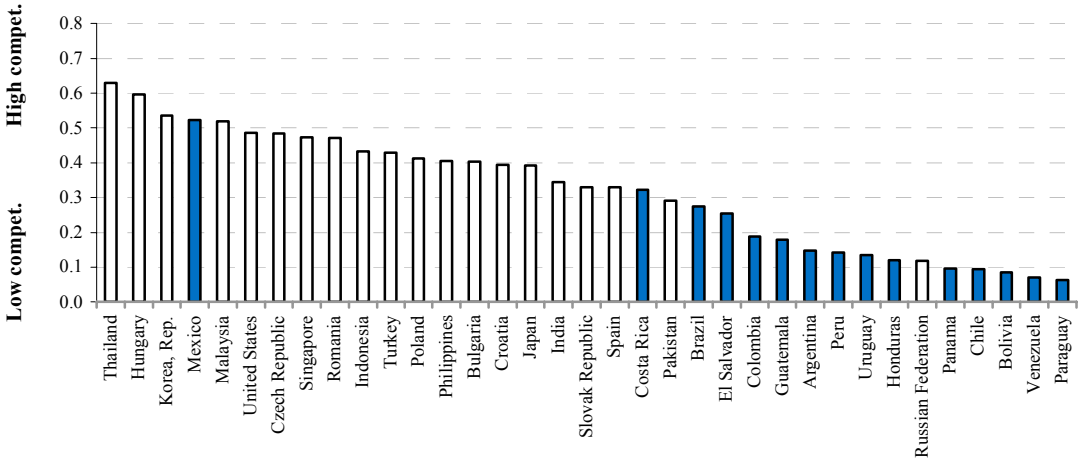
The rise of China and India in the global economy has had important effects on Latin America and been the subject of passionate public debate. Both these Asian giants have outperformed Latin America since the mid-1990s in terms of growth, exports, FDI attraction and innovation, giving rise to considerable apprehension in the region. While there are many examples of business co-operation between Latin America and the Asian giants, and trade agreements are being signed between their governments, public opinion has at times seen Asia's increased presence as a threat to national industries. A closer look at the real impact in Latin America of the world's rapidly growing trade with China and India nevertheless offers a much more encouraging assessment.

Trade competition between Latin America and the Asian giants

The United States, the European Union and Japan are where most third-market competition takes place between Latin America and the Asian giants. That competition is fiercest in the United States, which alone received 57 per cent of Latin American exports in 2006. China and India have been increasing their market shares in the United States — and, in the case of China, have already overtaken Mexico's share, for example.

Closer inspection shows, however, that only a few countries in Latin America face much trade competition with China and India, and that the latter do not constitute a significant threat to Latin America as a whole. Figures 6 and 7 provide indicators of export competition between China and India and selected countries. The competition is measured by comparing the trade structure of each country with that of China, in Figure 6, and with that of India, in Figure 7. A high score indicates similarity in export structures, which suggests more third-market competition.

Figure 6. **China's Export Competition with Latin American and Other Selected Countries**

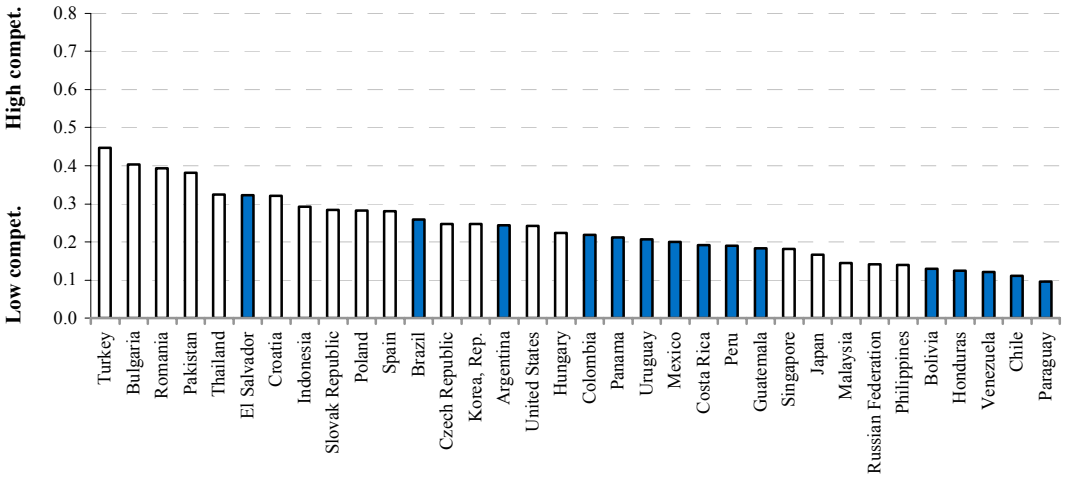


Note: Measured by Average Coefficients of Specialisation and Coefficients of Conformity.
Source: OECD Development Centre (2007); based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/121447200442

ISBN: 978-92-64-03826-4

Figure 7. **India's Export Competition with Latin American and Other Selected Countries**



Notes:
Measured by Average Coefficients of Specialisation and Coefficients of Conformity.
For more details, see Statistical Annex table 4.A5a and 4.A5b.
Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/121480464125

The data show that the export structures of most Latin American countries are very different from Chinese and Indian export structures, implying that they have little to fear from China's and India's export dynamism. Other emerging economies such as Thailand, Hungary and Malaysia are facing substantially tougher competition from Chinese exports. Mexico and Central America are the exceptions to this general pattern in Latin America of non-competition with China. Latin America's competition with India is similarly low, with El Salvador, Brazil and Argentina apparently facing the most exposure to competition, and emerging economies in other regions — notably Pakistan, Romania, Turkey and Bulgaria — facing much tougher competition with India. Not surprisingly, Latin American countries that export mainly commodities face the least trade competition with China and India, as the latter are net importers of these products. Paraguay, Venezuela, Bolivia and Chile thus suffer the least from Chinese and Indian trade competition.

Export bonanza in commodities

Equally significant is the fact that rapid growth in China and India is opening important export opportunities for Latin American countries. Thus, while Mexico's export structure suggests it is the most vulnerable amongst Latin America's large countries to Asian competition in third markets, especially in manufactures, Mexico is also one of the Latin American countries, together with Colombia and Venezuela, that stands to gain the most from increased commodities exports to China and India. Indeed, of the 19 biggest Latin American and Caribbean exporters, 11 are specialised in commodities, and both China and India are prime importers of these products. Their heightened demand for oil and minerals has already substantially increased Latin America's export earnings, which have benefited both directly, from the increased volume of the region's commodities exports to China and India, and indirectly, from the increase in world prices for the region's commodities exports to Asia and elsewhere induced by strong Asian demand. Few countries in Latin America, in contrast to Southeast Asian developing countries for example, appear likely to benefit from

ISBN: 978-92-64-03826-4

potential intra-industry trade growth with China and India, however. Mexico and Brazil may be partial exceptions in this regard, as they may have some potential to benefit from intra-industry trade in manufactures with the Asian giants.

Dutch disease, or the natural-resource curse

While China's and India's growth dynamism thus offers major benefits for Latin American exporters of primary goods, including oil, minerals and agricultural products, the principal risk is that as commodity exports become more valuable and commodity exporters see their incomes rise, they will rely on commodity exports to the detriment of other sectors. As is well-documented in the literature on the so-called Dutch disease, surges in commodity-export income, while increasing both growth and government revenues, can have substantial adverse effects if they are not managed responsibly. Surging commodity exports can easily drive up a country's exchange rate, which induces a long-term decline in non-commodity exports, notably manufactures, to the detriment of economic development.

Recent data on trade patterns in Latin America are partially consistent with the need for concern about Dutch disease in the region. The terms of trade have notably risen in Colombia, Chile and Uruguay, for example, indicating that the prices of their main exports are increasing faster than those of their imports. Specialisation has also increased, with most Latin American countries showing a higher degree of export concentration in commodities than at the beginning of this century. The trend towards greater specialisation in commodities is most marked in Venezuela, Ecuador, Bolivia and Chile; the exceptions are Costa Rica and Argentina.

More reassuring is the fact that real exchange rates have not appreciated as much as could be feared. Macroeconomic stability has also been maintained, with inflation contained. Fiscal reform is in part to be credited for these successes, especially recently established oil and stabilisation funds. New transparency rules, such as freedom-of-information laws, should further stimulate responsible and accountable policies.

Enhancing competitiveness

The current commodities boom also intensifies the need for both governments and firms in Latin America to redirect windfall revenues towards strategic growth-enhancing activities in order to maintain growth beyond the natural-resource bonanza. These activities include building up capabilities in innovation, education and physical infrastructure. They are needed to strengthen the competitive position of the economy's non-commodity exporters, including those involved in intra-industry trade, and to offset the negative impact of any exchange-rate appreciation. Diversifying the economy and taking advantage of non-commodity export opportunities also require a sound business environment, and it is important that Latin American countries be attractive destinations for FDI and for co-operation on innovation. Yet spending on innovation remains insufficient, and what is spent goes largely to basic research with little private-sector participation. Education, too, remains a major challenge, even for the region's best performers.

Moreover, for those parts of Latin America's economy that do compete against Chinese and Indian exports, including much of Mexico's and Costa Rica's manufacturing export industries, as well as labour-intensive sectors in other parts of Latin America and the Caribbean, proximity to the United States offers a major potential competitive advantage in goods where fast delivery or short turn-around times are crucial. These goods include clothing whose fashions change frequently and rapidly, for example, and intermediate automotive and electronic products in lean production systems that rely on just-in-time delivery of

ISBN: 978-92-64-03826-4

manufactured inputs. To take competitive advantage of proximity to the United States nevertheless requires well-performing infrastructure, in transportation as well as in telecommunications. Yet current infrastructure investment levels in Latin America remain substantially below those of Asian countries, and many countries need to rethink their infrastructure-investment strategies.

Infrastructure thus constitutes a potentially critical part of Latin America's response to increased competition from Asia. Mexico needs to exploit its geographical position fully by improving infrastructure, and Latin America as a whole needs to invest more and better in infrastructure. Such investment is also likely to help reduce inequality and poverty. It requires a well-organised public sector capable of managing infrastructure projects while maintaining fiscal discipline and engaging the private sector.

Looking Forward

Latin America benefits today from stable macroeconomic environments and pragmatic policy making. Democracy is widespread, and is gaining strength from improving fiscal policies. Pension reform is promoting financial development, if not raising savings. Foreign direct investment is strong, and the region has become an important home, as well as host, to multinational corporations. Rapid development of telecommunications, to which foreign investors are major contributors, should help raise the productivity and living standards of many people. And trade with Asia, contrary to widespread fears, constitutes more of a bonanza than a competitive threat for the region as a whole. Indeed, the preservation of macroeconomic stability in the context of such a bonanza is itself an important achievement.

The challenges Latin America faces today are no less impressive. Continuing high levels of poverty and inequality top the list. Together with policies to sustain growth, they call for less regressive and more efficient social and public expenditures that help build fiscal and democratic legitimacy. They call for pension reforms that, in addition to deepening capital markets, provide reliable sources of retirement income for much broader segments of the population. They call for regulatory systems in key public services (including telecommunications) that are carefully designed to complement market incentives while effectively lowering inequality of access between the rich and the poor. They call for governments and firms to redirect more of their windfall commodity export earnings to strategic long-term growth-enhancing activities, including more and better spending on education, innovation capabilities and infrastructure. Above all, they require efficient and responsive public sectors that benefit from fiscal legitimacy and are capable of providing strategic vision while maintaining fiscal discipline and fully engaging the private sector.

ISBN: 978-92-64-03826-4

Chapter 1

Policy Coherence for Development

Better, Fairer, More: Fiscal Policy and Legitimacy

Abstract

Fiscal legitimacy — the trust people place in their government's fiscal policy — matters for economic development and democratic governance because it affects the quality of a country's fiscal policy. Many countries in Latin America suffer from a vicious circle in which poor-quality fiscal policy hinders the generation of tax revenue and the effectiveness of public expenditure, thereby weakening fiscal and democratic legitimacy, which in turn undermines the quality of fiscal policy. Brazil and Mexico illustrate: Brazil collects and spends much, Mexico collects and spends little, but neither performs well in terms of fiscal quality. In the 1990s, fiscal reform in Latin America focused with some success on insulating fiscal policy from politics, but many reforms ultimately failed because they did not take local political realities into account. Today, politics is returning to the front of the debate on fiscal and especially tax reform, with the link between fiscal policy and democratic governance beginning to gain the attention it requires. Decision makers need to exploit the linkages between fiscal policy and democratic governance to successfully implement fiscal reform and address Latin America's urgent social challenges. Local think tanks can contribute by stimulating a debate on policy options and so play a crucial role in enhancing transparency, but they require financial autonomy to ensure their intellectual independence.

ISBN: 978-92-64-03826-4

Introduction

Latin Americans have long been concerned with the role of fiscal policy in fostering social cohesion. Writing in the early 1960s at the United Nations Economic Commission for Latin America, Chilean economist Aníbal Pinto observed, "Social pressure in Latin America is fostering a preoccupation for income distribution. Even amongst the few countries with relatively dynamic growth, a conscience is maturing that extreme inequality in the distribution of the fruits of progress constitutes a social and economic problem of the utmost importance" (Pinto, 1962). The redistributive role of taxation and public expenditure has been a recurrent theme in Latin America at least since that time.

Nor is the issue specific to Latin America. "The spirit of a people," wrote Joseph Schumpeter in 1918, "its cultural level, its social structure, the deeds its policy may prepare — all this and more is written in its fiscal history, stripped of all phrases" (Moore, 2004). Who should pay taxes — and how much — may appear to be a technical question whose resolution can be assigned to specialists. But no interpretation could be further from the truth, for fiscal policy is an expression of the very soul of a country. It is as important to democratic governance as to economic development. Historians trace the development of democracy in Europe, for example, and the very origin of the United States, to the development of a fiscal state with broader representation and a more inclusive voting franchise (Moore, 2004).

Fiscal policy, legitimacy and democratic governance are intimately connected.

Sound democratic governance requires democratic legitimacy, which reflects citizens' confidence in democracy over other forms of government and their acceptance of how it works in their country. Sound fiscal policy requires fiscal legitimacy, which reflects citizens' trust in their public authorities' performance in collecting taxes and spending public revenues. Democracy puts fiscal policy at the heart of the relationship between citizens and the state. As former UK Prime Minister Tony Blair clarified, "Welfare systems work only if there is shared responsibility — the state to provide help, the citizens to use that help to help themselves" (Blair, 2007). A functioning fiscal system, like a functioning welfare system, serves all, not just a privileged few.

This first chapter of the *Latin American Economic Outlook 2008* reviews the quality of fiscal policy in Latin America. It explores the link between fiscal policy and both democratic governance and economic development. It explains why the debate on fiscal policy in the region is moving away from being framed as a trade-off between efficiency and equity, towards greater understanding that much improvement is needed on both fronts. It argues that many governments should be collecting and spending better (and in some cases probably more) in order to deliver on social grounds — grounds which are crucial for democratic governance and long-term economic development, and ultimately for the success of fiscal reform as well. If athletes competing in the Olympic Games have long taken inspiration from the motto "*Citius, Altius, Fortius*" (Faster, Higher, Stronger), so in today's global economy might Latin American governments take inspiration for fiscal reform from the motto "Better, Fairer, More".

ISBN: 978-92-64-03826-4

Fiscal Policy and Legitimacy

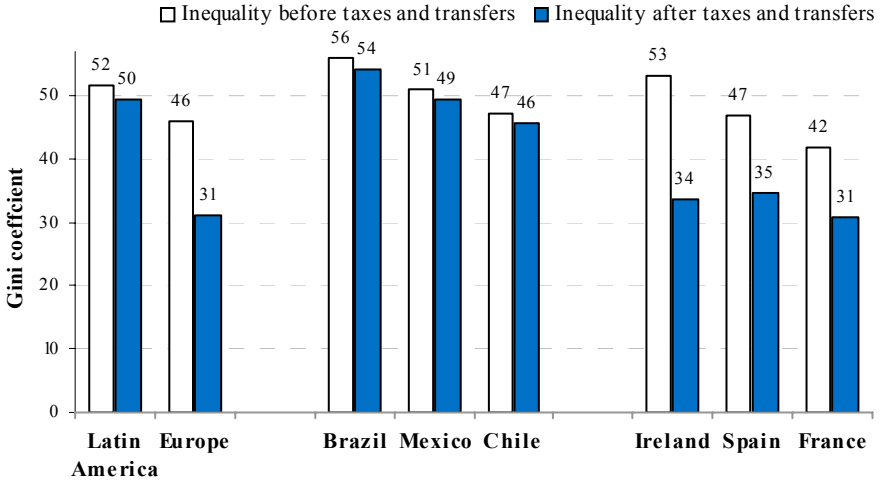
Fiscal and social pacts have a key role to play in Latin America (Schneider *et al.*, 2004; Boix, 2006; and Lora and Chaparro, 2007). While some authors emphasise the link between social cohesion and democratic governance (Ottone, 2007), others provide evidence on the positive impact of social cohesion on social expenditures (Schwabish *et al.*, 2003), and still others on the positive effect of social cohesion on tax collection (Li, 2005).

Can Latin American countries sustain more functional welfare systems on the basis of new fiscal and social pacts? A first step towards answering this question emerges from Figures 1.1 and 1.2, which show that Latin America's fiscal policy is ineffectual in terms of redistribution, certainly when compared to Europe (Figure 1.1), and that Latin Americans have little trust in the way their governments spend taxes (Figure 1.2).

Fiscal policy plays little or no redistributive role in Latin America.

Figure 1.1 shows that inequality in Europe before taxes and transfers, measured in Gini coefficients, is similar to that of Latin America. But while the combined effect of taxes and transfers in Europe is to reduce inequality by as much as 15 percentage points, in Latin America the reduction is only 2 percentage points (Goñi *et al.*, 2006).

Figure 1.1. **Redistribution of Wealth through Taxes and Transfers in Europe and Latin America, Selected Countries**



Note: Individual country data are available in the Statistical Annex, Table 1.A1.

Source: OECD Development Centre (2007); based on Goñi *et al.* (2006) data.

StatLink http://dx.doi.org/10.1787/120471287377

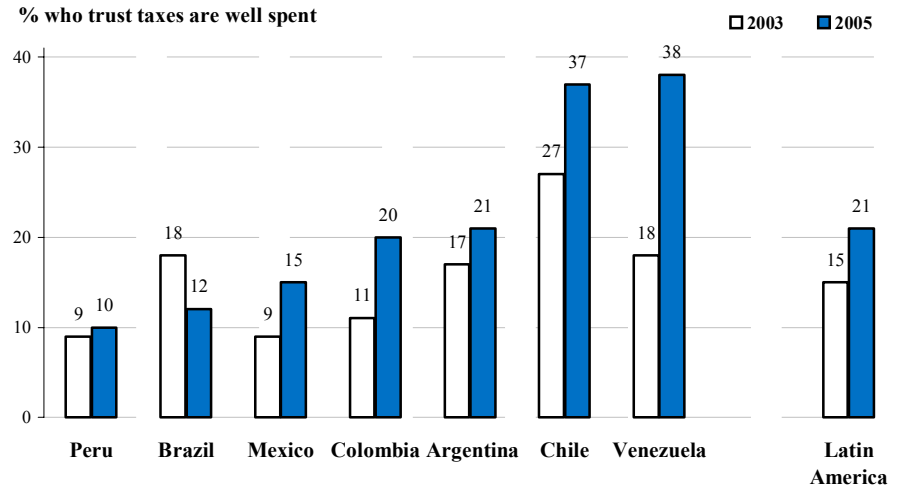
While the reduction varies slightly from one country to another, a regional picture clearly emerges. Part of this picture is quantitative: total transfers in Latin America amount to 7.3 per cent of GDP, on average, as compared to a much higher 14.7 per cent in Europe. But the picture is mostly about differences in quality: Europe has better-targeted and more progressive taxes and transfers (Goñi *et al.* 2006). Fiscal policy suffers in Latin America mainly because of poor quality on both the revenue and the expenditure side.

ISBN: 978-92-64-03826-4

Latin America suffers from low fiscal legitimacy.

This weakness is reflected in people's and firms' perceptions. Figure 1.2 shows that less than 25 per cent of the region's population trust that their taxes are being well spent, according to Latinobarómetro public opinion surveys in the mid-2000s. Even allowing for volatility and measurement error in those opinion surveys, there can be no doubt of the low orders of magnitude of fiscal legitimacy in most countries in the region, as these scores are corroborated by the views of both local and multinational enterprises operating there. According to similar indicators and business-climate measures that allow for cross-regional comparisons, managers consistently rate Latin American countries worse than those in other regions (Lora, 2006 and WEF, 2006).

Figure 1.2. **Percentage of Population Trusting That Taxes Are Well Spent**



Note: Individual country data available in Statistical Annex, Table 1.A2.

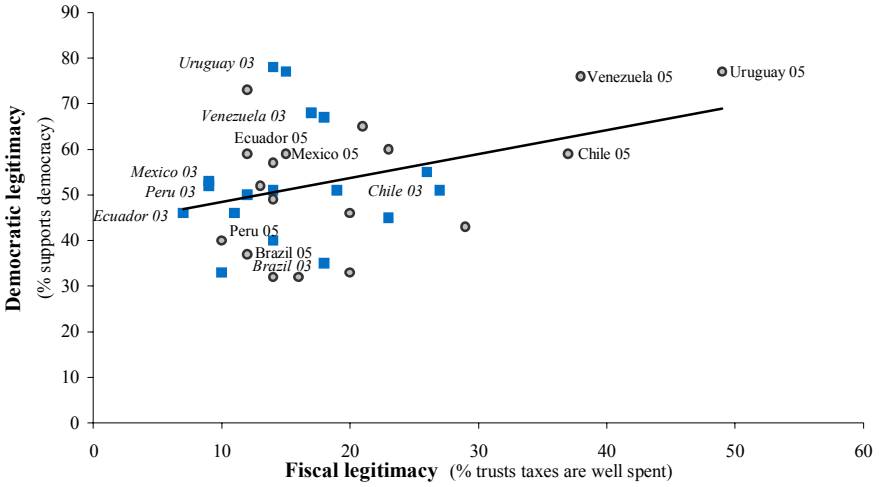
Source: OECD Development Centre (2007); based on Latinobarómetro (2003) data.

StatLink http://dx.doi.org/10.1787/120484410425

The low fiscal legitimacy that is widespread in Latin America is key to understanding why many Latin American countries do not have functioning welfare systems. Fiscal legitimacy is closely associated with democratic legitimacy — both citizens' support for democracy over other forms of government, and their acceptance or approval of how it works in their country. Figure 1.3 shows the correlation between the proportion of the population in different Latin American countries who trust that taxes are well spent in their country, and the proportion that supports democracy over all other forms of government. That the correlation is positive confirms that fiscal and democratic legitimacy tend indeed to be positively interrelated. But the fact that the correlation is relatively weak suggests that other factors, not shown in the figure, are also important (Santiso and Zoido, 2007).

ISBN: 978-92-64-03826-4

Figure 1.3. **Relationship between Democratic Legitimacy and Fiscal Legitimacy**



Note: For data on democratic legitimacy and performance, see Statistical Annex, Tables 1.A3 and 1.A4.
Source: OECD Development Centre (2007); based on Latinobarómetro (2003, 2005) data.
StatLink http://dx.doi.org/10.1787/120548087233

Part of the explanation is the considerable volatility of Latin American voters' view of democracy, especially how it works in their country, which hit a historical low in 2001. That year, according to Latinobarómetro surveys, the share of voters declaring their support for democracy over all other forms of government fell to less than half, and only one-fourth approved the functioning of democracy in their country. By 2006, these proportions had risen to 58 per cent and 38 per cent, respectively, for the region as a whole (Latinobarómetro, 2006). This volatility appears to reflect the fact that elections raise expectations, and when citizens do not then see the expected results of economic growth in their lives, their level of political approval, as reported in opinion surveys, can fall significantly.

The 2006-07 round of presidential elections in turn demonstrated that populist movements can gain democratic support even in a context of strong growth and good macroeconomic conditions. Peru illustrates: notwithstanding annual GDP growth of 8 per cent and low inflation, Ollanta Humala — a political outsider and former military officer with a chequered career, including a coup attempt — not only reached the run-off, he garnered over 47 per cent of the final vote in June 2006. The link between fiscal and democratic legitimacy suggests that the rise of social tensions, as Pinto noted in the 1960s, is closely associated with the failures of fiscal policy. Some have argued that fiscal reform is actually pinning down more populism in the region (Braun, 2007).

Indeed, fiscal legitimacy is not only closely intertwined with democratic legitimacy, but with the performance of the fiscal system. This linkage is reflected in evidence on the importance of "tax morale" — people's willingness to pay taxes[1] — as a determinant both of the degree of tax compliance in a country and the size of the country's informal sector (Cummings *et al.*, 2006; Torgler and Schneider, 2007).

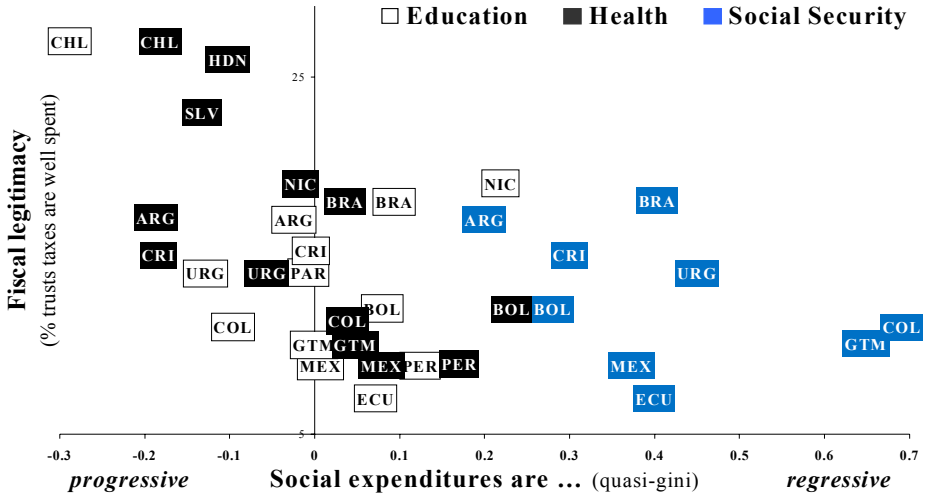
ISBN: 978-92-64-03826-4

Closing the cycle, empirical studies also report that people's attitudes towards democracy and their support for government officials (in particular the head of state) are key determinants of tax morale in a country (Torgler *et al.*, 2007). Clearly, fiscal and democratic legitimacy are key determinants of people's readiness to pay taxes, or the lengths to which they will go to avoid them.

Quality fiscal policy breeds legitimacy.

A key to raising fiscal legitimacy is to improve the social impact of fiscal policy. The data shown in Figure 1.4 reflect the deleterious effects on fiscal legitimacy of regressive social policies. The more regressive these policies are, the smaller is the percentage of the population trusting that taxes are well spent. Although these are perception-based data, such perceptions constitute an important part of "objective" reality for governments when they contemplate developing sustainable welfare systems, because people's perceptions determine their behaviour.

Figure 1.4. **Relationship between Social Spending and Fiscal Legitimacy**



Note: The vertical axis is the same for each country, but data are not available for all countries on all three measures.

Source: OECD Development Centre (2007); based on Latinobarómetro (2003) and ECLAC (2005) data.

StatLink http://dx.doi.org/10.1787/120563862637

The Quality of Fiscal Policy

The influential early-20th-century German architect Ludwig Mies van der Rohe adopted the dictum "less is more" to describe his minimalist aesthetics which emphasised simplicity and technical beauty. Like van der Rohe, the architects of fiscal reform, and especially tax reform, in Latin America during the 1990s emphasised simplicity. They also sought to isolate fiscal policy from politics. Unfortunately, their art has been neither as successful — it worked, but only to a degree — nor as widely appreciated.

ISBN: 978-92-64-03826-4

Politics, it turns out, are crucial for the implementation of fiscal reforms, and cannot be ignored. As an eminent specialist noted already in the 1960s, "It is extremely difficult to carry out a rational fiscal programme in any developing country without some common developmental goals agreed upon by business, the public, and the most important implementer of fiscal policy, the government" (Ekelund, 1969). For some time, these common development goals have been missing in many Latin American countries.

Is less more? Twenty years of fiscal reform in Latin America

The implementation of fiscal reform depends on politics, which have often been responsible for only partial implementation resulting in mixed results.

Political factors were actually amongst the main drivers of fiscal reform in Latin America in the 1980s and 1990s. They included the democratic character of the executive, its relationship with the legislature, and the nature of a country's electoral system. In contrast, while most countries that engaged in fiscal reform had a history of hyperinflation, other economic factors, such as whether or not a country had recently experienced an economic growth crisis, do not appear to have had any significant impact on the probability of reform (Mahon, 2004).

Latin American fiscal reformers in the 1990s strengthened budgetary rules on the revenue side, passed fiscal-responsibility laws, and established multi-year budgeting frameworks and legal limits to public spending, deficits and/or debt. Tax reform in many countries consisted of strengthening administrative capabilities and insulating tax agencies from politics. Discussions on the importance of equity within income groups largely trumped concerns both about equity across income groups — that is, between the rich and the poor — and about the relationship between fiscal reform and the quality of democratic governance (Moore, 2007). Attention focused on capacity building for tax administration, the simplification of tax codes, and reliance on indirect taxation — namely, value-added taxes (Lledo *et al.*, 2004).

The attention given to efficiency was welcome news. Institutional reforms met with some positive results, especially those reforms directed at strengthening accountability, improving transparency and granting more independence to collecting agencies (Santiso, 2006; Filc and Scartascini, 2005, 2007). The establishment of semi-autonomous revenue authorities improved revenue collection in some cases (Taliercio, 2004).

Results of the 1990s fiscal reforms have nevertheless been mixed, in part because many of the reforms were not fully implemented. Tax-reform indices show that the reform process lost its impetus around 1995 (Lora, 2007).

The constrasting experiences of Brazil and Mexico, highlighted in Box 1.1, illustrate the challenges of successful implementation. They show that while the technical aspects of reform are important, politics play a major role in determining the success or failure of fiscal reform. They suggest that rather than pursuing technical perfection, a wise approach to fiscal reform may involve focusing with perseverance on reforms that are feasible.

ISBN: 978-92-64-03826-4

Box 1.1. **Brazil and Mexico: Different Stories, Similar Challenges**

Brazil and Mexico have much in common. Not only are they both big, rapidly emerging economies — the two biggest in the region — they face similar challenges: widespread poverty and high inequality. Yet, within the region, they are virtually opposites in at least one crucial aspect: the relative size of their public-revenue generation.

Despite their efforts, neither country has fully reached its potential

After stagnation in the 1980s, the political leaders of both Brazil and Mexico steered their countries towards a "political economy of the possible" characterised by more pragmatic, less ideologically influenced, policy making which has helped to stabilise their economies, build strong monetary and fiscal anchors and revive economic growth (Santiso, 2006). Today, both economies are increasingly open to international trade and foreign financial flows, and local enterprises have begun making globalisation work for their countries' economies (see also Chapters 3 and 4). Yet, despite sustained growth, neither Brazil nor Mexico — like many other countries in the region — has reached its full growth potential. While China has been growing at more than 8 per cent annually since the 1980s, growth in Brazil and Mexico today stands at between 3 and 4 per cent. India too has been growing twice as fast as Brazil and Mexico (OECD, 2007*a*).

The main challenge that Brazil, Mexico and the region as a whole face is to reduce poverty and inequality and achieve more rapid economic growth (Perry *et al.*, 2006). Despite some progress in recent years, Brazil's inequality is the highest of the region, Mexico's is only a little lower, and poverty remains a major problem. Indeed, about 20 per cent of the population in Brazil, 30 per cent in Mexico, and, close to one-fourth in Latin America as a whole survive on less than $2 a day. To boost economic growth, Brazil, Mexico and the rest of the region will have to address this challenge.

Brazil and Mexico have achieved different results in revenue generation

Of particular interest for our purposes is the fact that, while Brazil and Mexico are similar in many ways, they differ in their fiscal policy, notably revenue generation, to the point of constituting opposites within the region (Figure 1.7). At the high end, Brazil collects over 20 per cent of its GDP in tax revenues and 15 per cent in social-security contributions, for a total fiscal revenue of 35 per cent of GDP, which is comparable to OECD countries. Mexico, at the low end, collects less than 12 per cent in taxes and about 2 per cent in social-security contributions, for a total GDP share of less than 15 per cent, which constitutes one of the lowest in Latin America (as well as amongst OECD countries).

Brazil

In the late 1990s, Brazil implemented several key fiscal reforms. The 1998-99 external and fiscal crisis and the re-election of President Fernando Henrique Cardoso sparked a new attitude towards fiscal reform which made it possible to introduce reforms to increase public revenue and enhance fiscal discipline. A key piece of legislation, the Fiscal Responsibility Act, included new transparency rules and prohibited refinancing of state or municipal debt by the federal government. Brazil achieved fiscal discipline, however, by increasing revenue without reducing expenditure (Giambiagi and Ronci, 2005). Reform efforts resulted in an over-reliance on inefficient taxes, which the federal government did not have to share with regional and local governments, and added to the complexities of the tax system. The reforms also increased rigidities on the expenditure side, which led to greater inefficiency and made further reform more difficult. Uncertainty about how the different proposed measures would affect the states finally produced a stalemate, to nobody's benefit, and the most ambitious part of the reform had to be postponed indefinitely (Stein *et al.*, 2006). The combined result of those reforms has been a more complex fiscal system in need of further reform (OECD, 2006*a*).

ISBN: 978-92-64-03826-4

Box 1.1 (contd.)

President Luiz Inácio Lula da Silva, elected to succeed Cardoso in 2002, tried to take up fiscal reform during his first term (2003-06) but had to shelve most of the proposed reforms as Congress proved reluctant to tackle them. Whether Lula, now in his second term, will manage to pass the much-needed fiscal reform remains unclear.

Brazil's experience illustrates both the importance of political leadership, as in Cardoso's successful introduction of the Fiscal Responsibility Act, and how political factors may partially derail even the most carefully designed and implemented fiscal-reform programme.

Mexico

Mexico, where both revenue generation and spending are relatively low, has also made significant progress in fiscal reform since 1996. Progress has been especially important in improving budgeting processes, increasing transparency and introducing fiscal rules to deal with the volatility of the state's significant oil revenue. But Mexico has not managed to increase revenue significantly, a problem whose seriousness is reflected in OECD Secretary-General Ángel Gurría's expression of concern that, "in Mexico, the lack of consensus on certain aspects of the economic agenda has profoundly limited the possibility of higher growth. That is what happened with fiscal reform, which was necessary under President Zedillo, urgent under President Fox and can be postponed no longer under President Calderón" (Gurría, 2006).

In Mexico, for years, any serious attempt at fiscal reform became entangled in politics. As in Brazil, a degree of fiscal reform could be achieved only when it had the strong support of the political leadership and was carefully orchestrated. The administration of President Vicente Fox (2000-06) only managed to pass a Fiscal Responsibility Law in its last months in office, while attempts to introduce a value-added tax became entangled with politics and came to a standstill (Matsuda and Senderowitsch, 2007).

Fox's successor, President Felipe Calderón, has nevertheless managed to progress on the fiscal front. In his first year in office, a reform of the private-pension system passed through Congress (see also Chapter 2 in this volume), and the new administration has sent Congress a proposal for fiscal reform that includes the creation of a new body for the evaluation of public policies and a new minimum corporate tax designed to eliminate loopholes and special treatments. The reform package does not, however, include the politically sensitive issue of the value-added tax. It appears that fiscal reform may move forward in Mexico step-by-step, if not in one package.

Is more better? Spending and the quality of public services

Basic social services lack quality and improvement depends on how public resources are spent.

Most Latin Americans say that the quality of basic public services in their country is not good. According to Latinobarómetro surveys of public opinion, 92 per cent of Latin Americans express the view that their government should spend more on health, 57 per cent that it should spend more on basic education, and 75 per cent that it should spend more on social security. Businesses operating in the region also consistently rate the quality of basic public services as below average. Public schools and the efficiency of government in reducing poverty and inequality get the worst ratings (Lora, 2006).

ISBN: 978-92-64-03826-4

These opinions are corroborated by data on public expenditure in Latin America, which show that public spending is more pro-cyclical, public investment is lower (in particular for infrastructure), and the quality of public bureaucracy is poorer (with a similar wage bill) than in other emerging countries (Clements *et al.*, 2007).

Part of the problem lies in earmarking, whereby certain revenues (e.g. oil taxes) have to be spent in particular ways (e.g. on roads), which mars the budget process in many Latin American countries. Earmarked spending accounts for 80 per cent or more of total spending in Brazil and Colombia, for example, according to 2002 data. While earmarking may aim to address a valid social objective, it constrains the fiscal process by producing rigidities and misallocation. Infrastructure — in which public investment is urgently needed, including to address the challenge of competition with China (see also Chapter 4 of this volume) — was one of the main victims of fiscal adjustment in the region in the 1990s because of earmarking (Singh *et al.*, 2005; Calderón and Servén, 2004).

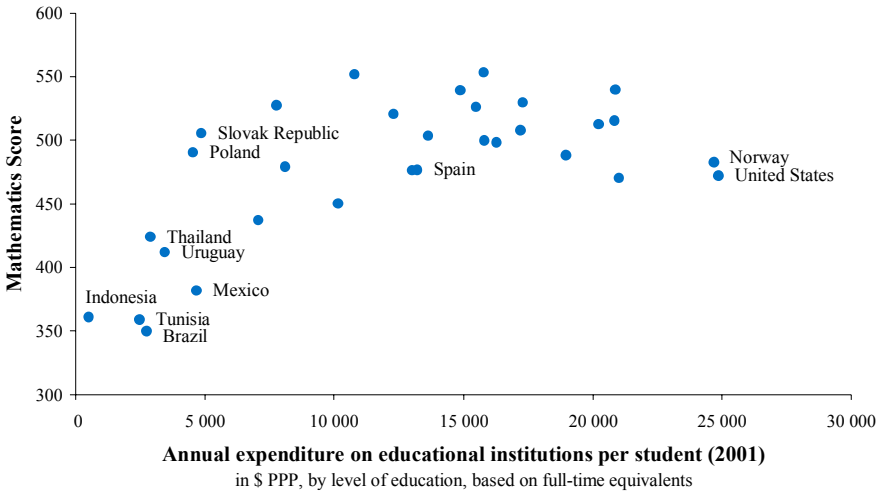
Yet rigidities and limited spending are only part of the problem. Indeed, social spending in the region has actually been increasing in most countries — despite spending rigidities and budget limitations. Another major part of the problem is the poor quality of much public spending, reflected in the weak impact of much of the social spending that does take place. The quantity of social spending is less important than the quality of that spending, as a determinant of its social impact. To achieve better results, public expenditures need to be better targeted and more efficient (OECD, 2005*a*).

An analysis of education expenditure in Mexico, for example, shows how spending can be improved to produce better results.

Education expenditures illustrate the kind of challenges many Latin American countries face. While most countries have achieved almost universal enrolment in primary schools, they lag in secondary-school enrolment despite levels of investment in education that are comparable to some OECD countries (OECD, 2005*c*). Figure 1.5 shows that in many countries, low public expenditure on education correlates with low student achievement, so low spending is at least partly at fault. But in some countries what is needed is not more, but better, spending. Thus, for example, Mexican students' test scores are poor compared to those of such countries as the Slovak Republic or Thailand, which achieve significantly better results with similar spending levels (Figure 1.5). The quality of Mexico's public expenditure may go far to explain these relatively poor results, as revealed in a careful OECD review of education in Mexico in 2005. Noting that 90 per cent of education expenditure went to wages (80 per cent to teachers, 10 per cent to other staff), and that 60 per cent of primary-school teachers did not have a university degree and 70 per cent of secondary-school teachers had no training in teaching, the survey recommended that Mexico rebalance expenditures, especially between wage and non-wage expenditures; it also encouraged Mexico to introduce incentives for teachers (e.g. in training and evaluation), and to focus on providing more equal access to schooling (OECD, 2005*b*).

ISBN: 978-92-64-03826-4

Figure 1.5. **Education: Expenditure and Performance in OECD and Selected Emerging Countries**



Source: OECD Development Centre (2007); based on Programme for International Student Assessment (PISA) (2004) and OECD (2005c) data.

StatLink http://dx.doi.org/10.1787/120578607141

Less is less! Equity gaps in spending and access to services

Regressive social spending in Latin America results in unequal access to basic services.

The poor quality of fiscal expenditure, often combined with insufficient spending, goes far to explain why Latin Americans' access to basic services remains largely inadequate, and especially so for the poor. As Table 1.1 shows, more than 25 per cent of all secondary-school-age children in Latin America are not enrolled in school, a proportion that rises to 45 per cent in poor families, on average. Similarly, more than 35 per cent of all Latin Americans have no sewerage, a figure that rises to more than 60 per cent of poor families. And more than 45 per cent of Latin Americans have no telephone, a proportion that rises to over 70 per cent of poor families.

Table 1.1. **Access by the Poorest and the Richest to Basic Services in Latin America**

	Latin America				Brazil				Mexico			
		Poorest	Richest			Poorest	Richest			Poorest	Richest	
	Total	20%	20%	*Gap %*	**Total**	20%	20%	*Gap %*	**Total**	20%	20%	*Gap %*
Water	**88**	79	95	0.8	**96**	89	100	0.9	**89**	79	95	0.8
Sewerage	**63**	38	85	0.5	**56**	33	78	0.4	**72**	52	87	0.6
Electricity	**92**	84	98	0.9	**97**	92	100	0.9	**99**	96	100	1.0
Telephone	**54**	28	82	0.3	**65**	34	94	0.4	**60**	38	87	0.4
Secondary school	**73**	55	93	0.6	**50**	24	87	0.3	**72**	60	91	0.7

Note: Latin America includes Argentina, Brazil, Chile, Colombia, Mexico, Peru and Uruguay. Gap is measured as the ratio of access from the poorest to the richest 20 per cent. Secondary school refers to net enrolment. See Statistical Annex, Table 1.A5 for more data.

Source: OECD Development Centre (2007); based on CEDLAS and World Bank (2007) data.

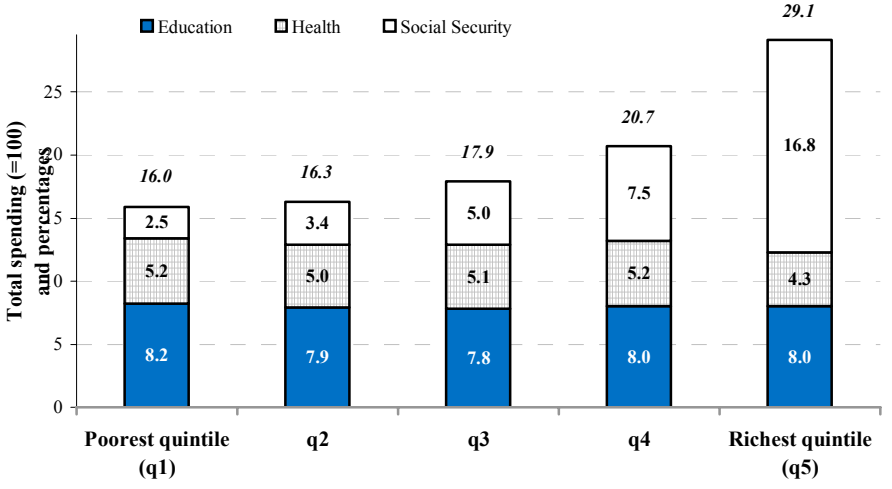
StatLink http://dx.doi.org/10.1787/121724212123

The gaps are thus large between the richest and the poorest income-distribution quintiles in their access to basic services in the region. The proportion of poor households with access to services such as sewerage, hygienic restrooms and secondary-school enrolment is about half that of rich households, on average, and much lower for telephones (see also Chapter 3 of this volume). Brazil and Mexico match this overall trend, a major cause of which is the regressive nature of public spending in much of Latin America. Figure 1.6 shows that whereas the poorest quintile receives 16 per cent of social spending, most of it on education, the richest quintile receives almost twice that amount, much of if through social security.

10.1787/120585302653

Transfers account in many OECD countries for more than two-thirds of the fiscal system's contribution to reducing inequality. Transfers also play a redistributive role in some countries in Latin America, but their positive impact in the region is much smaller. The limited size of transfers and poor targeting in many countries explain their smaller effect. Pension funds (Box 1.2) and unemployment insurance are two of the most prominent examples of regressive public transfers. Extensive evidence also suggests that public spending in health and education is at best mildly progressive, and can be strongly regressive, as in higher education. Only cash transfer programmes, such as the *Bolsa Familia* in Brazil or *Oportunidades* in Mexico, and to some extent expenditures on primary education, are clearly progressive (Goñi *et al.*, 2006; Elizondo and Santiso, 2007).

Figure 1.6. **Distribution of Social Spending across Income Levels: Average of Selected Countries in Latin America**



Note: Data are the simple average of nine countries: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico and Uruguay.

Source: ECLAC (2005).

StatLink http://dx.doi.org/10.1787/120585302653

Public spending that fails to enhance fiscal legitimacy — and often breeds fiscal illegitimacy — prevails in many countries in the region. Governments that do not deliver quality public services to broad segments of their populations are then unable to raise enough tax revenue to address social issues effectively. Completing this vicious circle in many countries are problems with the tax system, to which we now turn.

ISBN: 978-92-64-03826-4

Box 1.2. **Social Security in Brazil and Mexico**

Social security deserves special attention. It is not only one of the most regressive areas of public spending in Latin America, it is also an area where countries in the region are accumulating future debt. Estimates of implicit pension debt in the 1990s were as high as 305 per cent of GDP for Argentina, 289 per cent for Uruguay, 213 per cent for Brazil and 188 per cent for Mexico (Singh *et al.*, 2005).

Much of the growth in public debt in Latin America comes not from public deficits but from what economists call "fiscal skeletons" or, in technical jargon, "stock-flow reconciliation" (the term refers to an unexplained residual reflecting non-budgeted expenditures that show up in calculations of total public debt). In most OECD countries, this residual is indeed just a residual, but evidence shows that in Latin America fiscal skeletons account for the lion's share of debt accumulation (Borensztein *et al.*, 2007). Moreover, however imprecise the above-cited estimates of implicit pension debt may be, the trend suggests that more skeletons are probably hiding in the closets of many countries. And high and unstable debt will in turn eventually raise the cost of capital for all, making it harder to start a business, hindering economic growth and job creation, etc. — constituting, in short, a serious drag on the economy and long-term development.

In Mexico, the Mexican Social Security Institute (IMSS) is the public institution in charge of managing the pensions of private-sector workers (affiliation is compulsory). It covers more than 130 000 IMSS pensioned employees, who consume about 13 per cent of the IMSS budget. Today, the value of pensions for all current non-pensioned and pensioned employees is larger than the total value of IMSS assets (pension reserves, real estate, etc.). An IMSS employee may retire after 28 years of service (27 for female employees). If someone starts working at IMSS at age 20, he or she may retire at 48. Employees affiliated to the IMSS, that is, IMSS clients, may only retire after they turn 60 if they opt for an advance pension, or 65 for a normal one (Elizondo and Santiso, 2007).

Pension payments in public enterprises in Mexico are spiralling out of control. The state-run oil enterprise, PEMEX, the state workers' social security and services institution, ISSSTE, and the national electricity utility, CFE, spend together more than 7 per cent of GDP on pensions for their own workers (Elizondo and Santiso, 2007). Recognizing these challenges, the new administration of Felipe Calderón has rapidly introduced reforms aimed at solving many of these problems.

Brazil's social-security system is complex and includes several curious loopholes and exemptions. Professors, for instance, retire earlier after having contributed a lesser number of years than other public employees. Judges and parliamentarians enjoy special pension regimes. Until recently, when a military retiree deceased, his pension could be passed on to his unmarried daughter (Giambiagi and Ronci, 2005).

Brazil's social-security system is differentiated according to public employees and private employees. Since 2001, public-system coverage has been reduced to less than 5 per cent of the insured population but accounts for more than 65 per cent of the deficit. In 2005, 1 million people were covered by the public system and 20 million by the private one. Expenditure was about 4 per cent of GDP in the public system and 7.5 per cent in the private one. Contributions amounted to 1.7 per cent of GDP in the public system, and 5.6 per cent in the private system (Giambiagi and de Mello, 2006; de Mello, 2006*a*, 2006*b*; and de Mello and Moccero, 2006).

The system has also proven to fuel the informal economy: as many of the reforms of the social-security system have focused on granting access to previously marginalised populations, whether formally employed or not, there is little incentive to formalise the labour market. Throughout the 1990s, informality thus grew, in turn generating problems for the sustainability of the pension system for private employees. Pension benefits are tied to the minimum wage, which was raised. As a result, benefits grew while the contributing base shrank. Estimates of the private-pension-system deficit stood at close to 3 per cent of GDP in 2005 (OECD, 2006*a*).

ISBN: 978-92-64-03826-4

More, only better! Tax revenue in Latin America

Tax systems can be instruments of social justice.

Tax systems can be instruments of social justice by raising revenue to fund social programmes. When the system is efficient, it accomplishes this task and minimises costs and distortions at the same time. Taxation can also play a redistributive role, although in Latin America this role is limited — and some argue that the political economy of the region makes it practically impossible for taxation to play a redistributive role (Lora, 2007).

During the 1980s and 1990s, tax reform in Latin America focused on raising more revenue, increasing equity within income levels and sectors, and strengthening tax administration (Lora and Cárdenas, 2006). In most countries, tax reform resulted in simpler tax systems and more modern and independent tax administrations. Many countries also lowered import tariffs significantly in conjunction with a more general process of regional integration and greater openness to trade. Corporate taxes were lowered to attract foreign capital. Personal income taxes became more progressive, notably by raising minimum taxable-income levels (effectively exempting many from income taxes), although maximum rates were lowered, and the income levels at which those lower rates applied were also lowered. Value-added taxes (VAT) were generalised, replacing other sales taxes, and VAT rates increased (Lora, 2007).

The main achievements of these reforms were a modest increase in total tax revenue, mostly from VAT, together with increases in tax productivity (the relation between tax revenue and tax rate) and, in some countries, stronger tax-administration capabilities. On average, total revenue increased less than 1 percentage point of GDP (social security not included) as a result of a 2 per cent increase in VAT, a 0.2 per cent increase in direct taxes, and a 1.5 per cent decrease in other taxes. Income-tax productivity increased from 10 per cent in 1985 to 15 per cent in 2002, and VAT productivity rose from 24 per cent to 34 per cent in the same period (Lora and Cárdenas, 2006).

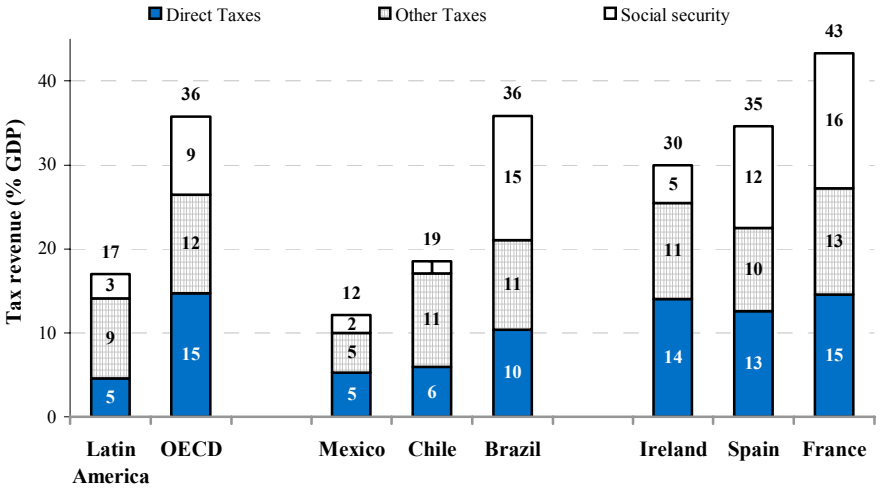
Tax revenue is low and tax structures are unbalanced.

Despite this increase (by less than 1 per cent of GDP), tax revenue in Latin America (except Brazil) remains low by international standards, and when compared with the region's current level of development (Perry *et al.*, 2006). Average tax revenue in the region is 17 per cent of GDP (Figure 1.7), as compared to more than 36 per cent in OECD countries. Only Brazil approaches the latter level, and when social-security contributions are excluded, even Brazil's level (slightly above 20 per cent) is below the OECD average of over 25 per cent of GDP. At the other extreme, Mexico's tax revenue is 15 per cent of GDP, the lowest level in OECD countries and amongst the lowest in Latin America.

Whereas tax structures are fairly well balanced between direct and indirect taxes in most OECD countries, direct taxation is particularly low in Latin America (Figure 1.7). Brazil, with the highest level in the region, collects about 10 per cent of GDP in direct taxes, a low figure when compared with the OECD average of 15 per cent. Direct taxation contributes about one-third of tax revenues (social-security contributions not included) in Latin America, compared with more than half in OECD countries, on average.

ISBN: 978-92-64-03826-4

Figure 1.7. **Tax Revenue in Latin America and OECD Countries**



Note: Data for Latin America are from ECLAC ILPES Database. Data are for central government except for Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador and Uruguay (for which data on general government is available). Data are for 2004, except for Bolivia (2003) and Uruguay (2002). Data for OECD countries are from the OECD Revenue Statistics database for the year 2004. Direct taxes include: *i)* taxes on income, profits and capital gains; *ii)* taxes on payroll and workforce; and *iii)* taxes on property. Other taxes include *i)* taxes on goods and services, and *ii)* other taxes. See Statistical Annex, Table 1.A6 for all data.

Source: OECD Development Centre (2007); based on ECLAC ILPES Database and OECD Revenue Statistics Database (2007).

StatLink http://dx.doi.org/10.1787/120608557111

The informal economy and tax loopholes make tax bases narrow.

Narrow tax bases continue to be one of the main challenges to Latin American tax systems. Tax bases can be approximated by looking at tax productivity. Despite recent improvements, Latin America still falls behind international standards in terms of tax productivity. VAT productivity, for which the region fares better, at around 35 per cent, is still below European standards, which stand above 60 per cent (Aldunate and Martner, 2006) — and the average masks considerable differences within the region, from around 25 per cent for Mexico to close to 50 per cent for Honduras. Latina America's income-tax productivity falls behind most other regions, including sub-Saharan Africa (Goñi *et al*. 2006).

Informality is one of the main causes of the region's narrow tax bases, and the size of the informal economy in the region is high and growing. Estimates for 2003 show the informal sector accounting for 43 per cent of GDP on average, up 4 points from 1990 and just as high as in Africa — and much higher than the 16 per cent estimated for OECD countries. There is considerable variance across countries, however, from Chile's 21 per cent to Bolivia's 68 per cent of GDP accounted for by the informal sector, according to best estimates (Schneider, 2007; Schneider and Enste, 2000).

Numerous loopholes further reduce the breadth of Latin America's tax bases. Corporate tax rates are eroded by numerous exemptions and special regimes. To attract foreign capital, many countries have provided special free-trade zones or exemptions for specific industries such as

ISBN: 978-92-64-03826-4

tourism or fishing (Lora, 2007). Mexico thus offers VAT exemptions for such sectors as agriculture, forestry and fishing (and has the narrowest VAT base amongst OECD countries), for example (OECD, 2007*b*).

Tax exemptions are regressive and costly.

Exemptions entail a significant loss of tax revenue, and also tend to benefit the rich more than the poor. They give rise to what are known as "tax expenditures", or non-collected tax revenues, which are very high in Latin America. They range from 8.5 per cent of tax revenue in Brazil (2004 data) to 61.5 per cent in Mexico (2005) — equivalent to 6.7 per cent of Mexico's GDP, or more than the fiscal revenue from the country's oil reserves — to more than 72 per cent of tax revenue in Guatemala (2000 data) (Cetrángolo and Gómez-Sabaini, 2006).

Although tax expenditures can be progressive, in Latin America they tend to benefit special interests, notably big agricultural producers and trade unions in big public and private companies (Elizondo and Santiso, 2007). Subsistence producers of maize in Mexico, on the other hand, received none of the benefits of exemptions offered to agricultural producers in the 1990s, and typically received less than one-fourth of the total benefits between 2000 and 2004, after the establishment of a direct-transfer programme specifically aimed at reaching them (OECD, 2006*b*). The poorest income quintiles in Mexico also receive less than 10 per cent of the subsidies implicit in VAT exemptions (Larre and Heady, 2007, who also suggest alternatives for VAT reform in Mexico).

A further problem in some countries is excessive reliance on volatile revenues from natural resources. This volatility often makes tax revenues unpredictable, further damages the quality of fiscal policy, and can pose serious problems for overall policy making (Avendaño *et al*., 2007). Thus, for example, while Chile's revenue from natural resources amounted to about 7 per cent of government revenue between 1990 and 2005, it accounted for 77 per cent of the variation in public revenue during that period; in Venezuela over the same period, revenue from natural resources accounted for 55 per cent of public revenue, and accounted for 33 per cent of the variation in public revenue (Jiménez and Tromben, 2006); in Mexico, revenue from oil accounts for almost 40 per cent of all public revenue today. To meet this challenge, countries are experimenting with institutional solutions. Chile and Mexico, for example, have both introduced stabilisation funds with some success.

Decentralisation of public expenditure is also playing a role in tax reform, although sub-national governments in many Latin American countries still rely heavily on transfers from the central government, and fiscal reform in the region has concentrated on imposing expenditure restrictions (see OECD, 2005*b*, for a detailed analysis of Mexico's experience). Thus, sub-national governments in the region had responsibility for 19 per cent of public spending as of 2004 — up from 13 per cent in 1985, although still low compared with the OECD average of about 40 per cent (although the latter range from a high of more that 60 per cent in Canada, to a low of less than 5 per cent in Greece) (Daughters and Harper, 2007). Significantly, sub-national governments that rely less on transfers from the federal or central government and more on their own taxation to finance their expenditures are more accountable (Gervasoni, 2006). Such decentralisation of revenue generation together

ISBN: 978-92-64-03826-4

with its expenditure also provides more fiscal legitimacy, and often better performance. Tax reform can help by providing incentives for sub-national governments to raise their own tax revenue.

In sum, taxation can play an important social role in Latin America by raising revenue efficiently. Although some progress has been achieved since the 1980s, tax revenue is still not sufficient to fund pressing social needs in many countries. Revenue from direct taxation not only remains too low: it has lost importance in relative terms. Tax bases are very narrow due to tax loopholes and the size of the informal economy. In some countries, tax revenues are excessively volatile because they rely too heavily on natural resources. Decentralisation is slowly occurring, but has far to go. Tax reform based on strengthening tax administration has thus proved limited.

Tax politics matter as much as tax administration.

Some experts espouse the view that in developing countries "tax administration is tax policy", and that this is true today for Latin America even more than in the past (Lora, 2007). But tax policy is influenced by the politics of taxation, and the two should not be confused. While capacity building can produce better tax administration, even the most capable administration can be manipulated and misused. Peru offers a particularly revealing example. While the Fujimori administration's tax reform in the 1990s completely overhauled the tax administration, putting in place a new tax administration that was meritocratic, more flexible and more effective, the national intelligence service then started to use tax-audit threats to extort entrepreneurs (McMillan and Zoido, 2004).

This distinction between tax policy and tax politics is important for economic and political reasons[2]. Insofar as high-quality tax systems provide an incentive to pay taxes, they also help to raise fiscal and democratic legitimacy. Tax reform, and fiscal policy as a whole, can also play a role in promoting democratic governance.

Fiscal Policy and Democratic Governance

Democratic governance and fiscal performance are intertwined.

Understanding the link between fiscal policy and governance is crucial. It may prove to be the key to unlock the current vicious circle of poor-quality fiscal policy and poor fiscal performance, especially for raising revenue from direct taxation. New empirical studies show that the causal interaction between taxation and democratisation runs in both directions. While a higher tax burden does not necessarily lead to more democratic governance, higher tax revenue relative to government expenditure is closely associated with more democracy. In this sense, taxation leads to representation (Ross, 2004).

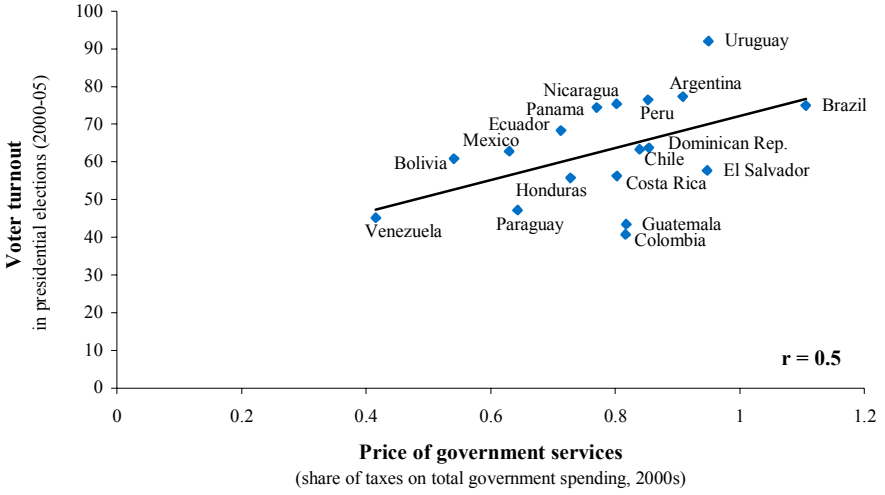
People who pay more taxes, at least relative to the value of public services they receive, are also more inclined to participate in the democratic process. Empirical evidence shows that taxpayers tend to accept higher tax obligations if they see results in terms of the services they receive in return for their tax payments. Figure 1.8 provides suggestive evidence along these lines for Latin America. It shows a positive correlation between the share of taxes in total government

ISBN: 978-92-64-03826-4

spending and voter turnout in presidential elections. A plausible interpretation of these data is that taxpayers demand more accountability from their government as the share of government services they pay for with their own tax payments (as opposed to non-tax sources of funding for government spending) increases.

We know from the "Dutch disease" and "resource curse" literature that an abundant endowment of natural resources can be an economic liability for a country, due mainly to its long-term tendency to discourage key productivity-enhancing economic activities, exacerbated by the volatility of income due to the fluctuation of international commodity prices. A growing literature is drawing attention to the equally negative effects of large natural-resource endowments in developing countries on the quality of local governance (e.g. Jaspers and Oman, 2007). An important reason for this negative effect is that an abundance of exportable natural resources can easily weaken the link between taxation and representation. In democracies, governments tend to rely more on taxation than on direct control of productive assets by the state to fund public expenditures.

Figure 1.8. **Relationship between Democratic Participation and Fiscal Policy in Latin America**



Source: OECD Development Centre (2007); based on ECLAC ILPES Database, CEPALSTAT and IDEA data; Payne *et al.* (2006).

StatLink http://dx.doi.org/10.1787/120618260217

An important challenge is to take these arguments one step further and derive concrete policy recommendations for the implementation of fiscal reform. Income taxation is an area with particular potential for the region, in terms of enhancing democratic governance and fiscal reform, and one where the experience of democratic transitions in some OECD countries, such as Spain, may prove helpful (Box 1.3). That experience shows how democracy allows a country not only to pass reform legislation, but pragmatically to adjust the reform process when local or international conditions change.

ISBN: 978-92-64-03826-4

Box 1.3. **The Development of the Personal Income Tax in Spain**

In the 18th century, the population of the British colonies in North America rallied behind the demand, "No taxation without representation!" because it was paying taxes to Britain but had no representation in the British Parliament. This led to the War of Independence and the founding of the United States of America on the principles of democracy… and fiscal legitimacy. Indeed, while public finance and democracy do not always go hand-in-hand, democracy is the political regime under which fiscal policy can achieve its full potential as a tool for allocating resources, redistributing income and ensuring macroeconomic stability.

Spain provides a more recent illustration. In 2007, the country commemorated the 30th anniversary of its first elections since the 1930s, held after almost four decades of dictatorship under General Francisco Franco. The year 2007 is also the 30th anniversary of the Moncloa Pacts, which led to the introduction of the General Personal Income Tax (IRPF — *Impuesto sobre la Renta de las Personas Físicas*), the main pillar of Spain's modern fiscal system.

Under Franco's dictatorship, the Spanish economy was characterised by lack of openness, weak entrepreneurship, extreme regulation with direct government intervention in the markets (especially in the labour market and in the financial system) and a public sector with little spending capacity. The advent of democracy led to structural reforms that changed Spain into a market economy. The reform programme was embodied in the Moncloa Pacts, a national agreement signed in October 1977 by all of Spain's democratic forces. It was the reflection of a broad consensus on the reform of the fiscal system, the social-security system, the financial system, and education and housing policy.

The core of the Moncloa Pacts was the transformation of the Spanish tax system. The main objectives were to make the fiscal system sufficient, fair and flexible — *sufficient*, by increasing revenue; *fair*, by applying the ability-to-pay principle, rebalancing direct and indirect taxation, and fighting vigorously against fraud (important for social legitimacy); and *flexible,* by introducing more powerful discretionary fiscal-policy instruments and increasing the elasticity of fiscal revenues relative to the business cycle.

Significant progress was achieved in the realm of direct taxation with the introduction of the IRPF in 1979. Until that time, direct taxation had consisted of taxes on products (that is, on activities, not on individuals) and corporate taxes. The IRPF, a general, personal and progressive tax (both in its rates and in its minimum exemption levels), allowed Spain to join the rest of the OECD economies, where personal income taxes are the main fiscal institutions. With the IRPF, the revenue from direct taxation tripled, from 2 per cent of GDP between 1965 and 1975 to 7 per cent since the mid-1980s.

The new personal income tax, the reform of the corporate tax and that of the social-security system all moved the tax system away from indirect taxation (customs tariffs and consumption taxes) towards the "European system". The tax burden in Spain, defined as the sum of revenues from income taxes and social contributions, converged with the OECD average in less than five years.

The role of the public sector in Spain has changed significantly in the past 30 years. Following fiscal trends in OECD countries, the IRPF was significantly reformed in 1992, 1999, 2003 and 2007. The reforms focused on enhancing efficiency and horizontal equity by reducing the number of tax brackets (from 28 in 1979 to 4 in 2007), reducing the maximum marginal tax rate on labour (from 65.5 per cent in 1979 to 43 per cent in 2007), broadening the tax base, and enhancing neutrality in the taxing of savings. Since 1994, part of the revenue from the IRPF has been administered by the regional governments (33 per cent of it since 2002, with tax authority) in accordance with the provision to transfer jurisdiction in health and education to the regions.

ISBN: 978-92-64-03826-4

Box 1.3 (contd.)

It was nevertheless in 1979 that the foundations of personal taxation were established in Spain during its transition to democracy, with the introduction of the IRPF. As economist Enrique Fuentes Quintana, one of the main architects of the Moncloa Pacts, observed during that period, "The tax system of a country and the way it shares out the tax burden amongst the social classes describe, without any kind of rhetoric, the country's true economic and social structure. When Spanish society is observed from this angle, there can be no doubt that injustice is mixed with inefficiency."

Today, both the injustice and the inefficiency of Spain's tax system are greatly reduced. Challenges remain, of course, due both to the transformation of the domestic economy and the changing international environment. The IRPF needs to be further simplified, the fight against fraud needs to be stepped up (particularly by linking more tightly tax bases and rents derived from different economic activities), and decentralisation needs to be more fully translated into shared responsibility. But there is no doubt that the existence in Spain of a sufficient, fair, and flexible fiscal system, articulated around the IRPF in a democratic context, has contributed to Spain's remarkable economic and social transformation of the past 30 years. Hopefully Spain's experience can provide useful insights for other emerging economies.

Source: Angel Melguizo-Esteso, Economic Bureau of the President of Spain

Sub-national governments can play an important role in income taxation, and thus in strengthening democratic and fiscal legitimacy.

Sub-national governments can also play an important role in improving fiscal policy, in particular by raising more revenue through taxation. Historically, accountable local governments have played a key role in strengthening democratic institutions through direct taxation. Sub-national governments in Canada and the United States wielded significant tax authority early in the 19th century, for example, raising revenue primarily through direct taxation. In Latin America, in contrast, initial post-colonial institutional conditions led to the development and perpetuation of increasingly centralised national tax systems that relied heavily on indirect taxation (Sokoloff and Zolt, 2005).

Strengthening the link at the sub-national level between democratic governance and fiscal policy thus constitutes a potentially fruitful area for further reform in the region. The decentralisation of tax authority should foster representation, accountability, discipline and transparency. New evidence from Latin America shows not only that more accountable sub-national governments are also those that rely more heavily on their own fiscal resources, as noted earlier, but that transfers from the federal government can actually hurt democratic governance at the sub-national level (Gervasoni, 2006).

Decentralisation brings its own challenges, of course. One cannot overstate the importance of establishing rules and accountability mechanisms for sub-national governments (Joumard, 2005). A danger is that municipalities, regional governments or sub-national states will spend resources with the hope, or belief, that the central or federal government will bail them out when they get into financial difficulty. Decentralisation can also give rise to "tax wars" amongst sub-national governments, as in Brazil, which undermine the tax base (Oman, 2000;

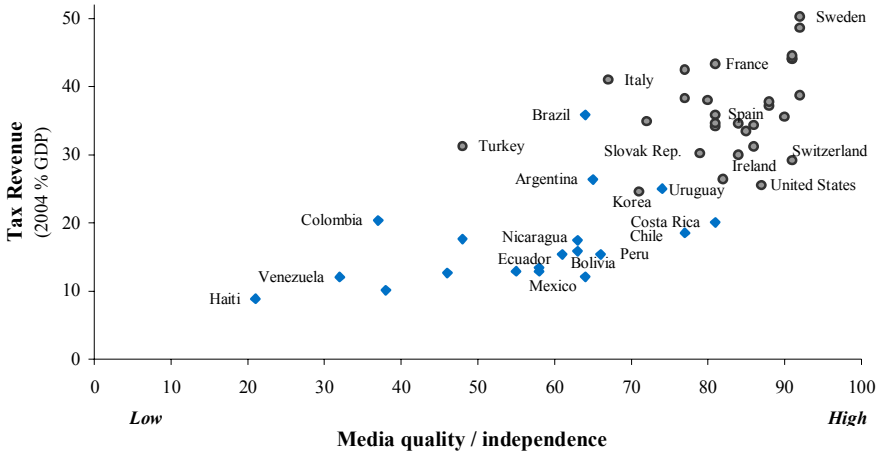
ISBN: 978-92-64-03826-4

de Mello, 2007). Experience in Latin America shows that weak administrative capabilities at the sub-national level can also hurt the efficiency of fiscal policy (Lora and Cárdenas, 2006). Still, decentralisation is progressing in the region. Governments should actively pursue a cautious approach towards the decentralisation of tax authority that combines local experimentation with effective transparency and accountability mechanisms.

Transparency and accountability are key.

Indeed, transparency and accountability are the keys to making fiscal policy work in a democracy. Ample evidence shows that such accountability and transparency mechanisms as the strong and active presence of a free press help to boost the quality of public spending and ensure democratic governance (Besley and Burgess, 2002; Svensson and Reinikka, 2005; McMillan and Zoido, 2004). Figure 1.9 depicts a strong positive relationship between indicators of the presence of high-quality and independent news media in a country and the share of tax revenue in the country's GDP. Although they are not proof of a causal relationship, these suggestive data highlight the crucially important role that the media and other independent "watchdogs" can play in improving the efficiency and legitimacy of fiscal systems throughout Latin America — as in all parts of the world.

Figure 1.9. **Relationship between Tax Revenue and High-quality, Independent Media**



Source: OECD Development Centre (2007); based on ILPES, CEPALSTAT, OECD Revenue Statistics and Freedom House data (2006).

StatLink http://dx.doi.org/10.1787/120628087167

Conclusions

Low fiscal legitimacy in Latin America is detrimental to fiscal performance and hinders the promotion of social and democratic goals.

Democracy puts fiscal policy at the heart of the relationship between citizens and the state. Fiscal policy will continue to be a major policy issue for Latin America, as it is in OECD countries. Close to 40 per cent of Latin Americans, or more than 200 million people, live in poverty, and inequality is greater than in any other region. Governments cannot ignore the challenges of fighting poverty and inequality while promoting stable and sustainable economic growth and development through fiscal reform.

While fiscal policy — and further fiscal reform — is crucial for addressing Latin America's pressing social challenges, many countries in the region suffer from low fiscal legitimacy. Both fiscal performance and democratic governance are damaged by citizens' lack of trust in their countries' fiscal systems and democratic institutions. An important cause of this distrust is that taxes and transfers widely play little or no positive redistributive role — contrary to their impact in many OECD countries. When taxation and public expenditures combined fail to help bridge the gap between the rich and the poor, the credibility of a country's fiscal system suffers: poor-quality fiscal policy hinders the generation of tax revenue, frustrates the quality of public expenditure, and undermines fiscal and democratic legitimacy.

Many Latin American governments are trying to improve fiscal efficiency and promote socio-economic equity. Fiscal reform has progressed in the region with the introduction of new rules to control public deficits, new fiscal responsibility laws, and measures to enhance transparency. In part as a result of these reforms, much of the region benefits from stable and predictable macroeconomic environments due to lower inflation, sounder public finances, lower sovereign risk premiums, and easier and better debt management.

Yet much remains to be done. The region needs better, fairer and more public spending, not only on health and education, but on infrastructure and innovation. Fiscal policy is regressive in many countries because wealthier households receive most of the system's benefits. Social-insurance programmes, in particular, are notably regressive in many countries. While conditional cash-transfer programmes, such as *Bolsa familia* in Brazil or *Oportunidades* in Mexico are, on the contrary, very progressive, their size and impact remain limited.

In tax reform, a major pending challenge for many countries is the elimination of special exemptions in direct and indirect taxes in order to make tax systems fairer and more balanced. Such reform would broaden the tax base, increase revenue, and operate as a disincentive for tax evasion. Moreover, as revenues from indirect taxes, notably value-added taxes, account for a large share of total tax revenues, many governments would improve the balance of their revenue structures and gain in fiscal accountability by increasing direct taxation.

ISBN: 978-92-64-03826-4

Enhancing fiscal legitimacy includes: greater transparency and accountability; more and fairer spending.

Enhancing transparency and accountability in fiscal policy is indeed a priority for the region. Independent third parties can play a constructive role in the auditing and evaluation of fiscal policies. An open debate on fiscal policies can enhance not only the process of approval of needed reforms and of new tax mechanisms, but also their implementation. Local think tanks can play a very important role here (Santiso, J., 2006*b*). Their independent monitoring of public spending and fiscal policy making can also strengthen the sense of public ownership over democratic processes. In many Latin American countries, these already play an important role, but their ability to monitor and criticise is limited by scarce funding and limited human resources. The creation of larger endowments would be an important step in providing Latin American think tanks with the more and better resources they need to analyse and evaluate public policies. Financial means and stability are also important for securing their independence from public actors, allowing them to exert their watchdog functions and express their dissenting views.

Decentralisation can also play an important role in strengthening accountability and democratic governance by strengthening the capacity, authority and accountability of sub-national governments, especially through direct taxation. New ways of empowering local governments in taxation need to be explored as they are not without challenges. In Brazil, for example, where states have been granted authority over VAT rates, there is evidence of counterproductive "tax wars" amongst different states.

Governments can thus increase fiscal legitimacy by: *i)* strengthening transparency and accountability through greater involvement of independent third parties in auditing and evaluating public policies; *ii)* promoting better, fairer, and more public spending; *iii)* broadening the tax base and making tax systems fairer and more balanced; and *iv)* reinforcing the capacity, authority and accountability of sub-national government bodies, especially through those bodies' greater use of direct taxation to finance their expenditures.

Significantly, strengthening administrative capabilities can only take tax reform part of the way. It is important to bring political realities explicitly and transparently back into fiscal reform, in order to improve tax policy and democratic legitimacy, because even the most capable administration can be manipulated and misused.

Fiscal reform should aim to broaden benefits and bring citizens and the state closer. An open and informed political debate, which can only happen if there is adequate transparency as well as full public access to information, is important for achieving this goal. Independent actors with the capacity and the financial independence to carry out a critical evaluation of policies and proposed reforms can powerfully enrich such a debate. In the process, better fiscal policy will strengthen democratic governance and economic development in Latin America.

ISBN: 978-92-64-03826-4

Notes

1. Tax morale is defined the literature as "the moral principles or values individuals hold about paying their tax", approximated by the proportion of survey respondents who think tax avoidance can never be justified (Alm and Torgler, 2006). The main conclusion of this literature is that "Taxpayers are more inclined to comply with the law if the exchange between the paid tax and the performed government services is found to be equitable" (Torgler, 2005). It goes back to the *quid pro quo* principle first applied to public finance by Swedish economist Knut Wicksell in the late 1890s. "No one can complain," wrote Wicksell, "if he secures a benefit which he himself considers to be (greater or at least) as great as the price he has to pay." (Wicksell, 1896)

2. The debate between those who see good tax policy as good tax administration and those who argue for attention to the politics of taxation resonates strongly in Europe as well. Picking up a battle that goes back at least to Francois Mitterrand's finance Minister Pierre Bérégovoy, who in 1989 declared " 'no' to rule by technocrats, 'yes' to rule by democrats", France's new President Nicolas Sarkozy has in turn criticised the European Union for "substituting technical expertise for political will" (Schrank, 2007).

ISBN: 978-92-64-03826-4

Statistical Annex

Table 1.A1. **Inequality, Taxes and Transfers**

	Inequality *before* taxes and transfers	Inequality *after* transfers	Inequality *after* taxes and transfers
Latin America			
Argentina	49.99	48.58	48.11
Bolivia	56.03	54.13	54.27
Brazil	47.23	45.76	45.57
Chile	56.76	53.34	52.16
Colombia	..	..	..
Costa Rica	..	..	..
Cuba	..	..	..
Dominican Republic	..	..	..
Ecuador	..	..	..
El Salvador	..	..	..
Guatemala	..	..	..
Honduras	..	..	..
Mexico	50.98	50.34	49.44
Nicaragua	..	..	..
Panama	..	..	..
Paraguay	..	..	..
Peru	48.59	48.79	47.94
Uruguay	..	..	..
Venezuela	..	..	..
Latin American average	51.60	50.16	49.58
OECD Benchmarks			
Austria	37.54	30.42	24.78
Belgium	46.53	36.38	29.20
Denmark	48.59	34.87	28.53
Finland	49.30	36.25	31.64
France	41.96	34.53	30.86
Germany	42.98	33.29	28.19
Greece	47.35	39.99	36.33
Ireland	53.14	38.90	33.75
Italy	47.51	40.95	37.44
Luxembourg	41.25	30.12	23.81
Netherlands	38.67	29.68	26.09
Portugal	49.35	42.97	38.06
Spain	46.78	39.57	34.76
Sweden	45.17	32.82	29.04
United Kingdom	52.27	38.75	34.29
Europe average	45.89	35.97	31.12

Note: ".." = not available.
Source: Goñi *et al.* (2006).

StatLink http://dx.doi.org/10.1787/121740062000

Table 1.A2. **Fiscal Legitimacy**

	2003	2005
Latin America		
Argentina	17	21
Bolivia	12	14
Brazil	18	12
Chile	27	37
Colombia	11	20
Costa Rica	15	12
Cuba	..	..
Dominican Republic	..	23
Ecuador	7	12
El Salvador	23	29
Guatemala	10	14
Honduras	26	20
Mexico	9	15
Nicaragua	19	14
Panama	14	13
Paraguay	14	16
Peru	9	10
Uruguay	14	49
Venezuela	18	38
Latin American average	15	21

Note: Percentage of respondents by country who answered "Yes" to the question: "Do you trust that the money from taxes will be well spent by the government?"
".." = not available.

Source: Latinobarómetro (2003, 2005).

StatLink http://dx.doi.org/10.1787/121828614178

ISBN: 978-92-64-03826-4

ISBN: 978-92-64-03826-4 © OECD 2007

Table 1.A3. **Democratic Legitimacy**

	1995	1996	1997	1998	2000	2001	2002	2003	2004	2005	2006
Latin America											
Argentina	76	71	75	73	71	58	65	68	64	65	74
Bolivia	..	64	66	55	62	54	56	50	45	49	62
Brazil	41	50	50	48	39	30	37	35	41	37	46
Chile	52	54	61	53	57	45	50	51	57	59	56
Colombia	..	60	69	55	50	36	39	46	46	46	53
Costa Rica	..	80	83	69	83	71	77	77	67	73	75
Cuba	..	..	..	..	..	..	..	..	..	..	..
Dominican Republic	..	..	..	..	..	..	75	..	65	60	71
Ecuador	..	52	41	57	54	40	49	46	46	59	54
El Salvador	..	56	66	79	63	25	40	45	50	43	51
Guatemala	..	51	48	54	45	33	45	33	35	32	41
Honduras	..	42	63	57	64	57	57	55	46	33	51
Mexico	49	53	52	51	45	46	63	53	53	59	54
Nicaragua	..	59	68	72	64	43	63	51	39	57	56
Panama	..	75	71	71	62	34	55	51	64	52	55
Paraguay	52	59	44	51	48	35	45	40	39	32	41
Peru	52	63	60	63	64	62	57	52	45	40	55
Uruguay	80	80	86	80	84	79	78	78	78	77	77
Venezuela	60	62	64	60	61	57	75	67	74	76	70
Latin American average	58	61	63	62	60	47	57	53	53	53	58
Average LA8	58	62	62	60	59	52	59	56	56	56	59

Note: Percentage of respondents by country who responded "Democracy is preferable to any other kind of government" to the question: "With which of the following statements do you agree most? Democracy is preferable to any other kind of government / Under some circumstances, an authoritarian government can be preferable to a democratic one / For people like me, it doesn't matter whether we have a democratic or a non-democratic regime".
Average LA8 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela.
".." = not available.

StatLink http://dx.doi.org/10.1787/121835157043

Source: Latinobarómetro (2006).

Table 1.A4. **Democratic Performance**

	1995	1996	1997	1998	2000	2001	2002	2003	2004	2005	2006
Latin America											
Argentina	51	34	42	50	45	20	8	34	34	34	50
Bolivia	..	25	33	34	23	16	24	25	17	24	39
Brazil	30	20	23	27	19	21	21	28	28	22	36
Chile	33	28	37	32	33	23	28	33	41	43	42
Colombia	..	16	40	24	29	8	11	22	30	29	33
Costa Rica	..	51	68	54	60	51	75	46	47	39	48
Cuba	..	..	..	..	..	..	..	..	..	..	..
Dominican Republic	..	..	..	..	..	..	..	..	36	43	49
Ecuador	..	33	31	34	22	15	16	24	14	14	22
El Salvador	..	26	48	47	21	21	38	33	37	37	25
Guatemala	..	17	40	57	39	17	35	21	20	28	31
Honduras	..	19	49	37	43	35	62	37	30	26	34
Mexico	22	12	45	21	37	26	18	18	18	24	41
Nicaragua	..	24	51	26	23	24	59	31	21	18	26
Panama	..	28	39	34	48	21	44	24	35	20	40
Paraguay	28	21	15	24	13	11	7	9	13	17	12
Peru	44	28	21	18	22	16	18	11	7	13	23
Uruguay	57	51	65	68	69	56	53	44	45	63	66
Venezuela	36	30	36	35	55	41	40	37	42	56	57
Latin American average	38	27	40	37	35	25	33	28	29	31	37
Average LA8	38	28	36	34	37	27	24	27	29	34	41

Note: Percentage of respondents by country who responded "Very satisfied" or "Fairly satisfied" to the question: "In general, would you say you are very satisfied, fairly satisfied, not very satisfied or not satisfied at all with the way democracy works in (country)?"
Average LA8 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela.
".." = not available.

StatLink http://dx.doi.org/10.1787/121841766846

Source: Latinobarómetro (2006).

ISBN: 978-92-64-03826-4

ISBN: 978-92-64-03826-4 © OECD 2007

Table 1.A5. **Inequalities in Access to Basic Services**

		Water		Sewerage		Electricity		Telephone		Secondary school	
	Year	Gap	Relative Index	Gap	Relative Index	Gap	Relative Index	Gap	Relative Index	Gap	Relative Index
Latin America											
Argentina	2003	6	1	63	19	2	0	..	..	30	6
Bolivia	2003-04	40	9	54	11	72	18	..	..	49	10
Brazil	2004	11	2	58	17	8	2	64	19	72	23
Chile	2003	8	2	29	7	2	0	51	13	24	5
Colombia	2004	17	3	48	12	4	1	78	27	36	9
Costa Rica	2004	8	2	54	14	3	1	49	12	53	15
Cuba	..	..	..	..	..	..	..	..	..	..	..
Dominican Republic	2005	40	9	67	21	15	3	84	33	53	15
Ecuador	2003	17	4	61	19	11	2	78	30	42	10
El Salvador	2004	50	15	82	33	39	9	80	30	74	26
Guatemala	2004	..	..	71	25	..	..	..	..	71	25
Honduras	2005	78	30	80	29	59	15	90	37	75	23
Mexico	2004	17	4	40	10	4	1	56	17	34	7
Nicaragua	2001	56	16	88	40	48	13	96	56	74	24
Panama	..	..	..	..	..	..	..	..	..	50	12
Paraguay	2004	52	14	93	49	15	3	83	30	43	10
Peru	2003	65	20	90	35	66	19	98	57	54	14
Uruguay	2005	2	0	59	17	..	..	60	16	37	8
Venezuela	2004	9	2	35	9	0	0	..	..	..	..
Latin American average		28	6	58	17	23	5	69	22	47	12
Average LA7		17	4	55	15	14	3	65	20	41	10

Note: Gap and relative index are both measures of inequalities in access to these basic services. Gap = 1- ("proportion with access in first quintile" / "proportion with access in fifth quintile"). Relative index (RI) is a measure of service concentration that takes into account intermediate quintiles RI =(4*(q5-q1)+2*(q4-q2))/(5*(q1+q2+q3+q4+q4)). Both measures go from 0 to 100 and from low to high inequality. Average LA7 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru and Uruguay.
".." = not available.

Source: Socio-Economic Database for Latin America and the Caribbean (CEDLAS and World Bank).

StatLink http://dx.doi.org/10.1787/122010768256

Table 1.A6. **Tax Revenue as Percentage of GDP (2004)**

	Year	Direct Taxes	Other Taxes	Social Security	Total
Latin America					
Argentina	2004	8.5	14.9	3.0	26.4
Bolivia	2003	5.1	8.4	2.4	15.9
Brazil	2004	10.4	10.7	14.8	35.9
Chile	2004	5.9	11.2	1.4	18.5
Colombia	2004	8.4	9.2	2.8	20.4
Costa Rica	2004	4.0	9.9	6.2	20.1
Cuba	..	..	..	..	..
Dominican Republic	2004	4.2	11.1	0.1	15.4
Ecuador	2004	2.6	7.8	3.0	13.4
El Salvador	2004	3.3	8.2	1.4	12.9
Guatemala	2004	3.0	7.1	0.0	10.1
Honduras	2004	3.7	13.4	0.6	17.7
Mexico	2004	5.3	4.7	2.1	12.1
Nicaragua	2004	2.8	12.9	1.7	17.4
Panama	2004	4.5	4.3	4.1	12.9
Paraguay	2004	2.0	9.8	0.8	12.7
Peru	2004	3.0	10.3	2.1	15.4
Uruguay	2003	6.1	11.7	7.2	25.0
Venezuela	2004	3.5	7.6	0.9	12.1
Latin American average		4.8	9.6	3.0	17.5
Average LA7		6.8	10.4	4.8	22.0

StatLink http://dx.doi.org/10.1787/122047043615

ISBN: 978-92-64-03826-4

Table 1.A6. (contd.)

	Year	Direct Taxes	Other Taxes	Social Security	Total
OECD Benchmarks					
Australia	2004	22.3	8.9	0.0	31.2
Austria	2004	15.7	12.4	14.4	42.5
Belgium	2004	19.2	11.3	14.1	44.6
Canada	2004	19.6	8.7	5.1	33.5
Czech Republic	2004	10.1	12.0	16.2	38.3
Denmark	2004	31.5	16.0	1.2	48.6
Finland	2004	18.2	14.1	11.9	44.1
France	2004	14.5	12.7	16.1	43.3
Germany	2004	10.3	10.1	14.1	34.6
Greece	2004	9.8	13.0	12.1	34.9
Hungary	2004	10.7	15.8	11.5	38.0
Iceland	2004	19.5	16.0	3.2	38.7
Ireland	2004	14.1	11.4	4.5	30.0
Italy	2004	15.4	13.1	12.5	41.0
Japan	2004	11.1	5.4	10.0	26.4
Korea	2004	9.7	9.8	5.1	24.6
Luxembourg	2004	15.5	11.5	10.7	37.8
Mexico	2004	5.2	10.6	3.1	19.0
Netherlands	2004	11.2	12.2	13.8	37.2
New Zealand	2004	23.5	12.0	0.0	35.6
Norway	2004	21.5	13.1	9.5	44.0
Poland	2004	7.7	12.4	14.0	34.1
Portugal	2004	9.9	13.5	11.0	34.4
Slovak Republic	2004	6.3	12.1	11.9	30.2
Spain	2004	12.6	9.9	12.1	34.6
Sweden	2004	22.9	13.0	14.3	50.3
Switzerland	2004	15.1	6.9	7.1	29.2
Turkey	2004	7.9	15.9	7.5	31.3
United Kingdom	2004	17.6	11.5	6.8	35.8
United States	2004	14.2	4.7	6.7	25.5
OECD average		14.8	11.7	9.4	35.8

Note: Data are for central government except for Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador and Uruguay (for which data on general government are available). Data for the OECD are from the OECD Revenue Statistics database. Direct taxes include: *i)* taxes on income, profits and capital gains; *ii)* taxes on payroll and workforce; and *iii)* taxes on property. Other taxes include: *i)* taxes on goods and services and *ii)* other taxes. Mexico is included in both groups, data differs by source.
Average LA7 includes Argentina, Brazil, Chile, Colombia, Mexico, Peru and Uruguay.
".." = not available.

Source: OECD Development Centre (2007); based on ECLAC ILPES database and OECD Revenue Statistics Database data.

StatLink http://dx.doi.org/10.1787/122047043615

ISBN: 978-92-64-03826-4

Table 1.A7. **Media Quality and Independence**

	Media Quality/Independence		Legal Environment		Political Environment		Economic Environment	
	2002	2006	2002	2006	2002	2006	2002	2006
Latin America								
Argentina	63	55	94	84	79	83	90	88
Bolivia	75	67	96	90	86	87	93	90
Brazil	68	61	91	89	87	85	90	87
Chile	78	74	94	93	91	89	93	92
Colombia	40	39	81	84	70	68	89	87
Costa Rica	83	82	94	93	96	94	93	95
Cuba	4	4	70	73	60	61	74	70
Dominican Republic	70	63	87	86	88	84	95	93
Ecuador	60	59	85	90	90	82	85	87
El Salvador	65	57	92	85	78	83	95	89
Guatemala	51	42	94	84	73	75	84	83
Honduras	57	48	88	86	83	78	86	84
Mexico	60	52	94	87	80	78	86	87
Nicaragua	68	56	89	88	85	82	94	86
Panama	70	57	93	90	91	84	86	83
Paraguay	49	43	84	81	77	80	88	82
Peru	70	61	91	89	87	83	92	89
Uruguay	75	72	97	89	92	91	86	92
Venezuela	56	28	90	83	85	70	81	75
Latin America average	61	54	90	87	83	81	88	86
Average LA7	65	59	92	88	84	82	89	89
OECD Benchmarks								
Australia	90	81	30	25	37	32	23	24
Austria	76	79	20	22	34	32	22	25
Belgium	91	89	28	28	38	36	25	25
Canada	84	82	29	26	34	32	21	24
Czech Republic	75	80	20	25	34	32	21	23
Denmark	91	90	29	28	39	37	23	25
Finland	90	91	29	28	37	37	24	26
France	83	79	28	25	35	31	20	23
Germany	85	84	28	25	32	34	25	25
Greece	70	72	14	22	34	26	22	24
Hungary	77	79	28	25	32	32	17	22

StatLink http://dx.doi.org/10.1787/122054308054

ISBN: 978-92-64-03826-4

ISBN: 978-92-64-03826-4 © OECD 2007

Table 1.A7 (contd.)

	Media Quality/Independence		Legal Environment		Political Environment		Economic Environment	
	2002	2006	2002	2006	2002	2006	2002	2006
Iceland	92	91	30	29	38	36	24	26
Ireland	84	85	25	27	36	33	23	25
Italy	73	65	28	21	29	27	16	17
Japan	83	80	29	28	33	28	21	24
Korea	70	70	27	21	29	29	14	20
Luxembourg	86	89	27	29	36	37	23	23
Netherlands	85	89	25	29	36	34	24	26
New Zealand	92	87	30	28	39	35	23	24
Norway	91	90	24	27	39	37	28	26
Poland	82	79	24	24	34	32	24	23
Portugal	85	86	27	28	35	34	23	24
Slovak Republic	78	80	20	25	35	32	23	23
Spain	83	79	29	26	31	28	23	25
Sweden	92	90	29	28	38	36	25	26
Switzerland	92	89	29	27	38	37	25	25
Turkey	42	52	4	13	17	20	21	19
United Kingdom	82	81	26	25	33	33	23	23
United States	84	84	27	24	34	34	23	26
OECD average	82	82	26	25	34	33	22	24

Note: Media quality and independence is the Freedom House score on freedom of the press and it has been rescaled to go from 0 to 100 as independence increases. It measures the degree to which Article 19 of the Universal Declaration of Human Rights on freedom of expression is observed. The article reads "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive, and impart information and ideas through any media regardless of frontiers." It is composed of three elements:
1) The legal-environment category "encompasses an examination of both the laws and regulations that could influence media content and the government's inclination to use these laws and legal institutions to restrict the media's ability to operate. We assess the positive impact of legal and constitutional guarantees for freedom of expression; the potentially negative aspects of security legislation, the penal code, and other criminal statutes; penalties for libel and defamation; the existence of and ability to use freedom of information legislation; the independence of the judiciary and of official media regulatory bodies; registration requirements for both media outlets and journalists; and the ability of journalists' groups to operate freely." This index goes from 0 to 30, increasing from low to high quality.
2) The political-environment category "evaluates the degree of political control over the content of news media". Issues examined include: "the editorial independence of both state-owned and privately owned media; access to information and sources; official censorship and self-censorship; the vibrancy of the media; the ability of both foreign and local reporters to cover the news freely and without harassment; and the intimidation of journalists by the state or other actors, including arbitrary detention and imprisonment, violent assaults, and other threats". This index goes from 0 to 40, increasing from low to high quality.
3) The economic environment for the media assesses "the structure of media ownership; transparency and concentration of ownership; the costs of establishing media as well as of production and distribution; the selective withholding of advertising or subsidies by the state or other actors; the impact of corruption and bribery on content; and the extent to which the economic situation in a country impacts the development of the media." This index goes from 0 to 30, increasing from low to high quality.
This and more information is available at www.freedomhouse.org in the methodology section of the press release of the *Freedom of the Press Report 2006*.

Source: Freedom House (2006).

StatLink http://dx.doi.org/10.1787/122054308054

Bibliography

Aldunate, E. and R. Martner (2006), "Política fiscal y protección social", *Revista de la CEPAL*, No. 90, Santiago de Chile.

Alm, J. and B. Torgler (2006), "Culture Differences and Tax Morale in the United States and in Europe", *Journal of Economic Psychology*, Vol. 27, No. 2, Elsevier, Amsterdam.

Avendaño, R., H. Reisen and J. Santiso (2007), "The Macro Management of Asian Driver Related Commodity Induced Booms", mimeo, OECD Development Centre.

Besley, T. and R. Burgess (2002), "The Political Economy of Government Responsiveness: Theory and Evidence from India", *The Quarterly Journal of Economics*, Vol. 117, No. 4, MIT Press, Boston MA, pp. 1415-1451.

Blair, T. (2007), "What I've Learned", *The Economist*, 31 May 2007, The Economist Group, London.

Boix, C. (2006), "Democracy, Development, and the Public Sector", *American Journal of Political Science*, Vol. 45, No. 1, pp. 1-17.

Borensztein, E., E. Levy, and U. Panizza (2007), "Living with Debt, Economic and Social Progress in Latin America 2007 Report", Inter-American Development Bank, Washington, D.C.

Braun, M. (2007), "Fiscal Reform in Latin America: The Silent Revolution That Is Pinning Populism", *Americas Quarterly,* Council of the Americas, New York, NY.

Calderón, C. and L. Servén (2004), "Trends in Infrastructure in Latin America, 1980-2001", *Working Papers* No. 269, Central Bank of Chile, Santiago de Chile.

Cetrángolo, O. and J.C.Gomez-Sabaini (eds.) (2006), "Tributación en América Latina. En busca de una nueva agenda de reformas", *ECLAC Books*, No. 93, United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago de Chile.

Clements, B., C. Faircloth and M. Verhoeven (2007) "Public Expenditure in Latin America: Trends and Key Policy Issues", *Working Paper* No. 07/21, International Monetary Fund (IMF), Washington, D.C.

Cummings, R.G., J. Martínez-Vazquez, M. McKee and B. Torgler (2006), "Effects of Tax Morale on Tax Compliance: Experimental and Survey Evidence", *Working Paper Series* No. 197, Berkeley Programme in Law & Economics, University of California, Berkeley, CA.

Daughters, R. and L. Harper (2007), "Fiscal and Political Decentralisation Reforms", *in* Lora, E. (ed.) (2007), *The State of State Reforms in Latin America*, Stanford University Press and Inter-American Development Bank, Palo Alto and Washington, D.C.

de Mello, L. (ed.) (2006*a*), *Challenges to Fiscal Adjustment in Latin America*, OECD, Paris.

de Mello, L. (2006*b*), "Fiscal Responsibility Legislation and Fiscal Adjustment: The case of Brazilian Local Governments", *Policy Research Working Paper* No. 3812, World Bank, Washington, D.C.

de Mello, L. (2007), "The Brazilian 'Tax War': The Case of Value-Added Tax Competition among the States", *Working Paper* No. 544, OECD Economics Department, OECD, Paris.

ISBN: 978-92-64-03826-4

de Mello, L. and D. Moccero (2006), "Brazil's Fiscal Stance during 1995-2004: The Effect of Indebtedness on Fiscal Policy over the Business Cycle", *Working Paper* No. 485, OECD Economics Department, OECD, Paris.

ECLAC (2005), *Panorama social de América Latina*, ECLAC, Santiago.

Ekelund, R.B., Jr. (1969), "Tax Reform in Latin America. The E.C.L.A. Proposals – A Critical Evaluation", *American Journal of Economics and Sociology*, Vol. 28, No. 1, Blackwell Publishers, Malden, MA.

Elizondo, C. and J. Santiso (2007), "Devórame otra vez: Violencia fiscal en América Latina", mimeo, OECD Development Centre, OECD, Paris.

Filc, G. and C. Scartascini (2005), "Budget Institutions and Fiscal Outcomes. Ten Years of Inquiry on Fiscal Matters at the Research Department of the Inter-American Development Bank", *International Journal of Public Budget*, Vol. 59, No. 32, Public Budget International Association (ASIP), Buenos Aires.

Filc, G. and C. Scartascini (2007), "Budgetary Institutions", *in* Lora, E. (ed.) (2007), *The State of State Reforms in Latin America*, Stanford University Press and Inter-American Development Bank, Palo Alto and Washington, D.C.

Freedom House (2006), *Freedom of the Press 2006*, Freedom House, New York, NY.

Gervasoni, C. (2006), "A Rentier Theory of Sub-national Authoritarian Enclaves: The Politically Regressive Effects of Progressive Federal Revenue Redistribution", mimeo, paper presented at the 2006 Annual Meeting of the American Political Science Association, Philadelphia, 31 August-4 September, Department of Political Science, University of Notre Dame, Notre Dame, IN.

Giambiagi, F. and L. de Mello (2006), "Social Security Reform in Brazil: Achievements and Remaining Challenges", *Working Paper* No. 62, OECD Economics Department, OECD, Paris.

Giambiagi, F. and M. Ronci (2005), "Brazilian Fiscal Institutions: The Cardoso Reforms 1995-2002", *CEPAL Review* No. 85, ECLAC, Santiago de Chile.

Goñi, E., H. López and L. Servén (2006), "Fiscal Reform for Social Equity in Latin America", mimeo, World Bank, Washington, D.C.

Gurría, A (2006), "Ibero-America: Breaking through the Underdevelopment Barrier, Following in the Footsteps of Spain and Portugal", presentation to the VII Ibero-American Forum, 29 November, Mexico City, OECD document, www.oecd.org/documentprint/0,3455,en_2649_201185_37880874_1_1_1_1,00.html, accessed 25 July 2007.

Jaspers, N. and C. Oman (2007), "Governance Curse", mimeo, OECD Development Centre, OECD, Paris.

Jiménez, J.P. and V. Tromben (2006), "Política fiscal y bonanza: impacto del aumento de los precios de los productos no renovables en América Latina y el Caribe", *Revista de la CEPAL*, No. 20, ECLAC, Santiago de Chile.

Joumard, I. (2005), "Getting the Most out of Public Sector Decentralisation in Mexico", Economics Department *Working Paper*, No. 453, OECD, Paris.

Larre, B. and C. Heady (2007), "Fiscal Policy and Tax Reform", *in* OECD, (2007), *Getting it Right: OECD Perspectives on Policy Challenges in Mexico*, OECD, Paris.

Latinobarómetro (2003), *Summary Report*, www.latinobarometro.org.

Latinobarómetro (2005), *Summary Report*, www.latinobarometro.org.

Latinobarómetro (2006), *Summary Report*, www.latinobarometro.org.

Li, X.S. (2005), "Ethnic Diversity, Social Identities, and Tax Compliance – Evidence from the European and World Values Surveys", mimeo, University of Michigan, Ann Arbor, MI.

ISBN: 978-92-64-03826-4

Lledo, V., A. Schneider and M. Moore (2004), "Governance, Taxes and Tax Reform in Latin America", *Working Paper* No. 221, Institute of Development Studies, Brighton.

Lora, E. (2006), "El Futuro de los Pactos Fiscales en América Latina", mimeo, paper presented at the Foro Económico de la Cumbre Iberoamericana: Políticas Económicas para un Nuevo Pacto Social en América Latina, Fundación CIDOB (Centro de Investigaciones de Relaciones Internacionales y Desarrollo), Barcelona, 6-7 October, IADB, Washington, D.C.

Lora, E. (2007), "Trends and Outcomes of Tax Reform", *in* Lora, E. (ed.) (2007), *The State of State Reforms in Latin America*, Stanford University Press and IADB, Palo Alto and Washington, D.C.

Lora, E. and M. Cárdenas (2006), "La Reforma de las Instituciones Fiscales en América Latina", *Working Paper* No. 559, IADB, Washington, D.C.

Lora, E. and J.C. Chaparro (2007), "Fiscal Pacts in Latin America", *IDEA*, Vol. 12, IADB, Washington, D.C.

Mahon, J.E. (2004), "Causes of Tax Reform in Latin America, 1977-95", *Latin American Research Review*, Vol. 39, No. 1, University of Texas Press, Austin TX, pp. 3-30.

Matsuda, Y. and R. Senderowitsch (2007), *Democratic Governance in Mexico: Beyond State Capture and Social Polarisation*, International Bank for Reconstruction and Development / World Bank, Washington, D.C.

McMillan, J. and P. Zoido (2004), "How to Subvert Democracy: Montesinos in Peru", *Journal of Economic Perspectives,* Vol. 18, No. 4, American Economic Association, Baltimore.

Moore, M. (2004), "Revenues, State Formation and the Quality of Governance in Developing Countries", *International Political Science Review*, Vol. 25, No. 3, International Political Science Association, SAGE Publications, Thousand Oaks, CA.

Moore, M. (2007), "How Does Taxation Affect the Quality of Governance?", *Working Paper* No. 280, Institute of Development Studies, Brighton.

OECD (2005*a*), *Economic Survey of Brazil*, OECD, Paris.

OECD (2005*b*), *Economic Survey of Mexico*, OECD, Paris.

OECD (2005*c*), *Education at a Glance*, OECD, Paris.

OECD (2006*a*), *Economic Survey of Brazil*, OECD, Paris.

OECD (2006*b*), *Agricultural and Fisheries Policies in Mexico*, OECD, Paris.

OECD (2007*a*), *World Economic Outlook*, OECD, Paris.

OECD (2007*b*), *Economic Survey of Mexico*, OECD, Paris.

Oman, C. (2000), *Policy Competition for Foreign Direct Investment: A Study of Competition among Governments to Attract FDI,* Development Centre Studies, OECD, Paris.

Ottone, E. (ed.) (2007), *Social Cohesion: Inclusion and the Sense of Belonging in Latin America and the Caribbean*, ECLAC, Santiago de Chile.

Payne, M., D. Zovatto and F. Carrillo (eds.) (2006), *Democracies in Development. Politics and Reform in Latin America*, IDB and International IDEA, Washington D.C. and Stockholm.

Perry, G., H. López, W.F. Maloney, O. Arias and L. Servén (2006), *Poverty Reduction and Growth: Virtuous and Vicious Cycles,* World Bank Latin American and Caribbean Studies, The World Bank Group, Washington, D.C.

Pinto, A. (1962), "Notas sobre la distribución del ingreso y la estrategia de la distribución", *El Trimestre Económico*, No. 115, Mexico DF.

ISBN: 978-92-64-03826-4

Ross, M.L. (2004), "Does Taxation Lead to Representation?", *British Journal of Political Science*, Vol. 34, No. 2, Cambridge University Press, Cambridge.

Santiso, C. (2006), "Banking on Accountability? Strengthening Budget Oversight and Public Auditing in Emerging Economies", *Public Budgeting & Finance*, Association of Budgeting and Financial Management, Blackwell Publishing, Oxford.

Santiso, J. (2006a), *Latin America's Political Economy of the Possible*, MIT Press, Boston, MA.

Santiso, J. (2006*b*), "Democracy in (Latin) America", *Policy Insights* No. 27, OECD Development Centre, Paris.

Santiso, J. and P. Zoido (2007) "Fiscal and Democratic Legitimacy", mimeo, OECD Development Centre, Paris.

Schneider, A., V. Lledo and M. Moore (2004), "Social Contracts, Fiscal Pacts, and Tax Reform in Latin America", mimeo, Institute of Development Studies, Brighton.

Schneider, F. (2007), "Shadow Economies and Corruption All Over the World: What Do We Really Know?", *E-conomics*, www.economics-ejournal.org/, discussion paper from the Kiel Institute for the World Economy, No. 2007-9, http://econpapers.repec.org/paper/zbwifwedp/5523.htm.

Schneider, F. and D.H. Enste, (2000), "Shadow Economies: Size, Causes, and Consequences", *Journal of Economic Literature*, Vol. 38, No. 1, American Economic Association, Baltimore.

Schrank, P. (2007), "Charlemagne: The Lessons of History", *The Economist*, July 12.

Schwabish, J., T. Smeeding and L. Osberg (2003), "Income Distribution and Social Expenditures: A Cross National Perspective", *Working Paper* No. 350, Luxembourg Income Study, www.lisproject.org.

Singh, A., A. Belaisch, C. Collyns, P. De Masi, R. Krieger, G. Meredith and R. Rennhack (2005), "Stabilization and Reform in Latin America: A Macroeconomic Perspective of the Experience Since the 1990s", *Occasional Paper* No. 238, IMF, Washington, D.C.

Sokoloff, K.L. and E.M. Zolt (2005) "Inequality and the Evolution of Institutions of Taxation: Evidence from the Americas", mimeo, University of California, Los Angeles, CA.

Stein, E., M. Tommasi, K. Echebaria, E. Lora and M. Payne (2006), *The Politics of Policies*, Economic and Social Progress in Latin America 2006 Report, IADB, Washington, D.C.

Svensson, J. and R. Reinikka (2005), "Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda", *Journal of the European Economic Association*, Vol. 3, No. 2-3, Department of Economics, University of Warwick, Coventry.

Taliercio, R.R. (2004), "Administrative Reform as Credible Commitment: The Impact of Autonomy on Revenue Authority Performance in Latin America", *World Development*, Vol. 32, No. 2, Pergamon, New York, NY.

Torgler, B. (2005), "Tax Morale in Latin America", *Public Choice*, Vol. 122, No. 1-2, pp. 132-137.

Torgler, B. and F. Schneider (2007), "Shadow Economy, Tax Morale, Governance and Institutional Quality: A Panel Analysis", *CREMA Working Paper Series* No. 2007-2, Center for Research in Economics, Management and the Arts, Basle.

Torgler, B., F. Schneider and C. Schaltegger (2007), "With or Against the People?", *CREMA Working Paper Series* No. 2007-04, CREMA, Basle.

WEF (World Economic Forum) (2006), *Global Competitiveness Report 2006-2007*, Palgrave McMillan, New York, NY.

Wicksell, K. (1896) "A New Principle of Just Taxation", translated by J.M Buchanan in Musgrave, R.A. and A.T. Peacock (1967) *Classics in the Theory of Public Finance*, McMillan, St Martin's Press, New York, NY.

ISBN: 978-92-64-03826-4

Chapter 2

Finance for Development

Pension Reform, Capital Markets and Corporate Governance

Abstract

Latin America leads the developing world in pension reform. Chile launched the process in 1981, followed since the 1990s by nine other countries in the region and some outside. The reform constitutes a transition from publicly managed "pay-as-you-go" to privately managed, fully funded retirement systems. Its objectives, in addition to providing a reliable source of retirement income for workers and reducing the fiscal drain on governments from existing systems, include two on which this chapter focuses: the enhancement of national savings, where overall results are not encouraging; and the deepening of local capital markets, where results are encouraging. Policy recommendations include measures to improve the alignment of incentives amongst pension-fund members (active and retired workers), sponsors (employers) and managers. Countries should re-examine regulations that hamper a healthy diversification of pension assets, while maintaining high prudential standards. Some countries must give attention to the excessively high administrative fees and costs that pension funds charge members. Better governance of pension funds can also enhance their role as agents for improved corporate governance outside the pension sector, contributing to long-term economy-wide productivity growth for the considerable benefit of workers, active and retired, and employers alike.

ISBN: 978-92-64-03826-4

Introduction

Following Chile's lead, many countries have launched pension reform.

Chile's pioneering reform of its national pension system, in 1981, has contributed to the country's remarkably successful economic performance thereafter (Corbo and Schmidt-Hebbel, 2003). Its accomplishments have been such that it became a model for policy makers in numerous other Latin American countries and even served as a source of inspiration for some countries outside the region, including OECD countries, notably in Eastern Europe.

Common goals are to address problems of low saving and financial fragility, while reducing the fiscal burden of public pension systems and providing individuals with safe retirement income.

The reforms involve the establishment of private-pension funds, built up in the form of accounts for individual workers that are managed by private-pension companies. The primary objectives of these pension reforms have been: to provide a stable and reliable source of retirement income for workers, including both better pensions and broader population coverage; in some cases, to diminish inequities associated with the pre-existing public "pay-as-you-go" (PAYG) retirement systems, in which a large percentage of total retirement benefits were paid to the richest segment of the population; and to reduce the fiscal drain on governments caused by deficient management and administration of the pre-existing unfunded PAYG retirement systems. In addition to these social and fiscal objectives, many economists expected the pension reforms to help countries raise aggregate domestic savings and provide a stable source of development finance. The new pension systems, it was thus widely hoped, would help countries to address the twin problems of persistently low saving and financial fragility, which in much of Latin America have long slowed growth and increased dependence on volatile international capital flows.

The institutional investors that manage retirement savings in these new pension systems, that is, pension funds and insurance companies, were also expected to help channel savings towards their most productive use, bringing about efficiencies in the allocation of capital and in the monitoring of the corporate sector. These economy-wide effects, it was thought, would be reflected in an acceleration of financial development, higher productivity and, ultimately, greater retirement-income security for workers as well.

Pension funds can perhaps serve as powerful agents for improving corporate governance throughout the economy.

The results, so far, have been mixed. In a few countries, notably Chile, and more recently Peru, pension reform was accompanied by fiscal consolidation and helped raise savings. In Chile, pension-fund investments have also contributed to local financial development, notably by increasing the role of the stock market in the country's financial system and helping to expand the local mortgage bond market. Chile's pension funds have also contributed, together with other reforms, to improving local corporate governance. In other countries, however, the picture is not as rosy. Argentina and Bolivia succumbed to fiscal pressures that weakened their pension-fund systems. National saving rates in many countries have failed to increase, or have even fallen. The capital-market impact has been constrained by regulations that limit investment options in pension funds and drive them into the sovereign debt market. Another disappointing result is that pension funds have not yet become the drivers of improved corporate governance that some think they may still become.

ISBN: 978-92-64-03826-4

Moving forward, it is essential that countries in the region continue to consolidate their macroeconomic fundamentals. Many countries will need to reform the governance of their pension-fund system in order both to promote a more efficient allocation of the investments of pension funds and to protect the interests of pension-fund members (workers and retirees). These reforms should be accompanied by a gradual liberalisation of the rules governing pension-fund investment behaviour in order to broaden the range of investment choices for these funds and strengthen competition amongst them.

The financial crises of the late 1990s in Asia, Russia and Brazil — and the critique of pervasive "crony capitalism" and corruption associated with poor corporate governance that emerged in conjunction with these crises — have also drawn attention to a perceived potential for pension funds to play a key role in helping to improve the quality of the governance of corporations in which they invest, that is, whose equity they purchase. However, this potential for pension funds to serve as agents for inducing needed economy-wide improvement in corporate governance may only prove effective if pension-fund administrators (the private financial enterprises that manage pension funds) take a long-term investment horizon and, beyond complying with detailed regulations and satisfying their shareholders' return-on-capital expectations, focus on the best interests of their funds' members.

OECD Guidelines on Corporate Governance and on Pension Fund Governance can serve as frameworks for enhancing these reforms.

The following exploration of this topic leads to looking at patterns of market concentration in Latin America's pension industry and at the impact of pension reform on national savings, capital markets, portfolio investment and the corporate governance of enterprises in which the pension funds invest. Although the effects of pension reform on retirement benefits as such are not the primary focus of this investigation, Box 2.1 sheds light on those effects by providing evidence on workforce coverage before and after pension reform. The spotlight is then turned on how to strengthen the governance of pension funds, which is a key determinant of the funds' performance. This is followed by an evaluation of pension-fund performance, and the examination concludes with an overall assessment and recommendations for action, including greater discussion amongst policy makers in the region to exchange national experiences within the framework of the OECD Principles of Corporate Governance and Guidelines for Pension Fund Governance (OECD, 2004 and 2005).

Box 2.1. **Pension Coverage**

Pension reform was expected, amongst other benefits, to raise the proportion of a country's workforce covered by its pension system. The idea was that workers' participation in the pension system would increase because a funded, privately managed defined-contribution system* offers two types of incentives for workers to join the system — incentives that either did not exist or had deteriorated under the previously existing publicly managed systems: *i*) workers own their individual pension accounts; and *ii*) a worker's benefits depend directly on his/her contributions.

ISBN: 978-92-64-03826-4

Box 2.1 (contd.)

A comparison of actual coverage rates before and after pension reform shows an impact of reform that is inconsistent with these expectations and is not encouraging. The table in this box provides two estimates of coverage, one based on the total number of members (the number of workers registered in the pension system), and the other based on the number of active contributors (workers who paid into the system in the last month).

Only about half to two-thirds of members are active contributors. While membership has increased as a share of the registered workforce, the share of members who actually contribute has decreased in every country. The weighted average of coverage for the region fell from 63 per cent before the reform to 26 per cent in 2006, though the data tend to overestimate the level of coverage before the reform because they do not refer to the last month to determine whether the participant was or not an active participant, as was done for 2006.

In addition to this decline in the share of contributors, the data show major differences in coverage amongst countries. In Peru, for example, only 11 per cent of workers who are registered in the pension system contribute, and in Bolivia, 13 per cent of them do. In Chile and Mexico, on the other hand, the share is 58 and 31 per cent, respectively. While the focus of this chapter is not specifically on the coverage of pension funds, it is important to stress that the causes of such relatively low coverage vary amongst countries. One of the most important, for the region as a whole, is the large size of the informal sector; another is the voluntary nature of the new system in some countries. Indeed, amongst the reasons why the degree of coverage varies significantly amongst countries in the region, are: *i)* the private pension system is mandatory in some countries, and not in others; *ii)* incentives vary amongst countries for workers to move from the publicly to the privately managed pension system; *iii)* the relative size of the informal economy is bigger in some countries than in others; and *iv)* the demographic structure of the population varies.

For a more in-depth analysis of this issue, see Mesa-Lago (2004), Gill *et al.* (2005) and Queisser (1998). For a severe critique of pension reform, see Kotlikoff (2006).

Coverage Before and After Pension Reform

	Coverage before reform		Coverage 2006	
Country	Year before reform	Contributors (%)	Members (%)	Contributors (%)
Argentina	1994	50	63.8	25.7
Bolivia	1996	12	26.7	13.3
Chile	1980	64	112.6	58.0
Colombia	1993	32	33.3	17.3
Costa Rica	2000	53	79.2	52.0
El Salvador	1996	26	49.1	18.4
Mexico	1997	37	84.2	31.0
Peru	1993	31	31.5	11.0
Dominican Rep.	2000	30	36.0	18.9
Uruguay	1997	73	45.3	26.0

Source: International Association of Pension Funds Supervisory Organisms (AIOS) (2006); Mesa-Lago (2004).

* A defined-contribution plan is one in which benefits to each member are based solely on the amounts paid into the plan by the sponsor or member, plus any accumulated financial return thereon. See also Note 1.

StatLink http://dx.doi.org/10.1787/121718083583

ISBN: 978-92-64-03826-4

The Impact of Pension Reform in Latin America

Many Latin American countries are abandoning their pre-existing publicly managed "pay-as-you-go" systems to the benefit of privately managed pension systems, though to varying degrees and in different forms.

Chile was the pioneer country — not only in Latin America but in the developing world — in reforming its pension system when, in 1981, it abandoned its publicly funded PAYG pension system and shifted to a privately managed, fully funded, defined-contributions system of individual accounts[1]. Following Chile's lead, several Latin American countries have since privatised part of their social-security system. The main exception to this trend is Brazil, which has instead chosen a pension-reform strategy centred on strengthening the solvency of the public PAYG system and further developing the existing privately managed, voluntarily funded pension system.

Although at the end of the 1990s, Brazil discussed the introduction of a privately managed mandatory pension system based on individual accounts to replace the PAYG system, it was considered politically and economically unfeasible because of its fiscal implications. The most recent reforms of the Brazilian pension systems were proposed during two different periods: 1995-2002 and 2003. The first-period reforms were directed at the pension system for private-sector workers, whereas the 2003 reform focused on the pension regime for public-sector workers. At the same time, successive governments have improved the regulatory framework to set the stage for the development of privately managed pension funds based on personal and occupational saving (Pinheiro, 2005).

In other countries, reforms have varied widely but can be considered to have followed one of three paths. Bolivia (1997), Mexico (1997), El Salvador (1998) and the Dominican Republic (2003-05) followed Chile's model closely, phasing out their old public PAYG systems and replacing them with privately managed, fully funded defined-contribution systems of individual accounts for beneficiaries. Colombia (1994) and Peru (1993), in contrast, launched new privately managed, fully funded schemes not as a substitute for, but as a voluntary alternative to the existing public scheme, which means that new entrants to the labour market can choose to enter the old system and are not obliged to join the new private system. Argentina (1994), Uruguay (1996) and Costa Rica (2001), on the other hand, have created a mixed system in which both the public PAYG component and the privately managed, fully funded component are compulsory and integrated.

Three countries in the region — Chile, Argentina and Peru — have also moved to undertake major changes in their reformed pension systems. In Chile, where the government expects parliament to approve the proposed modifications in 2007 and implement them in 2008, the central changes involve four main elements. The first is the creation of a solidarity pension system (SPS) for members who are unable to save towards their retirement. The SPS is to replace the current means-tested pensions (targeted just to those with low incomes) and the guaranteed minimum pension, with a single type of pension benefits available to all citizens aged 65 or older who have lived in Chile for at least 20 years and have accumulated less than a certain amount in their individual account. The second is the introduction of a set of instruments to enhance gender equity by ensuring greater coverage of women. Third are changes in the framework that regulates investments that can be

ISBN: 978-92-64-03826-4

made by pension-fund administrators, and fourth is a new regulation making it mandatory for the self-employed, who are currently not obliged to contribute to the system, to join the individual retirement-account system within seven years of the implementation of the reform.

In Argentina and Peru, in contrast, the key modification is that members are allowed to switch back to the publicly managed PAYG system. In Argentina, parliament passed the relevant reform bill in February 2007 and the government expects to approve it in 2008, whereas in Peru, the president promulgated this law in March 2007.

Market concentration

The market concentration of pension-fund administrators is cause for concern about the competitive efficiency of the pension industry.

All the new private pension systems in Latin America have a simple structure where individual pension funds are managed by specialised financial enterprises called pension-fund administrators. As shown in Table 2.1, the number of such administrators in all countries other than Brazil is small — ranging from 2 in Bolivia to 21 in Mexico — and this has raised concerns about competitive efficiency and market domination in the pension-funds industry. Bolivia has legally restricted the number of administrators to two. In all other countries, access to the industry is free, subject to certain eligibility conditions, including a relatively stringent minimum-capital requirement, and economies of scale in the administration of individual accounts are likely to be an important cause of concentrated market structure in the industry.

Ownership of pension-fund administrators is also highly concentrated: just a few large financial institutions, especially banks and financial conglomerates, hold large stakes in pension-fund administrators. Chile, Peru and El Salvador are the exceptions, because domestic banks and insurance companies cannot own pension-fund administrators directly — although they can do so through subsidiaries. An important feature of ownership regulations is their openness to foreign ownership. Foreign financial institutions thus have a strong representation in most countries. For example, the two pension-fund administrators in Bolivia are majority-owned by Spanish banks.

The pattern of industry concentration in Latin America is remarkably similar from country to country. The largest pension-fund administrators in Costa Rica and Uruguay account for more than 60 per cent of total pension-fund assets. In Argentina, Chile, Colombia, Mexico and Peru, the largest two account for over 35 per cent, and in Bolivia the two licensed pension-fund administrators have a roughly equal share of the market.

As shown in Table 2.1, in both Chile and Argentina there has been substantial recent consolidation in the pension-funds industry. In 1994, Argentina had 26 funds, a number that fell to 18 at the beginning of 1998 and to 11 as a result of mergers after that. In Chile, there were 21 funds in 1994, 13 at the beginning of 1998, and 6 in 2006. Mexico has also experienced consolidation despite the fact that its private pension-fund industry is very young: the number of fund managers fell from 17 in 1997 to 12 in 2003 — although in 2006, the number increased to 21.

ISBN: 978-92-64-03826-4

In Brazil, as noted earlier, private-pension plans are a voluntary complement to the social-security system. They comprise the so-called complementary pension system (*Sistema de Previdência Complementar*) established in 1977 and the *Fundos de Aposentadoria Programada Individual*, which are long-term investment accounts managed by mutual funds. They include both closed pension funds (*Entidades Fechadas de Previdência Privada*) and open pension funds (*Entidades Abertas de Previdência Privada*). The closed funds are employer-sponsored, non-profit organisations covering the workers of a particular enterprise or group of enterprises. The open funds are constituted as insurance companies covering any worker who chooses to enrol. With 413 funds as of December 2006, Brazil has by far the largest number of pension funds, including 370 closed funds sponsored by a total of 2 037 enterprises, and 43 open funds.

Table 2.1. **Main Features of Latin American Private Pension Systems, 2006**

	Public PAYG system	Affiliation of new workers to private system	Minimum rate of return	No. of administrators	Contribution rate %	Fees and insurance (% of salary)
Brazil (1977)[a]	Open	Voluntary	Absolute[b]	413	No legal rules	No legal rules
Chile (1981)	Closed	Mandatory	Relative	6	10.0	2.3
Peru (1993)	Remains	Voluntary	Relative	4	8.0	2.9
Colombia (1994)	Remains	Voluntary	Relative	6	10.5	3.0
Argentina (1994)	Remains	Voluntary[b]	Relative	11	4.4	2.5
Uruguay (1995)	Remains	Voluntary[b]	Relative	4	12.2	2.8
Bolivia (1997)	Closed	Mandatory	No	2	10.0	2.2
Mexico (1997)	Closed	Mandatory	No	21	7.2	3.7
El Salvador (1998)	Closed	Mandatory	Relative	2	10.0	3.0
Costa Rica (2000)	Remains	Mandatory	No	8	3.9	-
Dominican Rep. (2003)	Closed	Mandatory	Relative	7	6.4	1.6

Notes:
a) In Brazil, a guaranteed real annual rate of return of 6 per cent is usually provided under defined-contribution plans. In countries where a minimum rate of return is required, this is calculated as a weighted average of the industry's return.
b) In Argentina and Uruguay, new workers can choose between a public-defined contribution plan and a private individual retirement account.

Source: OECD Development Centre (2007); based on AIOS data for Latin America.

StatLink http://dx.doi.org/10.1787/122105862532

While, to some extent, the different reforms across the region reflect each country's specific circumstances, they have all pursued the same goals. These are: to reduce the fiscal burden imposed by the pension system after transition to the fully funded system; to increase the role of the private sector in the provision of pension services; to reduce the risks associated with PAYG financing, for instance due to a possible payment default by the government; and, above all, to improve transparency of the system and diminish the possibility of its being politically captured by making it more independent from potential political manipulation. The introduction of a fully funded system, in that it builds up a pool of savings, was also expected to raise the level of national savings. This, in turn, would help develop the domestic financial sector and local capital markets by increasing the mobilisation of domestic resources for long-term investment. A fully funded pension system would thus have a positive impact on economic growth as well.

ISBN: 978-92-64-03826-4

A limited impact on national savings

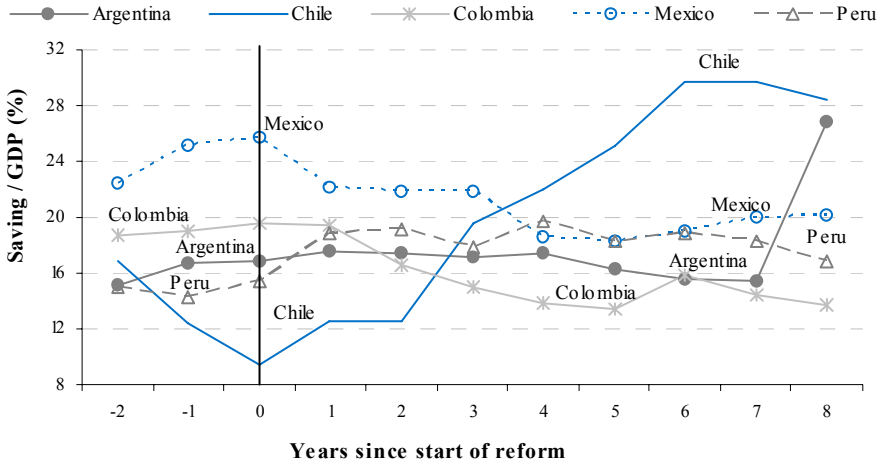
One of the major expectations of pension reform – to increase national savings – has not met with encouraging results.

The empirical evidence on the impact of pension reforms on national savings is not conclusive (Reisen, 2000; Bailliu and Reisen, 1997). Moreover, it has been particularly difficult to assess this impact in Latin American countries because pension reform coincided in many countries with a series of changes in economic policy that may also have had an impact on their overall saving rates. Another obstacle to evaluation in many countries is the short period of time since the reforms were launched. So far, Chile is the only country where the reforms have been in place long enough to gauge their impact on domestic savings.

Figure 2.1 shows that aggregate saving in Chile has grown strongly since 1985, once the country recovered from the financial crisis it suffered in the first half of the 1980s. This positive correlation suggests that Chile's pension reform may have had a positive effect on saving — estimated by one study at 2.3 per cent of GDP during 1981-2001 (Corbo and Schmidt-Hebbel, 2003). Nonetheless, this increase in saving might not have materialised without the important reforms Chile implemented in other areas of the economy. Most of these reforms mutually reinforce their effect on the development of capital markets and promote saving.

In other countries, comparing the level of savings before and after the pension reforms shows that only Peru has experienced an increase, albeit small, in the saving rate after the pension reform. In contrast, saving rates in Argentina remained virtually unchanged, while those in Colombia and Mexico actually declined (Figure 2.1). Saving rates are also low in the region as a whole compared to those in the fast-growing East Asian economies: while Argentina, Mexico and Chile have saving rates of between 20 and 30 per cent, and those of Colombia and Peru are even lower, those of Korea and Thailand, for example, are well above 30 and 40 per cent, respectively.

Figure 2.1. **Trends in Gross Domestic Saving as Percentage of GDP**



Source: OECD Development Centre (2007); based on World Bank, *World Bank Development Indicators* (2006) data.

StatLink http://dx.doi.org/10.1787/120676251351

ISBN: 978-92-64-03826-4

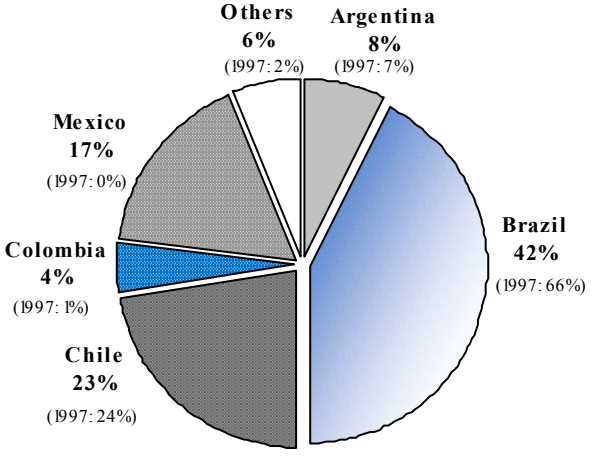
Although in Brazil, the development of the private-pension system in the course of the last ten years has been accompanied by an increase in national saving, from 20 per cent in 1995 to 28 per cent in 2005, the extent to which there is a causal link between the two variables is open to debate.

A significant impact on capital markets

The introduction of private-pension systems has brought about significant changes in the domestic financial systems of some of the countries in the region. The accumulation of large financial resources by the new pension funds has quickly allowed the latter to gain a dominant position in their domestic financial systems. By the end of 2006, pension-fund assets under management in the region, which have grown by an average 16 per cent annually since 1999 (Figure 2.3), amounted to $390 billion.

Brazil and Chile have the largest pension-fund industries in Latin America, accounting for approximately 65 per cent of all pension assets in the region (Figure 2.2; Annex Table 2.A1). The large size of the private-pension industry in these two countries is for the most part a result of their early establishment and, in Brazil's case, of the size of the economy. Mexican reforms have been in place for almost 10 years and assets are also large, reflecting the fact that Mexico has the greatest number of members in the region and is the second largest economy in Latin America, after Brazil.

Figure 2.2. **Distribution of Pension Assets by Country, 2006**

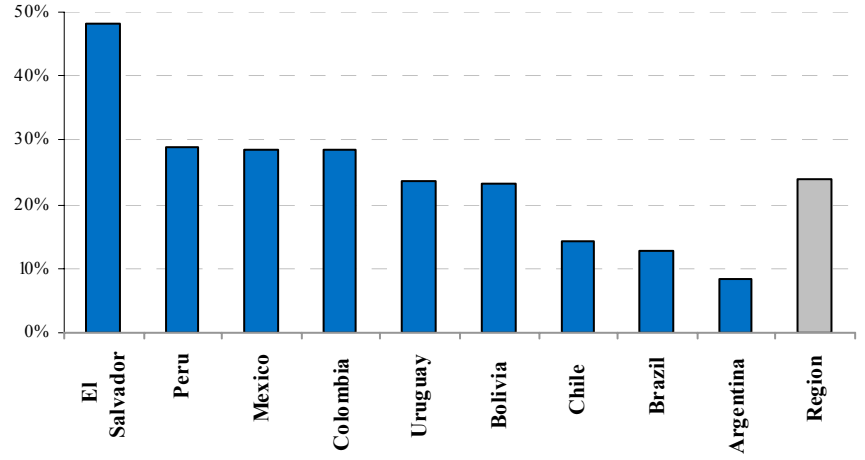


Source: OECD Development Centre (2007); based on AIOS data.

StatLink http://dx.doi.org/10.1787/120742640427

ISBN: 978-92-64-03826-4

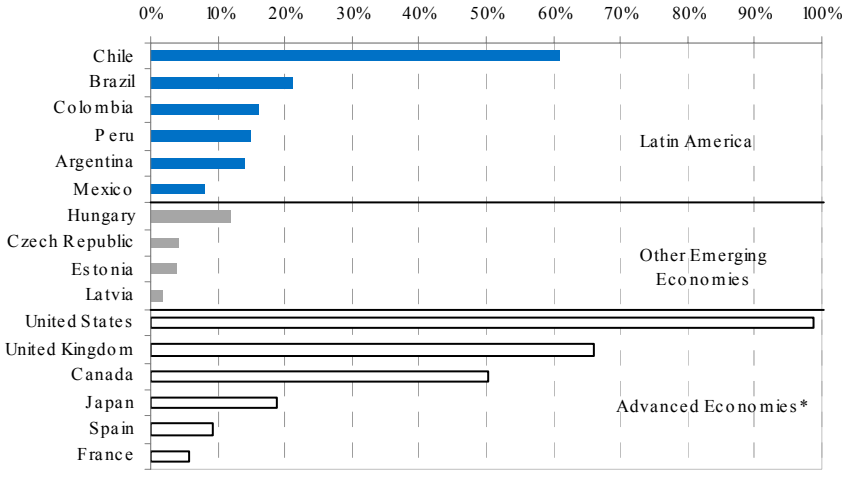
Figure 2.3. **Average Annual Growth Rate of Pension Assets, 1999-2006**



Source: OECD Development Centre (2007); based on AIOS data.
StatLink http://dx.doi.org/10.1787/120747044272

Relative to the size of its economy (Figure 2.4), Chile has by far the largest private-pension industry, with assets worth more than 60 per cent of the country's GDP as of December 2006 — a figure comparable to those found in OECD countries with well-developed private-pension industries such as the United Kingdom, where the industry's assets are worth 66 per cent of GDP. As Figure 2.3 shows, Brazil's private pension-fund assets have grown more slowly than Chile's, despite the earlier establishment of Brazil's funds in the late 1970s. This is explained by their voluntary nature. Brazilian private pension-fund assets are now worth about 20 per cent of GDP, which makes Brazil's the second most developed system in the region. Brazil also compares relatively well with countries that have voluntary private-pension plans complementing public pensions, such as Spain, where pension-fund assets are equivalent to 9 per cent of GDP.

Figure 2.4. **Pension Fund Assets as Percentage of GDP, 2006**



Note: (*) 2005
Source: OECD Development Centre (2007); based on OECD Global Pension Statistics database data.
StatLink http://dx.doi.org/10.1787/120755578734

ISBN: 978-92-64-03826-4

The new pension funds are having a significant effect on national capital markets, which overall have increased their total value and their trading volume.

The most important effects that pension reform is likely to have on local capital markets occur through the investment of pension-fund assets in diverse local securities and their trading in local markets. Large institutional investors like pension funds can contribute significantly to the development of local capital markets both by deepening — that is, increasing their total value — and increasing the liquidity of trading in those markets, and by inducing institutional reforms designed to improve the functioning of those markets. All investors operating in local markets are thus likely to benefit, and investment in those markets is likely to grow. Empirically, the accumulation of pension funds is indeed associated with the growth of annuities, mortgages, bonds and other asset-backed securities, as well as with the creation of closed-end mutual funds and local rating enterprises (SPFAC, 2004; and Yermo, 2003).

There is evidence from the first countries to have undertaken pension reforms (Chile, Peru and Argentina) that the reforms have improved financial-market regulations and increased the flow of funds into the countries' financial systems (Yermo, 2003). Capital-market regulation has also improved substantially in several Latin American countries (Roldos, 2004; Yermo, 2003; Gill *et al.* 2005). Although some of these changes pre-date the new pension arrangements, the vast majority were concurrent with the growth of private pension funds. In Chile, the simultaneity between the growth of pension funds and institutional reforms in the capital market suggests that these advances are a direct consequence of the pension reform, because the capital-market reforms were justified by the need to assure an adequate framework for the investment of pension funds (Acuña and Iglesias, 2001). In Brazil, on the other hand, which has not undertaken pension reform, the growth of private pension-fund assets has been notably strengthened by the development of the nation's financial markets and the evolution of the relevant legislation (Reis and Paixão, 2004).

Pension reforms have also had a significant impact on financial securities markets and on the creation of new instruments as a result of growing demand by the funds for financial assets. Positive consequences of the introduction of private pension funds in some countries also include an increase in the size and depth of the local stock market, reduced volatility of transactions, reduced costs of capital faced by enterprises, greater competition between the institutional investors in the market and improvements in the allocation of financial resources (Lefort and Walker, 2002; Yermo, 2005; Blommestein and Santiso, 2007).

Institutional investors, and especially pension funds, have been major forces stimulating the financial innovation that has taken place in the last years. The great volume of resources managed by pension funds, along with the limits laid down for investing them, have permitted the creation of new types of financial instruments (long-term bank and corporate liabilities, equity, mortgages, pension annuities). Examples of the new instruments also include investment-fund shares and bonds issued by securitisation companies.

The growth in pension funds has also triggered a modernisation of the financial infrastructure of local securities markets. Key elements of this infrastructure, such as risk-rating, custodial services and brokerage services, are directly related to the establishment of the pension-funds industry.

ISBN: 978-92-64-03826-4

Another important improvement in the financial structure is the modernisation of trading systems in stock exchanges. For example, in Chile, the Santiago Stock Exchange implemented an electronic trading system in 1987, and in 1990, it created a new exchange entirely equipped with electronic trading systems. Both innovations are linked to the growth in the volume of transactions driven by the accumulation of assets in pension funds (SPFAC, 2004).

The development of private pension funds has also had an enormous impact on the development of the life-insurance industry. As private pensions mature, money is transferred from pension funds to life-insurance companies to pay for retirement annuities. Pension-fund administrators also have to take out policies with insurance companies to cover their members' risks of disability and death. The only exception to this is Mexico, where the social security institution, IMSS, has retained its role as public insurer of these risks.

Pension reform, and especially the growth in pension-fund assets under management, have thus had positive implications for the development of local capital markets. However, there are limits to this impact. The initial hope that pension-stimulated capital-market development would extend to equity markets, for example, has so far proved mixed. While stock-market capitalisation (a good measure of the size of a market) has increased rapidly throughout the region, value traded has not kept pace, as shown in Table 2.2. Thus, capitalisation has risen spectacularly in Chile, to 116 per cent of GDP by 2004, which compares positively not only with OECD countries as a whole but even with the United States and the United Kingdom, which have the most developed capital markets. In other Latin American countries, stock market capitalisation had reached nearly one-third of GDP by 2004. Nonetheless, value traded has remained low as a percentage of GDP in Latin America — whereas in other emerging regions it has grown considerably. Recent studies show that it is much more the degree of liquidity than the size of equity markets (that is, value traded rather than market capitalisation) that strongly and positively correlates with the strength of a country's real economic growth (Oman, 2003). Moreover, while the number of listed enterprises has increased in Mexico, Chile and Colombia, it has declined in the region as a whole.

The impact of pension funds on a country's financial system has also been conditioned by macroeconomic policies. In Argentina, for example, the 2001-02 financial crisis dealt a severe blow to the pension-fund industry, with repercussions that went well beyond the purely financial ones. The crisis spotlighted the pension-fund industry, and fund administrators were forced by government regulators to introduce major changes in the design of the pension system. These included changes in the investment rules for the funded schemes, contribution rates, pension-fund administration fees and the funded scheme's benefits (Rofman, 2002). Pension-fund enterprises were also forced to make asset allocation decisions they probably would not have made in other market conditions (Roldos, 2004).

ISBN: 978-92-64-03826-4

Table 2.2. **Stock Market Development**

	Stock Market Capitalisation (% of GDP)		Value Traded (% of GDP)		Listed Enterprises (number)	
	1990	2004	1990	2004	1990	2004
Argentina	2.3	26.2	0.6	5.0	179	104
Brazil	3.6	42.0	1.2	12.3[a]	581	357
Chile	44.9	116.2	2.5	12.2	215	239
Colombia	3.5	22.5	0.2	1.5	80	114
Mexico	12.4	23.7	4.6	6.3	199	152
Peru	3.1	26.1	0.4	1.6	294	194
Latin America and Caribbean	7.7	39.4	2.1	8.3	1 748	1 525
Australia	35.1	122.8	12.9	80.7	1 089	1 515
Singapore	92.9	129.6	55.0	75.6	150	484
Spain	21.8	86.6 [a]	8.9	111.5[a]	427	3 191
United Kingdom	85.8	132.6	28.2	174.5	1 701	2 684
United States	53.2	139.4	30.4	165.3	6 599	5 231

Note: *a)* 2003.
Source: World Bank (2005); IADB (2007).

StatLink http://dx.doi.org/10.1787/122107134225

Restrictions on portfolio investment

Governments have set restrictions as to how much pension-fund administrators can invest in different asset categories, the most stringent being in relation to foreign assets in an effort to preserve macroeconomic stability.

The limits to the impact of private-pension systems on local stock markets can be partially explained by the regulations imposed by governments on the pensions industry and other financial institutions. Pension funds in Latin America are subject to a prudential regulatory framework aimed at protecting members' future pension benefits. These regulations affect aspects of the industry's structure, asset allocation, relative performance and, hence, the development of local security markets.

All the regulatory frameworks in Latin American countries allow pension funds to invest in four main asset categories, with varying limits: government bonds; capital-market instruments (stocks and bonds); bank deposits; and foreign assets. As shown in Table 2.3, the limits on investment in government bonds have typically been generous, reflecting not only the fact that these assets form part of a well-balanced portfolio, but that governments have needed to finance the cost of transition from the state-managed social-security system. Indeed, the transition implies being able to honour payments to retirees having paid into the PAYG system at a time when the PAYG contributions are disappearing from the public coffers to the benefit of savings in private funded systems. Limits on investing in bank deposits have also been generous. Limits on investments by pension funds in both domestic equities and all foreign assets, in contrast, have been strict in almost all countries. In 2007, Chile, Brazil and Peru have the least restrictive quantitative limits; Uruguay and Mexico have the most restrictive investment regimes.

ISBN: 978-92-64-03826-4

Table 2.3. **Portfolio Ceiling by Main Asset Classes,**
Selected Latin American and OECD Countries

	Government securities	Financial Institutions	Stocks	Corporate bonds	Investment funds	Foreign securities
Argentina	50%	40%	50%	40%	20%	10%
Bolivia	none	20%-50%	20%-40%	30%-45%	5%-15%	10%-50%
Brazil	no limit	80%	50%	80%	no limit	3%
Chile	40 %-80 %	40 %-80%	0%-80 %	30%-60%	0%-40%	30%
Colombia	50%	30%	30%	40%	5%	10%
Mexico	none	10%	15%	5%-no limit	-	20%
Peru	30%	40%	35%	40%	15%	10.5%
United Kingdom	no limit	no limit	no limit	no limit	no limit	no limit
United States	no limit	no limit	no limit	no limit	no limit	no limit

Source: OECD (2007).

StatLink http://dx.doi.org/10.1787/122177886451

These investment regulations have led to a high allocation of funds into government bonds, which have also been attractive to pension funds for their high yields — reflecting country as well as default risk. By the end of 2006, the average share of government paper in pension-fund portfolios (excluding Brazil) was 42 per cent of total assets, which is larger than the prevailing average in advanced economies, although smaller than the average in other emerging economies. This average masks large differences across countries (Figure 2.5). In five countries, pension funds hold at least 60 per cent of their portfolio in government bonds: El Salvador (79 per cent), Bolivia (75 per cent), Mexico (73 per cent), Argentina (61 per cent) and Uruguay (60 per cent). That share is much smaller in Peru (19 per cent) and Chile (13 per cent). Finally, in Brazil, the share grew from 2 per cent in 1994 to around 12 per cent in 2005, due perhaps to Brazil's high real interest-rate policy during this period and to the absence of long-term investment alternatives in the local capital market (Reis and Paixão, 2004).

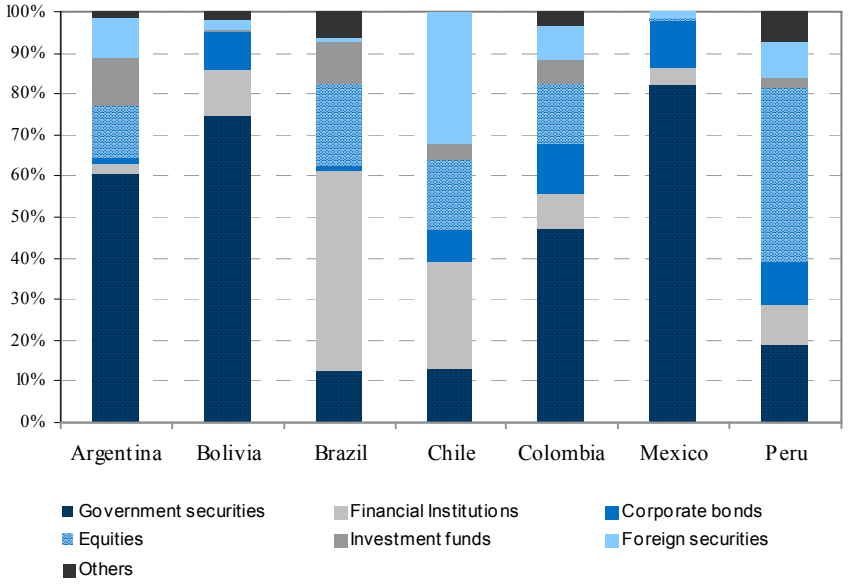
Compared with the levels found in leading OECD countries, pension-fund investment in equities has remained low in all countries in the region with the exception of Peru, where 42 per cent of total pension assets were invested in equities in 2006. Pension funds in Argentina, Chile and Colombia have between 12 per cent and 17 per cent of their portfolios invested in stocks, and in Mexico the level is around 2 per cent. Equity investment is close to zero in the rest of the countries, except Brazil where it is higher than the average in the region, having nevertheless diminished from 31 per cent in 1996 to about 20 per cent in 2007[2].

Investment portfolios are also far from being internationally diversified. In most Latin American countries, investment abroad was banned or discouraged when the new private-pension systems were set up, in order to channel saving into the reformers' domestic economies. In Brazil, foreign investment is limited to 3 per cent, and restricted to Brazilian Depositary Receipts and stocks listed in the capital markets of the Southern Common Market (Mercosur) countries. Chile has been gradually raising the limit on the share of investment by pension funds in foreign instruments: it reached 30 per cent in March 2004. In May 2007, the Chilean president announced that the ceiling would be raised to 45 per

ISBN: 978-92-64-03826-4

cent. The consequent decline of the stock market shows the weight of the presence of pension funds — and the potential for stock-price distortions — when a few pension funds control such vast resources under a relatively tight investment regime. Mexico's level is 20 per cent, Argentina, Colombia and Peru's around 10 per cent, Bolivia's between 10 per cent and 50 per cent, and the level is zero in the remaining countries.

Figure 2.5. **Distribution of Portfolio Investment in Selected Latin American Countries, 2006**



Source: OECD Development Centre (2007); based on AIOS data.
StatLink http://dx.doi.org/10.1787/120773517201

While diversification of pension-fund portfolios is important both to manage risk and to achieve better performance through different kinds of investment instruments, economic crises and market collapses in the region have left regulators cautious about relaxing investment ceilings and limitations on equities. Yet the substantial variation amongst countries in how they limit allocations across different types of investments suggests that there remains a significant divergence of views on appropriate levels of diversification and their impact on macroeconomic stability.

There also remains a still largely untapped potential for pension funds to use mechanisms to enhance the quality of the governance of the corporations in whose equities they invest, in order to reduce the risk of financial instability and improve their own financial performance and risk management. Only a few countries — including notably Brazil, whose experience we describe below — allow for higher pension-fund investment levels in the equities of local corporations shown, through objective measures, to meet standards of corporate governance that are higher than those required for listing on the stock market. Such an allowance, and the incentive it can give to improved corporate

ISBN: 978-92-64-03826-4

governance in the country, can result in better financial performance for pension funds, as well as for the corporations they invest in, and for the country's securities markets overall (Malherbe *et al.*, 2007).

Potential impact on corporate governance

While the shares of pension-fund investments in equities remains low in Latin American countries compared to a few leading OECD countries, these low shares fail to reveal important and changing dynamics in the region in terms of how pension funds are influencing local corporate governance. Moreover, improving corporate governance has emerged as an important objective, not only because of its potential contribution to the value of local pension-fund portfolio investments, and thus to the welfare of their members, but as an overall policy objective in support of long-term real economic and productivity growth (Oman and Blume, 2005). Significant privatisation of formerly state-owned enterprises only reinforces the fact that most Latin American countries increasingly depend on private-sector corporations to create jobs, generate tax revenues and provide consumers with goods and services. Employment generation, the development of indigenous technology, and ultimately the international competitiveness of Latin America's economy need to build on a base of enterprises that do not suffer from cost-of-capital disadvantages and that adapt sound management and corporate-governance practices to domestic circumstances. Improving corporate governance has thus emerged as an important objective for pension funds in Latin America (OECD, 2003).

Through their investments, pension-fund administrators have the potential for raising standards of corporate governance, and Brazil in particular has introduced an instrument that increases this potential.

The extent of pension reform and the projected continued growth of the funds therefore provide additional justification for giving special attention to the questions of good corporate-governance and capital-markets development in the region. With a small but growing portion of pension funds invested in securities of publicly traded enterprises, the longer-term performance of the funds will increasingly depend both on the incentives for, and ability of, fund managers to make the right judgements about the long-term competitiveness of the enterprises in which they invest, on the one hand, and on the fair treatment of investors by those who control such enterprises — reflected in the quality of their corporate governance — on the other. Assuring the maximum degree of transparency and internal and external accountability by publicly traded enterprises also increases the likelihood that for retirees, investment decisions by pension funds will pay off in the longer term.

Brazil provides a good example of the potential importance of local pension funds for achieving progress on corporate governance in the economy as a whole. In 2001, the country's main stock exchange, Bovespa, inaugurated special listing segments with requirements for the quality of corporate-governance practices by enterprises choosing to list in those segments — requirements that are higher than the legal ones established for listing in the regular market. The stock exchange established three higher-level corporate-governance tiers known as "*Novo Mercado*", "Level 1" and "Level 2". While the market initially took some time to react, these higher-level listing segments have taken off since about 2005, with the 100th listing in early 2007. Between 2002 and 2005, the Bovespa corporate-

ISBN: 978-92-64-03826-4

governance index for enterprises that had joined one of these three special levels rose by 420 per cent, almost double the growth rate of the stock-exchange listings as a whole. By the end of 2006, the enterprises on the better corporate-governance listing segments constituted 58 per cent of the trading value and market capitalisation of all enterprises listed on the exchange (Dias, 2006).

Large pension funds in Brazil, working closely with other domestic institutional investors, have played an important role in advising enterprises, when they are considering initial public offerings (IPOs), on the importance the investors give to these higher corporate-governance standards — standards that include higher disclosure requirements, strengthened rights for minority shareholders and efficient dispute-resolution mechanisms. Pension funds in Brazil also have built-in incentives to request such commitments, because Brazilian pension-fund regulation allows pension funds to invest up to 50 per cent of their portfolios in enterprises listed on one of the three higher-level corporate-governance segments of the market, but only up to 35 per cent in those listed in the regular market. As enterprises have seen the higher values that investors have been willing to pay for the shares of enterprises meeting higher corporate-governance standards, there has been an acceleration of corporate listings in these segments. While no other Latin American country has replicated the Bovespa initiative, some of Chile's pension funds have been pursuing a similar objective to improve enterprise governance, notably by playing a more active role in trying to influence the appointment of independent directors, remuneration policies and other governance issues.

Spurred in part by these examples, institutional investors, including pension funds, in several Latin American countries (Argentina, Brazil, Chile, Colombia, Mexico and Peru, for instance) have agreed to work towards the development of a new set of recommendations for institutional investors on good corporate-governance practices. These recommendations are to apply both to their own governance and to the influence they can exert on the quality of governance of the enterprises in whose equity they can invest (and to the market as a whole).

These discussions have begun since 2003, in the context of the Latin American Roundtable on Corporate Governance, a joint initiative of the OECD and the World Bank Group to convene, on a regular basis, policy makers, stock exchanges, investors, enterprises and other stakeholders from Latin American and OECD countries in view of promoting corporate-governance improvements. The Roundtable issued a White Paper on Corporate Governance in Latin America in 2003 (OECD, 2003) and following that, it launched an initiative to develop a new White Paper for institutional investors, including pension funds. With institutional investors playing such an important role in Latin American capital markets, the aim of the Roundtable's initiative on institutional investors is to develop better information on good practices, ways to improve legal and regulatory incentives, and ways to remove barriers to investors playing a more active role in promoting good corporate governance. Ultimately, this initiative could trigger further improvements at the enterprise level, in turn attracting additional investors and promoting further capital-market growth in the region (see also Malherbe *et al.*, 2007).

ISBN: 978-92-64-03826-4

Strengthening the Governance of Pension Funds

The quality of the governance of the pension funds themselves is thus critically important, not only for the own financial performance of the funds and the benefits they provide to their members, but also for the considerable indirect impact it can have on the quality of corporate governance of the enterprises in which pension funds invest.

One of the key issues that needs to be addressed in the area of corporate governance is the ability for pension-fund members – workers and retirees – to weigh upon pension-fund policy.

Policy makers throughout Latin America have begun to move to ensure better regulation of the pension-fund industry. Significant room for improvement remains. As recommended by the OECD Guidelines for Pension Fund Governance, laws and regulations governing private pensions need to be revised to strengthen the role and responsibilities of institutional investors as fiduciaries of other people's retirement assets (OECD, 2005). Reforms are specially needed as investment regulations are relaxed and administrators are given greater discretion in how they manage pension-fund investments.

The root of the governance weaknesses of the new systems is the unequal distribution of information and negotiating power between the largely uninformed individual pension-fund members, on the one hand, and the large specialised financial corporations that are the pension-fund administrators, on the other. The administrators are for-profit organisations whose exclusive purpose is the management of pension funds and the development of associated activities strictly related to retirement provision, but whose loyalty is due to their shareholders.

Well-informed members — that is, workers and retirees — can exert a strong countervailing force in relation to their fund administrators if they are also well-organised. Otherwise, the system will favour the shareholders of the private administrators at the expense of workers and retirees. A clear sign of the failure to align the incentives of pension-fund administrators with those of members is the high administration fees observed in some countries. Figure 2.6 compares fees, net of insurance costs, as a percentage of assets for 12 countries. Net fees range from 1.2 to 9.5 per cent of assets in Latin America, as compared to less than 0.1 per cent in the US Thrift Saving Plan (TSP) for federal workers and 0.3 to 0.7 per cent in large enterprise or industry funds in the United States, Western Europe and Australia (James, 2005).

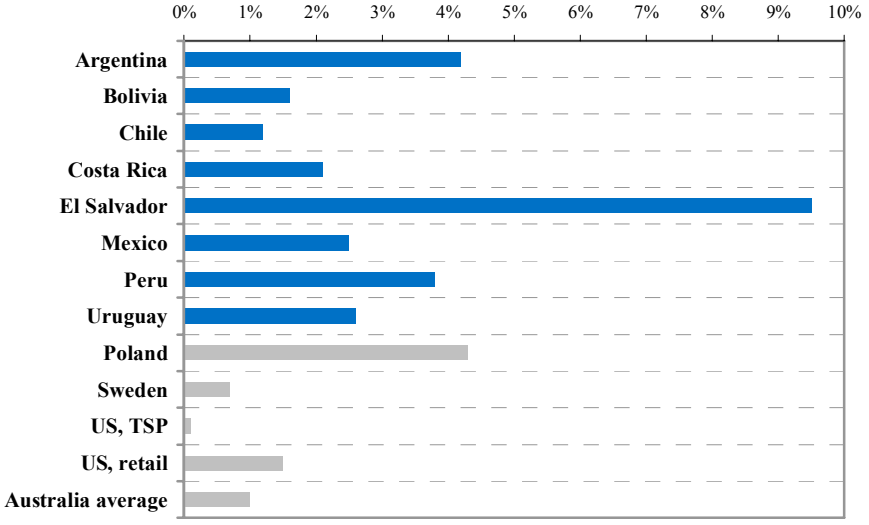
While government intervention can correct these results, a less politically intrusive solution could be to establish an intermediary, in the form of a trustee or ombudsman who exclusively looks after the best interests of the members. One proposal being discussed in Chile is the establishment of a users' committee that would monitor the cost and the quality of the service provided by the administrator, amongst other tasks.

Here again, Brazil provides a useful reference, because its pension funds are independent non-profit organisations, set up either by sponsoring employers (closed funds) or by life-insurance enterprises (open funds). The sole purpose of closed pension funds — whether created by individual employers, by multiple employers or (as recently allowed) by labour unions, and which may be public or private — is to manage pension monies for their members. When the fund is sponsored by the public sector, its governing body is composed of a maximum of six individuals:

ISBN: 978-92-64-03826-4

three nominated by the sponsor and three elected by members. Governance regulations are more flexible in funds sponsored by the private sector, but at least one-third of the individuals who serve on the governing body must be representatives of members. This form of governance structure should ensure a better protection of members' interests than does the governance structure of pension funds in other Latin American countries, where pension-fund administrators' boards of directors are made up exclusively of shareholder appointees.

Figure 2.6. **Administrative Costs and Charges: Fees as Percentage of Assets**
(net of insurance premium)



Notes:
1. Data on commissions are difficult to compare because charge structures vary across countries. Thus, for example, Mexican commissions take various forms (asset-based, return-based, flat fees, etc.) and must be converted into an equivalent percentage of wage for comparisons. Other countries, such as the Dominican Republic and Costa Rica, allow for charges based on returns and would also have to be converted into a percentage of average wage. For a comparison of different charge structures see Whitehouse (2001).
2. These fees include contribution-based and asset-based fees and cover investment and record-keeping services, marketing costs and profits. For Latin America, numbers are derived from fees per contributor for 2002. In most cases (notably Chile) they are lower in 2006.
3. For Poland, numbers are for 2002.
4. Swedish numbers are for 2004.
5. For Australia, data are for 2001. Conversion to $ based on exchange rate in December 2001.

Sources: OECD Development Centre (2007); based on James (2005) data; FIAP (2003) data for Latin America; Agnieszka Chlon-Dominczak (2003) data for Poland; James *et al.* (2001) data for the United States; Clare (2001) data for Australia.

StatLink http://dx.doi.org/10.1787/120861145406

Enhancing accountability and aligning incentives

Much remains to be done to strengthen the internal control of pension-fund administrators in the interests of members.

Other mechanisms to promote the loyalty of pension-fund administrators to members involve enhancing the accountability of an administrator's governing body by enlarging the latter's fiduciary responsibilities to include maximisation of members' risk-adjusted pension benefits, net of fees. A clearly written mission objective to this effect sometimes helps to induce both a change in administrators'

ISBN: 978-92-64-03826-4

pricing practices and a proactive reorientation in their investment strategies in order to take account of different members' investment horizons and risk aversion.

Pension-fund administrators also need to strengthen their internal controls to ensure that they are managed in the best interest of members. Amongst the more important mechanisms of internal control are rules concerning conflict of interest. According to an initial assessment of pension regulations against OECD Guidelines on Pension Fund Governance (OECD, 2005), in most countries, to prevent potential conflicts of interest, administrators are prohibited from investing any of their own money in securities that may be acquired by the pension funds they manage. There are also strict limitations on investments in enterprises whose managers or owners (or major shareholders) are related to the managers, owners or major shareholders of the pension-fund administrator, and a clear legal separation is made between the administrator and the pension assets he or she manages.

However, there are no specific requirements for developing a code of conduct for the board of directors and investment managers, or to ensure that there are adequate internal controls in place to monitor the impact of fees and investment strategies on pension benefits, and the quality of the advice that members receive.

In Brazil, whose occupational pension-fund industry has a different governance structure, as noted earlier, there are also governance problems. Fiduciary duties and accountability mechanisms are not clearly defined. The lack of appropriate internal controls leads to many situations in which pension funds make decisions in the interest of their sponsors regardless of the implications for their members. One provision, for example, allows the manager of a pension fund to be the same as the manager of a sponsor enterprise as long as the assets of the fund and of the sponsor remain separate. This structure facilitates conflicts of interest amongst sponsors, members and managers.

Improving disclosure and redress

A few rules governing disclosure to members are applied widely and effectively in Latin America. By law, fund-managing enterprises are required to send regular statements to their members containing the amounts each member has contributed to the fund, the financial return on the fund, the commissions and insurance premiums charged over the past reporting period and each member's current-account balance. Government supervisors oversee the operations of both the managers and the pension funds they manage. In Chile, for example, *Administradoras de Fondos de Pensiones* (AFPs) must provide members with information at least every four months on all transactions concerning their individual accounts, returns earned on the investment of their capital and the amount of their accumulated capital. AFPs must also provide information on details of each fund, the balance sheet of the last fiscal year, details of the amount of assets, return fluctuation and general reserve assets, the fee structure and details of the investment portfolio. Similarly, in Mexico, the *Administradoras de Fondos para el Retiro* must provide workers with almost the same kind of information at least every six months, whereas in Colombia, AFPs have to inform their members every three months[3].

ISBN: 978-92-64-03826-4

However, despite the regularity of the information provided, many workers state that they do not read or understand the documentation received. Simple and clear presentations of the information provided with comparable figures from different administrators would help participants make choices that are in their best interest. Administrators must also facilitate access to information; while members may be able to obtain additional information on request, often the procedures for doing so are not clear.

One of the weakest features of the reformed pension-fund systems is members' lack of effective redress mechanisms.

Even more worrisome is the fact that redress mechanisms, which allow members to enforce their rights and possibly take action against their fund's administrator, are underdeveloped. These mechanisms are particularly important in privately managed pension funds in Latin American countries, because members have no representation in the governing body and can therefore not exert any pressure directly on it. Only in Brazil is part of the governing body elected by the members.

While most pension systems in the region do not impose any legal requirements for pension-fund administrators to formally address members' complaints or establish dispute-settlement procedures, members can lodge their complaints with the government supervisory authority or bring civil actions against their pension-fund administrator. The supervisor can in turn sanction the administrator and its directors, and take legal action through the courts. Most often, however, both the length of delay and the lack of responsiveness of the courts leave much to be desired.

An important exception is Colombia, where the pension system has an ombudsman who is responsible for receiving and solving members' complaints. The Chilean government has also proposed the establishment of a users' committee to address members' complaints.

Enhancing Pension-fund Performance

The strengthening of pension-fund governance is likely not only to bring down costs, but also to help sustain investment returns and thus also improve retirement-income security. Average investment rates of return before administrative costs have been very high in most Latin American countries. Table 2.4 provides nominal and real gross investment returns for the entire period since reform was implemented. However, administrative costs and fees associated with managing pension funds, which are relatively high, have not been netted out, and there are questions as to whether these high returns will be maintained into the future.

Better internal governance also enhances pension-fund performance.

Real gross returns in Chile have been at an outstanding average annual rate of around 10 per cent for the period from 1981 to December 2006. Other countries, such as Colombia, Peru, Bolivia and Uruguay, have also achieved high real rates of return. Brazil and Costa Rica show the lowest returns. And, of course, net returns are lowered by administration fees, which in some countries have been on average as high as 2 per cent of assets under management. Nonetheless, as fees are charged on contributions and assets under management are growing, the weight on yields of fees and charges is falling.

ISBN: 978-92-64-03826-4

Table 2.4. **Gross Investment Returns of Pension Funds**
Selected Latin American Countries, 2006

Country (period)	Historical Average Annual Rates (%)			Last 12 Months	
	Nominal	Real	Standard deviation[a]	Nominal	Real
Argentina (1994-2006)	15.7	9.8	11.1	25.2	14.0
Bolivia (1997-2006)	13.17	8.8	3.5	7.9	2.8
Brazil (1994-2006)	25.7	6.3	6.4	23.4	13.4
Chile (1981-2006)[b]	22.7	10.2	7.6	18.1	15.8
Colombia (1994-2006)	18.3	6.7	-	7.3	2.7
Costa Rica (2002-2006)	18.6	6.9	4.0	20.8	10.3
El Salvador (1999-2006)	12.3	8.8	4.5	6.1	1.2
Mexico (1997-2006)	15.9	7.8	3.6	13.1	8.7
Peru (1993-2006)	15.5	9.9	9.6	28.3	26.8
Uruguay (1995-2006)	22.4	11.8	14.3	16.5	9.5

Notes:
a) This is the standard deviation of the annual real rate of returns for the entire period. The numbers represent percentage point changes.
b) For Chile, the average return refers to Fund C.
Source: OECD Development Centre (2007); based on AIOS data.

StatLink http://dx.doi.org/10.1787/122184646586

However, during the period, real returns also show considerable fluctuations, which involve significant risks for members. The standard deviation in Table 2.4 measures the variability of these returns, and serves as a proxy for the level of risk. The high historical real average annual rate of returns in Uruguay, Argentina, Peru and Chile, for example, should be assessed in light of their very high volatility over time.

Real returns also vary according to the period of calculation. Up to the mid-1990s, real average gross returns were very high. They can be explained by the fact that most pension funds were invested in public-debt instruments, which paid a very high real rate of interest because of the high-risk profile of sovereign debt. Since 1995, returns on investment have been reduced as a consequence both of the improved macroeconomic circumstances in the region (with lowered returns on public bonds) and the stock-market crises of 1995, 1998 and 2001. Thus, for example in Chile, between 1981 and 1994 the pension system generated an average real rate of return on assets of more than 13 per cent, whereas between 1995 and 2005 it reached only 4.4 per cent. These returns were greater than those available in OECD countries because investment opportunities in Chile were attractive but perceived as risky. Similarly, in Argentina real annual returns were around 17 per cent during the period 1994-97, versus 7.2 per cent from 1997 to 2001. Argentina's financial crisis in turn had serious short-term effects on the financial situation of the pension system because it affected the overall real return, which fell more than 10 per cent in 2001, but the average real return then rose again to more than 12 per cent annually during the period from 2002 to 2006.

ISBN: 978-92-64-03826-4

Conclusions and Policy Recommendations

To meet macroeconomic and financial goals, in addition to ensuring safe pensions for its members, the pension-fund industry needs to enhance its self-regulation.

The new pension-fund industry in Latin America, supported in the many countries which have undergone pension reform by a stringent regulatory framework and effective public regulatory supervision of a relatively small number of private pension-fund administrators, has delivered safe management of workers' pension monies and a steady flow of finance into nascent capital markets in the region.

The new pension systems have improved the quality of benefits and services received by members. The combination of individual ownership rights over accumulated balances in personal accounts, the private management of funds and freedom of individual choice has been effective in protecting pension funds from the risk of political capture that often plagued the old PAYG systems.

Progress towards other goals shows greater variance amongst countries. Chile has made impressive gains in national saving, economic growth, financial deepening and corporate governance. Progress in the other countries towards these objectives is less evident, in part because they started at least ten years later, but in no small measure because they have made less progress than Chile in equally important structural reforms outside the pensions industry itself.

Policy makers throughout Latin America have moved to ensure better regulation of the pension-fund industry, but significant room for improvement remains. The quality of the governance of pension funds also needs to be strengthened. Clearly written mission statements, codes of conduct, and mechanisms for enhancing the accountability of pension-fund administrators should help to align incentives amongst members, sponsors and administrators, and provide a better protection of the interests of workers and retirees.

As governments in Latin America review pension-fund regulations and move to liberalise their pension-fund investment regimes, the quality of self-regulation and effective governance arrangements of pension-fund administrators will become even more important. This is particularly the case in the many countries where pension-fund administrators have become entrenched in their dominant local-market position as the largest institutional investors. Greater attention to their governance and self-regulation should also induce a healthy reorientation in their investment strategies towards seeking higher returns from less liquid, but potentially profitable and socially necessary, investments, for example in housing, infrastructure and innovative technologies.

The probably inevitable high degree of market concentration in strictly regulated, mandatory, funded pension systems further highlights the need for much greater attention to the quality of the governance of pension-fund administrators. Equally important is the potential those administrators have to induce widespread improvement in the quality of governance in the enterprises whose equities they acquire as assets.

ISBN: 978-92-64-03826-4

Combined, the result of such enhanced governance — of both pension-fund administrators and the corporations in which they invest workers' pension monies — should be a far more productive economy-wide use of real capital and human resources. Countries throughout the region would thus enhance national saving and reduce their financial fragility and dependence on volatile international capital markets.

Five specific policy areas require special attention.

To achieve such results, policy makers in different countries would benefit from learning more actively from one another's experiences. Policy makers could usefully exchange their experiences and lessons learned within the frameworks of the OECD Principles of Corporate Governance (OECD, 2004), and the OECD Guidelines for Pension Fund Governance (OECD, 2005), with the active support of the OECD. Five policy areas deserve particular attention:

1) Strengthen local financial-market infrastructure and financial regulatory frameworks.

1) Given that pension fund assets are likely to continue to grow in Latin America in the coming years, priority must be placed on strengthening local financial-market infrastructure and financial regulatory frameworks. This is all the more important since the ability of pension funds to maintain the living standards of their retired members depends crucially on the financial performance of the funds' assets, and thus on the reliability and stability of financial markets.

2) Facilitate asset diversification for pension-fund investments.

2) Regulations, especially investment limits, that hamper a healthy diversification of pension assets should be re-examined with a view to facilitating asset diversification while maintaining high prudential standards. Particularly important are limits on specific asset classes, notably equities, on the one hand, and foreign assets, on the other. Increasing the share of equities and/or foreign assets allowed in the investment portfolios of pension funds, especially in countries where current limits on such assets are close to zero, will contribute not only to better pension-fund risk management through enhanced asset diversification, but also to reducing the undesirable side-effects of current pension-fund investment patterns on domestic asset prices. The relaxation of investment limits should be accompanied with effective incentives for asset managers to be diligent in monitoring the investments of their funds.

The potential for pension funds to exert a positive influence on the quality of the governance of the companies in which they invest will be minimal, however, unless regulators also lift corresponding restrictions in countries (such as Mexico) that limit pension funds' equity investment to indexed funds and prohibit such investment in individual companies. For pension funds to become active shareholders, capable of exercising significant voice in the quality of the governance of the companies in which they invest money, the pension funds must be able to purchase directly, and eventually sell, the shares of individual companies. Once able to exercise such enhanced *voice* in corporate governance, moreover, they also reduce their need for *exit* — that is, reduce their need to sell corporate shares — as the most effective way to influence corporate governance throughout the economy.

ISBN: 978-92-64-03826-4

3) Offer members a choice of more than one fund in terms of risk and yield.

3) Policy makers should consider the benefits of allowing pension-fund asset managers the possibility to offer members a choice of more than one fund, that is, to offer members a diversity of funds in terms of risk-yield profile, which today only Chile, Mexico and Peru allow. In addition to giving individual members a broader range of investment options, such multiple funds will enhance the incentive for members to seek information on performance differences of fund investments, increase the services that administrators provide to members, raise member participation and improve resource allocation.

4) Find ways to lower member fees.

4) The high administrative fees and costs that pension funds charge members in some countries in Latin America require policy attention — and are in fact being discussed in the region. The two principal options are: *i)* to strengthen competitive pressures on funds by liberalising the market to allow banks, insurance companies and perhaps other financial organisations to compete directly with pension funds for members' contributions; and *ii)* to reduce administrative costs through economies of scale by centralising, for the country as a whole, the collection of members' contributions, record keeping and reporting to members, and to reduce administrative fees by limiting incentives for members' costly and inefficient switching between administrators. While the former option relies more on the competitive market to induce pension administrators to lower their fees and commissions, it requires careful evaluation to avoid exposing pension assets to the excessive risk that may characterise the investment and management behaviour of non-specialised financial organisations. Argentina, Mexico and Uruguay currently pursue the latter option.

5) Improve funds' governance for the benefit of members, corporate governance outside the pensions sector and the economy as a whole.

5) The laws and regulations that govern private pension funds need to be revised to strengthen the role and responsibilities of institutional investors as fiduciaries of other people's retirement assets. Transparency and effective rules of communication between fund managers and members are required for the governing bodies of pension funds to act consistently in the best interest of their members. Improved governance of pension funds can in turn greatly enhance the positive impact, and simultaneously lower the risk, of investment by pension funds in the equity of enterprises active in all sectors of the local economy, as well as internationally. By serving as powerful agents for improved corporate governance throughout their economies, well-governed pension funds can thus also contribute powerfully to long-term real economy-wide productivity growth. Workers, active and retired, and employers alike should benefit immensely.

ISBN: 978-92-64-03826-4

Notes

1. According to the OECD pension taxonomy (OECD, 2005), a defined-benefits (DB) plan is any pension plan other than a defined-contributions plan. All plans in which the financial or longevity risk are borne by the plan sponsor are thus considered DB plans, in which benefits to members are typically based on a formula linked to members' wages or salaries and the length of their employment. A defined-contribution (DC) plan, in contrast, is one in which benefits to each member are based solely on the amounts paid into the plan by the sponsor or member, plus any accumulated financial return thereon. DC plans do not include those in which the employer that sponsors the plan guarantees a rate of return.
2. The data for Brazil reflect only equities in the portfolios of closed pension funds.
3. In 2002, the Microdata Center of the Economics Department of the Universidad de Chile conducted a household survey, *Historia Laboral y Seguridad Social*, which provides useful data on the Chilean pension system. It also offers detailed information about members' pension benefits and/or pension-plan participation, and a retrospective labour-mark history going back to 1980.

ISBN: 978-92-64-03826-4

Statistical Annex

Table 2.A1. **Total Pension Funds Assets 1995 -2006**
($ million)

	1995	1997	1999	2001	2003	2004	2005	2006
Latin America								
Argentina	2 495	8 827	16 787	20 786	15 947	18 306	22 565	29 371
Bolivia		98	535	936	1 485	1 716	2 060	2 299
Brazil	62 691	83 436	71 464	81 378	91 260	120 923	161 590	165 215
Chile	25 143	30 525	34 501	35 461	49 691	60 799	74 756	88 632
Colombia	266	1 367	2 887	4 955	7 326	11 067	16 015	16 739
Costa Rica					305	476	711	1 020
El Salvador			213	800	1 572	2 148	2 896	3 352
Mexico		615	11 412	27 146	35 844	42 524	55 205	66 613
Peru	583	1 510	2 406	3 622	6 341	7 820	9 397	14 260
Uruguay			591		1 232	1 678	2 153	2 586

Source:AIOS (2006).

StatLink http://dx.doi.org/10.1787/122222044121

ISBN: 978-92-64-03826-4

Bibliography

Acuña, R. and A. Iglesias (2001), "Chile's Pension Reform after 20 Years", *Pension Reform Primer*, World Bank, Washington, D.C.

AIOS (International Association of Pension Funds Supervisory Organisms) (2006), *Boletin Estadistico AIOS*, No. 16, www.aiosfp.org/estadisticas/estadisticas_boletin_estadistico.shtml.

Blommestein, H. and J. Santiso (2007), "New Strategies for Emerging Domestic Sovereign Bond Markets", *Working Paper* N° 260, OECD Development Centre, Paris.

Bailliu, J. and H. Reisen (1997), "Do Funded Pensions Contribute to Higher Aggregate Savings? A Cross Country Analysis", *Working Paper* No. 130, OECD Development Centre, Paris.

Corbo, V. and K. Schmidt-Hebbel (2003), "Macroeconomic Effects of Pension Reform in Chile", paper presented at the Federación Internacional de Asociaciones de Pensiones Conference in Cancún, Mexico, May.

Dias, L. (2006), "Governance of Brazilian Pension Funds", ExpressO Preprint Series, *Working Paper* 1447, Berkley Electronic Press, http://law.bepress.com/expresso/eps/1447/.

Gill I., T. Packard and J. Yermo (2005), *Keeping the Promise of Social Security in Latin America*, Stanford University Press and World Bank, Palo Alto, CA and Washington, D.C.

IADB (2007), *Statistical Indicators*,Inter-American Development Bank, Washington, D.C. www.iadb.org/research/SearchInd.cfm?language=EN&parid=2,

James, E. (2005), "Reforming Social Security: Lessons from Thirty Countries" *Policy Report* No. 277, National Center for Policy Analysis, Dallas, TX.

Kotlikoff, L. (2006), "Pension Reform – The Triumph of Form over Substance?", lecture to the Latin American Meeting of the Econometrica Society and the Annual Meeting of the Latin American and Caribbean Economic Association, Mexico City, November 2.

Lefort, F. and E. Walker (2002), "Cambios Estructurales e Integración. Discusión y Análisis del Mercado de Capitales Chileno", *Cuadernos de Economía,* Vol. 0116, No. 39, Instituto de Economía, Pontificia Universidad Católica de Chile, Santiago de Chile.

Malherbe, S., C. Oman and R. Short (forthcoming), "The Role of Institutional Investors in Improving Corporate Governance in Developing Countries", *Working Paper*, OECD Development Centre, Paris, forthcoming.

Mesa-Lago, C. (2004), "Las reformas de pensiones en América Latina y su impacto en los principios de la seguridad social", *Serie Financiamiento del Desarrollo* No. 144, Economic Commission for Latin America and the Caribbean (ECLAC), Santiago de Chile.

OECD (2003), "White Paper on Corporate Governance in Latin America", OECD, Paris, www.oecd.org/dataoecd/25/2/18976210.pdf.

OECD (2004), "Principles of Corporate Governance", OECD, Paris, https://www.oecd.org/dataoecd/32/18/31557724.pdf.

ISBN: 978-92-64-03826-4

OECD (2005), "The OECD Guidelines for Pension Fund Governance", OECD, Paris, www.oecd.org/dataoecd/18/52/34799965.pdf.

OECD (2007), "Survey of Investment Regulations of Pension Funds", OECD, Paris, www.oecd.org/dataoecd/56/7/38969997.pdf

Oman, C. (ed.) (2003), *Corporate Governance in Development: The Experiences of Brazil, Chile, India, and South Africa*, OECD Development Centre and Center for International Private Enterprise, Paris and Washington, D.C.

Oman, C. and D. Blume (2005), "Corporate Governance: A Development Challenge", *Policy Insights* No. 3, OECD Development Centre, Paris.

Pinheiro, V.C. (2005), "The Politics of Pension Reform in Brazil", *in* Crabbe, C. (ed.), *A Quarter Century of Pension Reform in Latin America and the Caribbean: Lessons Learned and Next Steps*, Inter-American Development Bank (IADB), Washington, D.C.

Queisser, M. (1998), *Development Centre Studies: The Second Generation Pension Reforms in Latin America*, OECD Development Centre, Paris.

Reis, A. and L.A. Paixão (2004), "Private Pensions in Brazil", paper presented at the OECD Working Party on Private Pensions, July, Paris.

Reisen, H. (2000), *Pension Savings and Capital Flows: From Ageing to Emerging Markets*, OECD Development Centre, Paris.

Rofman, R. (2002), "The Pension System and the Crisis in Argentina: Learning the Lessons", *Background Paper for Regional Study on Social Security Reform*, Office of the Chief Economist, Latin America and Caribbean Region, World Bank, Washington, D.C.

Roldos, J., (2004), "Pension Reform, Investment Restrictions, and Capital Markets", *Policy Discussion Paper* No. 04/4, International Monetary Fund (IMF), Washington, D.C.

SPFAC (Superintendency of Pension Fund Administrators of Chile)(2004), *The Chilean Pension System*, 4th edition, Superintendency of Pension Fund Administrators of Chile, Santiago de Chile.

Yermo, J. (2003), "Pension Funds and Capital Market Development", *World Bank. Background Paper for Regional Study on Social Security Reform*, Office of the Chief Economist, Latin America and Caribbean Region, World Bank, Washington, D.C.

Yermo, J. (2005), "The Contribution of Pension Funds to Capital Market Development in Chile", Oxford University and OECD, Oxford and Paris.

Whitehouse, E.R. (2001), "Administrative Charges for Funded Pensions: Comparison and Assessment of 13 Countries", *in* OECD, *Private Pension Systems: Administrative Costs and Reforms*, Private Pensions Series No. 2, OECD, Paris.

World Bank (2005), *World Development Indicators Database 2005*, World Bank, Washington, D.C. (WDI online), www.worldbank.org/data/wdi/home.html.

World Bank (2006), *World Development Indicators Database 2006*, World Bank, Washington, D.C. (WDI online), www.worldbank.org/data/wdi/home.html.

ISBN: 978-92-64-03826-4

Chapter 3

Business for Development

Multinationals, Telecommunications and Development[1]

Abstract

Since the early 1990s, foreign direct investment has increased dramatically worldwide. Latin America has been a major recipient of such investment, notably in conjunction with privatisation in the region during the 1990s. The emergence of new Latin American multinational corporations means that the region has also become a source of such investment, especially in the 2000s. The importance of both inward and outward foreign direct investment is particularly visible in telecommunications, a sector dominated in Latin America by two multinationals, one from each side of the Atlantic. Many countries in the region have taken great strides in building modern telecommunications infrastructure thanks to the combined effects of technological progress, the spread of mobile telephony and the market-seeking thrust of the leading competitors' investment behaviour. The strength of a few corporations has, however, given rise to concerns over the nature of competition in the sector. Greatly expanded user access to telecommunications services increases the contribution of this sector to economic growth, but key challenges remain in establishing and ensuring contestable markets that will close international and domestic digital gaps between rich and poor segments of the population and provide telecommunications services to all. Effective access-promotion policies with clear and stable rules are needed together with well-regulated, open and competitive markets that promote innovation and encourage multinational corporations to maximise their collective contribution to the region's long-term development.

ISBN: 978-92-64-03826-4

Introduction

The developing world, where multinational corporations have emerged, is now not only a recipient, but also a source of foreign direct investment.

Since the early 1990s, foreign direct investment (FDI) has increased rapidly all over the world. In Latin America, the 1990s were a period of significant FDI inflows, led by OECD-based multinational corporate investments in newly privatised or liberalised sectors in the region.

The real change, however, is not in the game but in the players. The share of stocks of FDI from developing countries has increased by half, from 8 per cent in 1990 to 12 per cent in 2005. More than one-third of total FDI flows to developing countries since 2002 have been South-South flows, which reached $60 billion already in 2004 (World Bank, 2006; UNCTAD, 2006).

Multinational corporations are thus no longer a monopoly of developed countries. New multinationals are emerging from countries such as Brazil, China, India, Mexico, Russia and South Africa. FDI flows from these emerging economies have risen from less than $10 billion in 2000 to more than $80 billion in 2006[2]. In Latin America, Brazil illustrates this phenomenon, with the country's $26 billion in FDI outflows in 2006 actually surpassing the size of its inflows.

In Latin America, the telecommunications market – which as an information medium is at the core of business efficiency – is examined here as a good illustration of the effects of FDI flows on economic growth.

The telecommunications sector lies at the intersection of these patterns of inward and outward FDI in Latin America. Two multinationals dominate FDI in the sector: Spain's Telefónica and Mexico's Carso group. The former came into the region riding the wave of privatisations in the 1990s. The latter, owner of Telmex and América Móvil, moved, in little more than five years, from being a national monopoly to becoming a major regional player.

The performance of the telecommunications sector is also important because of its implications for aggregate economic performance in Latin America. Telecommunications services are a key means of information transmission. As such, not only does the roll-out of telecommunications infrastructure profoundly change the way business is done, it has the potential to significantly improve the efficiency of markets as the cost of obtaining information is radically lowered, and thus also to contribute sizeably to economic growth and development. Moreover, these benefits for the economy as a whole display increasing returns, so that as service coverage approaches universality, the benefits increase more than proportionately (Röller and Waverman, 2001; Waverman *et al.*, 2005). The degree of people's and firms' access to telecommunications services is therefore crucial.

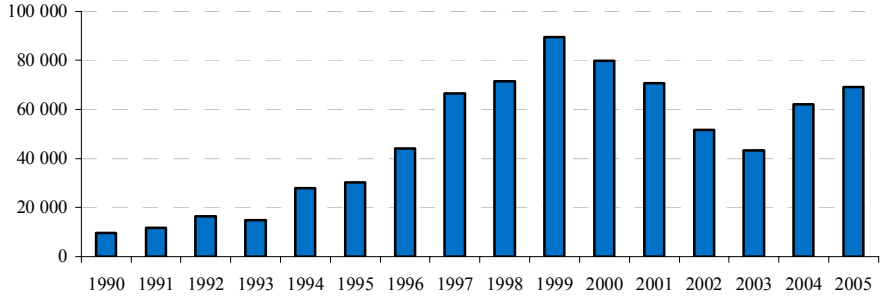
This chapter looks briefly at recent patterns of inward and outward FDI in Latin America and then focuses on the performance of Latin America's telecommunications sector and the strategies of the leading multinationals in that sector. It analyses the factors that have driven the evolution of telecommunications service coverage, and measures the sector's progress both in terms of overall coverage and in terms of providing access to different segments of the population. It concludes with an examination of the relationship between the sector's performance and market structures, drawing attention to the central importance of the quality of regulation in a public service such as telecommunications.

ISBN: 978-92-64-03826-4

Globalisation Actors: Old and New Multinationals

FDI flows to Latin America (Figure 3.1) increased dramatically throughout the 1990s, in conjunction with widespread privatisation in the region, from less than $10 billion in 1990 to a record $89 billion in 1999 (averaging $39 billion a year for the decade). Following a substantial fall in the early 2000s, the annual flow rose again in the middle of the decade to around $70 billion. Still, given the rapid growth of global FDI flows, which rose by 34 per cent in 2006 alone, Latin America's share of global FDI flows, at 8 per cent in 2006, remains well below the 14 per cent peak reached during the 1970s and again in 1997.

Figure 3.1. **Total FDI Inflows to Latin America and the Caribbean 1990-2005**
($ million, excluding main financial centres)



Source: UNCTAD, 2006.

StatLink http://dx.doi.org/10.1787/120880841263

Privatisation in Latin America was the avenue for a new wave of FDI inflows, but Latin American enterprises also play away from home.

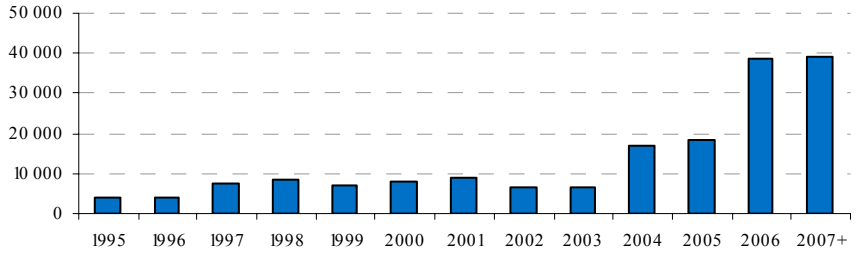
Key features of Latin America's latest inward FDI boom include: the importance of service sectors in attracting FDI; the enhanced role that European, especially Spanish, corporations have played as investors; and the importance of privatisation as a driver of FDI (IADB, 2004). These features are of course interlinked. Public utilities, notably telecommunications, are among the crucial privatised assets in the region, and privatised and deregulated services, including banking and telecommunications, are among the sectors in which Spanish corporations have invested most heavily in the region[3].

Latin American enterprises now also play away from home. The important news about FDI in Latin America concerns not only the size of inflows, but the fact that the region is becoming a major source of FDI (Figure 3.2). Outflows increased slowly through the 1990s, and have exploded since 2004. In 2006, Latin American enterprises invested more than $40 billion outside their home countries, both within and outside the region — and in 2007 they had almost matched that figure by mid-year thanks to a few large deals (notably including the $15.3 billion acquisition by Mexico's CEMEX of cement maker Rinker in June).

ISBN: 978-92-64-03826-4

Figure 3.2. **FDI Outflows from Latin America**

$ million, main Latin American economies excluding financial centres



Note: 2007+ is January to June, including recent deals.
Source: OECD Development Centre (2007); based on Economist Intelligence Unit (EIU) Thomson Datastream data.

StatLink http://dx.doi.org/10.1787/121161605644

This jump in the region's outward FDI since 2004 is driven by the increasing pace of internationalisation of a relatively small number of Latin American enterprises, notably in Brazil and Mexico. Brazilian enterprises invested $26 billion abroad in 2006, for example, as compared to $2.5 billion the previous year, and Mexican enterprises saw their outward FDI increase from about $4 billion in 2006 to nearly $19 billion in the period between January and June 2007 alone. Equally impressive is the fact that Brazil became a net outward investor in 2006, with FDI inflows of only $18 billion that year (ECLAC, 2007).

Some of Latin America's multilatinas, or Latin multinational corporations, are placed in top global rankings.

Forbes's list of the top 2000 global enterprises also reveals the coming of age of Latin American multinationals. Seventeen Mexican and 22 Brazilian multinationals were on that list as of March 2007, including for example CEMEX — the Mexican cement maker that is a pioneer in overseas expansion among emerging multinationals and now competes in the same league as France's Lafarge and Switzerland's Holcim (see Box 3.1) — and Brazil's minerals and metals producer Companhia Vale do Rio Doce (CVRD) — which currently tops international rankings in its sector together with the Anglo-Australian multinationals BHP Billiton and Rio Tinto (Forbes, 2007). In oil, Brazil's national champion Petrobras and Venezuela's national champion Petróleos de Venezuela, S.A. (PDVSA) have also gone international. In Argentina, three firms stand out — Techint (specialised in engineering, construction and procurement services), Arcor (a sweets manufacturer present in 117 countries in five continents) and Tenaris (a pipe-manufacturer present in Canada, Italy and Japan) — while in Chile, firms in the retail distribution sector are becoming increasingly active abroad.

ISBN: 978-92-64-03826-4

Box 3.1. **CEMEX, the Internationalisation of a Latin Leader**

CEMEX, which advertises itself as a global building-solutions company, has come to symbolise the growing success of the *multilatinas*, or Latin multinationals. Founded in 1906, it is the undisputed champion in the internationalisation of Mexican enterprises in terms of foreign assets. After securing a leading position in its domestic market, CEMEX's expansion abroad began in the early 1990s, first in Spain and then in several Latin American countries, followed by its incursion into South-east Asia.

Its initial strategy was to focus on high-growth markets, where it could leverage cultural affinities and the knowledge it had previously gained in Mexico. CEMEX had developed sophisticated management skills to overcome hyper-inflation and other challenging structural economic conditions, and it had pioneered an innovative use of then-emerging information and communication technologies, including equipping its ready-mix trucks with GPS systems, which enabled a spectacular reduction in delivery time, a critical competitive advantage in the cement business.

After nearly a decade of sustained growth, CEMEX sought to improve the balance of its global portfolio and achieve greater stability throughout different business cycles by expanding its presence in more mature markets, including the United States with its acquisition of Southdown in 2000, Europe with the acquisition of the former British company RMC in 2005 and, more recently, Australia with its successful $15.3 billion offering for the Rinker Group, which further strengthens CEMEX's positioning in the US market.

From the outset, CEMEX has followed a highly disciplined international acquisitions strategy, by setting strict criteria to ensure that each new company that it buys is able to benefit from its management expertise, that its financial structure remains healthy and that it is able to retain most of the incoming talent. In an increasingly competitive, multicultural global business environment, this has proven key for an enterprise that after 17 major international acquisitions is present in over 50 countries worldwide, from the Americas to Europe, the Middle East, Asia and now, Australia.

Another crucial aspect of CEMEX's international growth strategy has been its decision to focus on its core business, and to invest not only in cement assets, but across the whole cement value chain. Since the mid-1980s, a time when diversification was in vogue, CEMEX opted out from its participation in other industries, such as tourism and petrochemicals, to focus exclusively on cement and cement-related activities. This decision clearly brought good results for the company, as reflected in its current standing as the world's largest ready-mix concrete producer, third cement producer and one of the top aggregates suppliers.

Source: CEMEX.

Multilatinas invest across borders worldwide, and more particularly in Latin America.

Crucially important in making possible the expansion of emerging-market multinationals (including in Latin America), as well as in facilitating the rise in the number of mergers and acquisitions in the region, has been a dramatic fall in the cost of capital. Contributing to this fall have been both a rise in global liquidity and a fall in the emerging-market sovereign-risk premium; the latter, as measured by the Latin America Emerging Market Bond Index spread, reached a record low of 167 basis points in the first quarter of 2007. These favourable cost-of-capital conditions have provided avenues for expansion both for enterprises that did not previously have international operations — which can facilitate local borrowing in overseas markets — and for firms that were already internationalised and able to borrow abroad in local currency. Latin American enterprises have thus multiplied their acquisitions both in their home markets and abroad, with total

ISBN: 978-92-64-03826-4

acquisitions in Latin America by Latin American enterprises between 2000 and 2006 amounting to almost $110 billion. Of this amount, more than $23 billion were for international acquisitions within the region.

Table 3.1. **Ten Largest Non-financial Multinationals from Latin America**

Corporation	Home economy	Industry	Assets, end 2006 ($ million)		Sales, end 2006 ($ million)	
			Foreign	Total	Foreign	Total
CEMEX S.A.	Mexico	Construction	24 908	29 972	14 551	18 249
Vale do Rio Doce	Brazil	Mining	24 382	60 954	16 145	20 363
América Móvil	Mexico	Telecommunications	10 662	29 473	9 618	21 526
Telmex	Mexico	Telecommunications	10 625	44 532	4 362	16 115
Petrobras	Brazil	Petroleum expl./ref./distr.	9 953	98 680	23 160	93 893
Petróleos de Venezuela*	Venezuela	Petroleum expl./ref./distr.	8 868	55 355	25 551	46 589
Gerdau	Brazil	Metal and metal Products	4 926	12 595	6 474	10 940
FEMSA - Fomento Economico Mexicano	Mexico	Food and beverages	3 455	13 463	2 854	11 707
Gruma	Mexico	Food and beverages	1 486	2 784	1 937	2 823
Grupo Bimbo	Mexico	Food and beverages	1 386	3 851	1 892	5 859

Note: *Data for PDVSA (Petróleos de Venezuela) are from 2004.
Source: OECD Development Centre (2007), based on annual reports and UNCTAD (2006).
StatLink http://dx.doi.org/10.1787/122242507200

The corporate strategies underlying these internationalisation processes, as well as their scope, vary by sector. Primary-commodities producers, bolstered by high prices (see Chapter 4 in this volume), have expanded aggressively, seeking markets and reserves in the region and beyond. Intermediate-goods producers, as well as commodities producers with interests in downstream activities, such as PDVSA and CVRD, have expanded to seek greater efficiency in their external operations. In services and final goods, enterprises undertaking internationalisation have tended to become regional rather than global players.

In services, there has also been significant interaction between multinationals from within and from outside the region. A number of developed-country multinationals staked out significant territory in the region in conjunction with privatisation during the 1990s, putting pressure on local enterprises which were forced to cope with growing competition. In some countries, local laws and regulations nevertheless served to protect local enterprises, in some cases creating national champions. Other European and North American multinationals have withdrawn from the region, leaving space filled in some cases by the emergence of new *multilatinas*, or Latin multinationals. The purchase by the Mexican telecommunications firm América Móvil of the US firm Verizon's assets as the latter exited the region is an important case in point.

In retail distribution, where such large multinational groups as the United States' Wal-Mart or France's Carrefour have concentrated their investments in a few large markets, especially Mexico and Brazil, Chilean enterprises have moved to establish themselves as regional players in

ISBN: 978-92-64-03826-4

the remaining markets. The picture is more mixed in financial services, where local banks — such as Itaú of Brazil — are evolving to become regional players, but OECD-country multinationals remain major actors.

The telecommunications sector provides a particularly important example of the recent wave of developed-country multinational corporate investment in the region together with the rise of Latin American multinationals, and their interaction. We therefore turn to an in-depth analysis of that investment activity, and its implications for broader economic development, in the region.

Investment in Public Services: The Case of Telecommunications

Infrastructure plays a key role in economic development. By way of illustration, if the countries in Latin America with the largest gaps in infrastructure development — Bolivia, Guatemala, Honduras, Nicaragua and Peru — caught up with the regional leader, Costa Rica, their long-term growth performance is predicted to speed up by at least 5 percentage points and their income Gini coefficients (a common measure of income inequality) to drop by a significant 8 to 10 percentage points (Calderón and Servén, 2004).

A detailed analysis of the developments since the 1990s in the Latin American telecommunications market provides a revealing picture of these new economic developments – FDI flows, Latin multinationals, cross-border corporate activity – and their consequences.

Telecommunications are a particularly important part of a country's infrastructure. Not only do they open doors to new information and business opportunities, and shape how firms do business: they can also deeply affect economic and political life as a whole, because information and communications technology (ICT) influences the transmission of information for all kinds of purposes. ICT development has been shown to be associated with lower levels of corruption, for example, as well as with lower inequality (Bandyopadhyay, 2006)[4].

Like other key areas of infrastructure, the telecommunications sector requires substantial capital investment. Amongst developing regions, Latin America has been at the forefront in allowing private capital into its telecommunications industry. Following the path opened by Chile in 1987, other countries, including Jamaica (1989), Argentina (1990) and Mexico (1990), privatised their incumbent operators. These privatisations brought in substantial amounts of private capital — the privatisation of Brazil's Telebras system alone raised $34 billion in 1998, for example. In the majority of cases, privatisation was also an avenue for foreign capital to enter the industry. Of course, such has not always been the case, as in Mexico — where regulatory restrictions on FDI in the sector have prevented entry, and foreign participation remains limited to 49 per cent outside of mobile telephony — and in a few countries, notably Ecuador and Paraguay, which have failed to secure the interest of private investors[5].

With ICT greatly facilitating the internationalisation of firms and economies, companies that supply ICT services face significant potential gains from internationalising their activity. The very drive of telecommunications enterprises to become global players, accompanied in the last five years by a process of consolidation in the ICT industry, has in turn given rise to a battle for supremacy in the Latin American telecommunications industry.

ISBN: 978-92-64-03826-4

Privatisation, multinationals and FDI in telecommunications

Telecommunications is a domain where increasing internationalisation, but also consolidation, have taken place.

Between 1990 and 2003, FDI in the telecommunications sector in Latin America amounted to $109.8 billion, well above that in any other developing region; the lion's share (70 per cent) of this amount is the result of privatisation transactions (Guislain and Qiang, 2006). Despite a slowdown since the beginning of 2000s, FDI in the sector still amounted to $909 million in 2004 and $870 million in 2005[6]. But the objectives of FDI in the sector have changed. While consolidation has driven a series of corporate mergers and acquisitions, on the one hand, mobile telephony accounts for more than half of FDI in the sector since 2000, and the rise of mobile telephony has led to a growing share of greenfield investments, on the other.

Indeed, the telecommunications sector has witnessed increased internationalisation and consolidation worldwide since the early 1990s, and Latin America is no exception to the rule. A number of foreign investors, including Spain's Telefónica, entered Latin America with the privatisations of the landline incumbents during the 1990s. Despite difficult financing conditions after the burst of the dot-com bubble in 2000 and the large expenses incurred in purchasing third-generation licenses and devaluations in Brazil and Argentina, the rise in demand from 1995 to 2005 for telecommunications services, especially mobile telecommunications, kept private enterprises in the game. At the same time, the region witnessed a gradual process of consolidation, led by Telefónica in 2000 and followed by the growth of América Móvil — a Telmex spin-off operating in the mobile segment — from 2002 to 2005. Reinforcing this trend, Telmex, the privatised Mexican landline incumbent, invested $4 750 million between 2003 and 2005 to compete with Telefónica in the landline and data-transmission markets.

Table 3.2. **Main Telecommunications Operators in Latin America (March 2007)**
in thousands of serviced lines

	Telefónica	America Móvil	Telmex	Telecom Italia	Millicom
Landlines	23 810	2 913	20 374	5 173	--
Mobile customers*	85 637	122 434	--	38 656	10 438
-- of which					
Mexico	9 320	44 946	18 284	0	0
Central America	**4 042**	**9 231**	**0**	**0**	**5 917**
Brazil	41 064	24 608	2 068	26 300	0
Argentina	16 441	10 927	n/a	13 426	0
South America	**96 085**	**71 170**	n/a	**56 109**	**4 521**
Total	**109 447**	**125 347**	**20 374+**	**43 829**	**10 438**

Notes:
* including fixed mobile
n/a = not available
-- = no operations
+ = total of available data.
Source: OECD Development Centre (2007); based on enterprise reports for first quarter 2007, complemented by regulator websites.

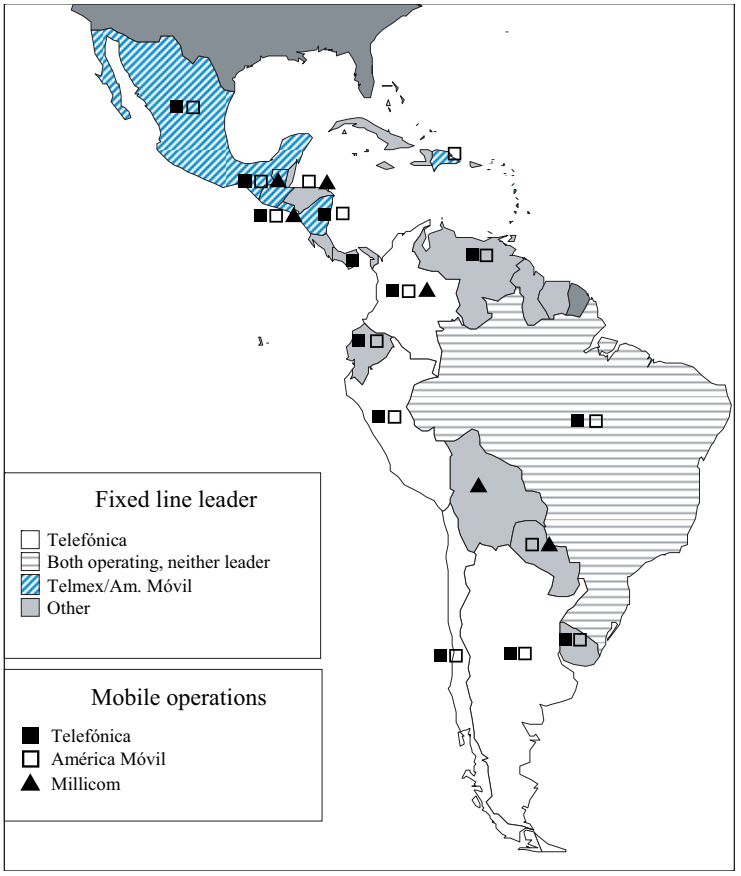
StatLink http://dx.doi.org/10.1787/122324282834

ISBN: 978-92-64-03826-4

Latin sisters? The internationalisation of Telefónica, Telmex and América Móvil

Telefónica and Telmex — together with América Móvil, Telmex's mobile-telephony spin-off — compete for supremacy in the telecommunications sector in nearly all of Latin America (see Figure 3.3). Brazil and Central America are exceptions, in that Telecom Italia, Deutsche Telekom and France Telecom are also important players in the former, and a third player, Millicom[7], is strongly present in the latter.

Figure 3.3. **Latin America, Main Telecommunications Operators**



Source: OECD Development Centre (2007); based on operators' annual reports and regulator web sites data.

StatLink http://dx.doi.org/10.1787/121177354711

The processes by which the two leading multinationals, one from each side of the Atlantic, have come to dominate telecommunications in Latin America exhibit important similarities. Both firms were built into national champions when they were privatised under the shadow of increasing international competition, and both successfully internationalised to fend off that competition when their home markets were opened to foreign enterprises. Since most countries regulate most branches of the telecommunications sector, the firms' ability to deal

with public authorities and the telecommunications regulator in different countries is key to understanding their successful internationalisation. Indeed, while operators in regulated industries, like most other investors, prefer to operate in politically stable countries, they are more likely than many other investors to enter countries where government has discretionary power and can, for instance, alter regulations or grant licences (García-Canal and Guillén, 2005).

In the early 1990s, when the first wave of privatisation and liberalisation started in Latin America, two strategies were available to new entrants in the sector. One was to enter less-regulated segments — typically business and data-transfer services, and to a lesser degree mobile telephony — in order to avoid the pressures and costs associated with regulation. Another strategy was to bid for the incumbent operator to benefit from the existing infrastructure and often monopoly power in the local distribution loop. Telefónica was amongst the firms that opted for acquiring the incumbent, taking advantage of its knowledge of regulated markets and its ability to exploit existing infrastructure and inherited market position. In Mexico, Telmex, when privatised, developed a similar strategy, albeit initially within its own borders.

Both multinationals' strategy of acquiring the incumbent in their overseas investments originated in their home country's decision to create a national telecommunications champion. Spain and Mexico, when privatising their state telecommunications monopolies, created the conditions for the newly privatised companies, Telefónica and Telmex, to become such champions. Argentina, Chile and Brazil, for example, purposefully forwent that possibility. But it was a clearly stated strategy in both Spain and Mexico. Indeed, in privatising Telmex, Mexico required bidding consortia to have a Mexican majority. Nor was creating a national champion without costs: in 1996, Telefónica's bid in the privatisation of the Panamanian incumbent, INTEL, was rejected because the Spanish administration still owned a controlling stake in the company[8].

Both Telefónica and Telmex emerged as national champions from privatisation processes, competing for regional supremacy, with many similarities but very different corporate cultures.

Both Telmex and Telefónica thus relied on safe domestic markets to launch their international expansion. The Spanish landline market was liberalised in 1996, after Telefónica had been prepared for competition by gradually rebalancing user tariffs during the first half of the decade while maintaining a pricing policy that was favourable to the former public operator. In Mexico, the market was formally liberalised in 1995, five years after the privatisation of Telmex, but licenses for local service were not granted until 1998. Even today, moreover, market conditions, over which a weak regulator (COFETEL) has little control, contribute to Mexico's continued high prices for telecommunications services — notwithstanding substantial falls in the price of telephony in recent years — compared with those of other OECD countries, especially for small and medium enterprises (OECD, 2004, 2005, 2007).

Other countries in the region, as noted earlier, preferred to spur competition in the industry from the start of privatisation, counting on competition amongst world-class operators to modernise the sector. Brazil's choice of establishing a competitive market by licensing regional duopolies has also contributed — especially because Brazil is the region's biggest market — to spurring the expansion of both América Móvil and Telefónica in the region as a whole, and made Brazil the frontline in the battle for regional supremacy.

ISBN: 978-92-64-03826-4

With a strong foothold in their home markets, both Telmex and Telefónica looked abroad to expand their customer base. In an industry whose services are essentially not tradable across borders due to regulation, and where brand recognition plays an important role and technological edge can be decisive, the leading competitors' search for customers leads them to pursue market-seeking "multi-domestic" multinational investment strategies.

Despite the advantage of their relatively safe home markets, however, neither Telefónica nor América Móvil initially took up the regional battle alone. Both began their foreign acquisitions with other partners. Telefónica initially bid for privatised firms (TeleSP, Telefónica Argentina, and Telefónica Perú) in consortia, and in 2000 América Móvil set up a joint venture with Bell Canada and SBC to form Telecom Américas. But by 2000, Telefónica had bought off its partners through 11 simultaneous takeover bids in what came to be known as "*Operación Verónica*". And in 2002, América Móvil bought out its partners in Telecom Américas in order to restructure the corporation. América Móvil's positive experience was also instrumental in Telmex's February 2004 decision to purchase AT&T's assets in the region, which gave it presence in the largest markets (Argentina, Brazil, Chile, Colombia and Peru).

Both multinationals have thus relied on their knowledge of regulated economies, on safe home markets, at least initially, and on their knowledge of the region. However, the two competitors differ in terms of structure, which gives rise to important differences in their strategies. Telefónica, while still under the control of the Spanish administration, began its internationalisation in conjunction with the opening of the European market, which limited the strategic viability of a monopolistic organisation. Telmex's internationalisation, in contrast, started eight years after its privatisation, when the home market had been substantially strengthened.

Telmex's and América Movil's internationalisation was also less gradual than Telefónica's, due both to strategy and to circumstance. It started in 1999, coinciding with the Argentine crisis and a time of difficulty for the international telecommunications sector, when a number of operators were seeking to sell their non-strategic Latin American assets. Telmex and América Móvil have also gone into markets that are geographically and culturally close to their Mexican home economy, and have shown an ability to acquire key assets at very reasonable prices: Telmex took control of Embratel (then a Brazilian long-distance carrier) in 2004 by buying, for $400 million, the shares owned by MCI, for which the latter had paid $2.3 billion at the time of privatisation in 1998 — and then spent a further $271 million in subsequent years to achieve control over 90 per cent of voting shares. América Móvil's and Telmex's quick internationalisation also reflects their reaction to Telefónica's increased presence in the region, and the potential threat it constituted in their home market (Graham, 1998). In the five years to 2004, América Móvil and Telmex thus became large regional players[9].

Telefónica and its Mexican competitors also differ somewhat in their treatment of mobile telecommunications. Whereas Telefónica now manages its mobile business as an integral part of the company[10], América Móvil (then Telcel) was spun off from Telmex in 2001. Although

ISBN: 978-92-64-03826-4

Telmex and América Móvil have common ownership, América Móvil was made operationally separate, due in part to regulatory concerns, and in part as a means of separating the higher risk involved in the international expansion of mobile operations. The two enterprises then followed different strategies, with América Móvil betting strongly on internationalisation, especially in mobile telephony — but also purchasing landline assets in Central America — and Telmex originally focusing on its domestic market.

The Spanish and Mexican multinationals' different strategies also reflect substantially different corporate cultures (Mariscal and Rivera, 2005). Telefónica has major institutional investors (including Banco Bilbao Vizcaya Argentaria – BBVA, La Caixa, Chase Manhattan, State Street Bank&Co and Citibank) and focuses on telecommunications. In contrast Carso Global Telecom, which controls both Telmex and América Móvil, is part of a family-owned holding company that has businesses in many other sectors as well — including retail distribution, financial services, etc. These differences have a great impact on the corporations' strategies: a flatter hierarchical structure and greater liquidity have allowed the Mexican corporations to be agile and aggressive in their acquisitions, while Telefónica's long history as a telecommunications leader has given it specific knowledge advantages over time. Its mastery of both analogue and digital technology gave it an edge over its US competitors in the privatisations of the 1990s, and technology has consistently been an important competitive asset. For example, ADSL service was launched in São Paulo by TeleSP (part of the Telefónica group) in 1999, even before it was launched in some European countries (Blanco Bermúdez, 2002).

Performance of the Telecommunications Sector in Latin America

Although telecommunications services and coverage have indisputably and dramatically improved, the poorer segments of the populations are still left out of the picture.

Latin Americans do not have a positive perception of the privatisation of public utilities in their region. According to 2005 survey data (Latinobarómetro, 2005), only one-third of the region's population is satisfied with it. These opinion data nevertheless refer to the privatisation of water and electricity, where the entry of foreign private capital has often been more controversial, as well as to telecommunications, where privatisation and liberalisation were widely preceded or accompanied by a rebalancing of user tariffs. Whereas previously, very costly long-distance calls often "paid for" extremely low-cost local calls and the sector's infrastructure, operators moved to eliminate this cross-subsidisation, thereby raising the cost of telephone services for those who make less use of international services, and hurting the poorer segments of the population.

Good aggregate performance

The performance of Latin America's telecommunications sector has nevertheless been exemplary since privatisation started in the late 1980s in terms of increased aggregate availability and quality of services. The

ISBN: 978-92-64-03826-4

most commonly used aggregate indicator of progress in telecommunications is telephone density (or teledensity) in terms of lines per 100 inhabitants. Given the substitutability of landlines and mobile lines for voice communications (OECD, 2007), the sum of the two is taken as a measure of access to private telephone lines. Telephone density is a useful indicator of the connectivity gap across countries (though only a very rough indicator of equality of access within countries, other than in countries that are close to universal service). Table 3.3 presents the evolution of telephone density for the countries in the region since 1990. On average, the region has gone from single-digit density to serving the majority of the population in 15 years, catching up and surpassing the world average.

Table 3.3. **Telephone Density in Latin America**
telephone lines (mobile and fixed lines) per 100 inhabitants

	1990	...	1995	...	2000	...	2005
Argentina	9		17		39		82
Bolivia	3		3		13		33
Brazil	6		9		31		68
Chile	7		14		44		90
Colombia	7		11		22		65
Costa Rica	10		15		29		58
Cuba	3		3		4		9
Dominican Rep.	5		8		20		51
Ecuador	5		7		13		60
El Salvador	2		5		22		49
Guatemala	2		3		13		46
Honduras	2		3		7		25
Mexico	7		10		27		62
Nicaragua	1		2		5		23
Panama	9		12		30		56
Paraguay	3		4		20		36
Peru	3		5		12		28
Uruguay	14		21		42		66
Venezuela	8		13		33		60
Latin America and Caribbean	6		10		27		61
OECD Average	40		52		97		127
World Average	10		14		28		54

Source OECD Development Centre (2007); based on International Telecommunications Union (ITU) (2006) data.

StatLink http://dx.doi.org/10.1787/122347020144

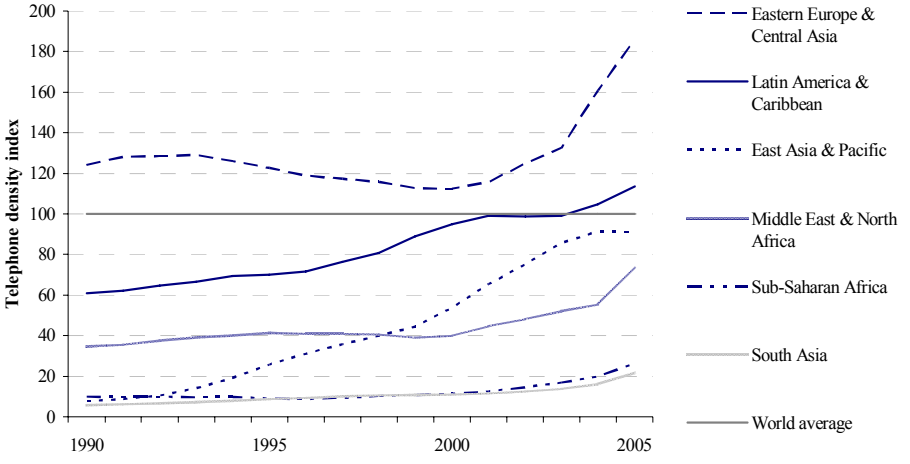
ISBN: 978-92-64-03826-4

The performance is also good relative to other regions. Figure 3.4 shows that in terms of telephone density, while Latin America remains in third position — after the industrialised countries (not shown in the figure, much above all other regions) and Eastern Europe and Central Asia — in 1990 it was lagging well behind the world average, and caught up in 2001. The catching-up pattern depicted in Figure 3.4 also shows two stages: a first phase in the late 1990s, when catching up in telephone density accelerated, and a second since 2003, when density has increased more quickly in Latin America than the world average.

The positive aggregate performance of Latin America's telecommunications sector still masks wide disparities within the region.

Latin America's aggregate success in catching up with the world average in telephone density hides a diverse picture amongst countries in the region. Chile and Argentina are far ahead, with 90 and 82 telephone lines per 100 inhabitants, respectively. On the other hand, two countries, Haiti and Cuba, have yet to experience take-off in telephone access and uptake, while the poorest Central American and Andean countries have only recently started their catching-up phase: in Ecuador, for instance, annual growth in teledensity accelerated from around 30 per cent in the early 2000s to 53 per cent in 2005.

Figure 3.4. **Telephone Density in Developing Regions**
world average = 100, population weighted



Source: OECD Development Centre (2007); based on ITU (2006) and World Bank (2006) data.
StatLink http://dx.doi.org/10.1787/121203470338

Increased telephone service coverage is linked to income growth, but this is a complex and evolving relationship.

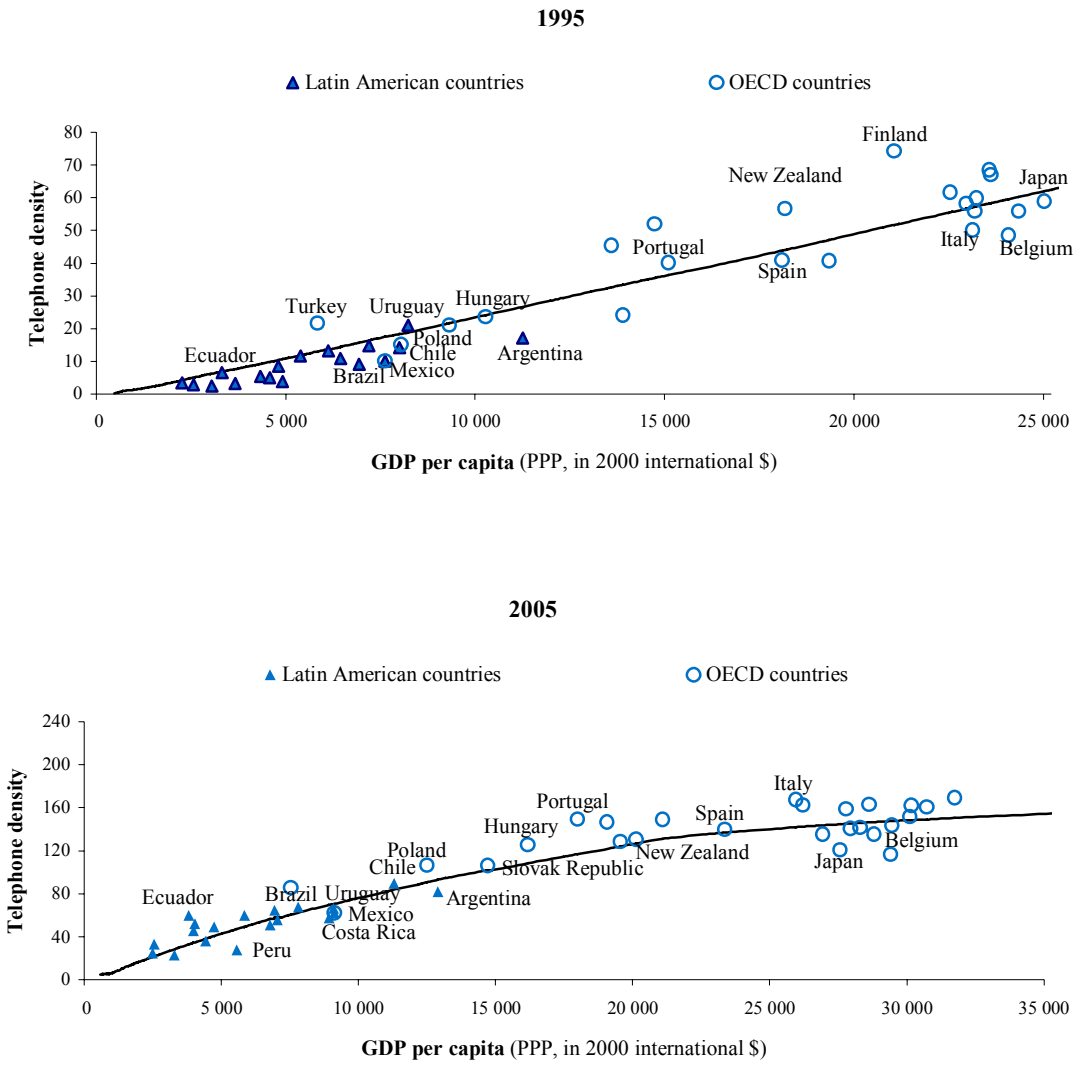
The difference in performance across countries is related to differences in aggregate economic performance: as much as 80 per cent of the variation in telephone density across countries can be attributed to variation in GDP per capita. This statistical correlation does not mean that the connectivity gap across countries will necessarily be closed by convergence in per capita income levels, however, or that such convergence is necessary to close the connectivity gap. Indeed, the relationship across countries between telephone-service density and GDP per capita has substantially evolved over time, as more developed markets have reached saturation levels and middle-income countries have extended service more quickly than would have been predicted by income

ISBN: 978-92-64-03826-4

growth alone (Figure 3.5). While this relationship between teledensity and per capita income was essentially linear until 1995, by 2005, that linearity had disappeared — a disappearance that is consistent, among other interpretations, with threshold effects in network extension. The relationship between income levels and teledensity has limits, in other words, both in terms of its causal interpretation, and in terms of the degree to which it can be used to infer policy recommendations.

Figure 3.5. **Income Per Capita and Telephone Density: An Evolving Relationship**

GDP per capita (PPP, in constant 2000 $) and telephone density (lines per 100 inhabitants)

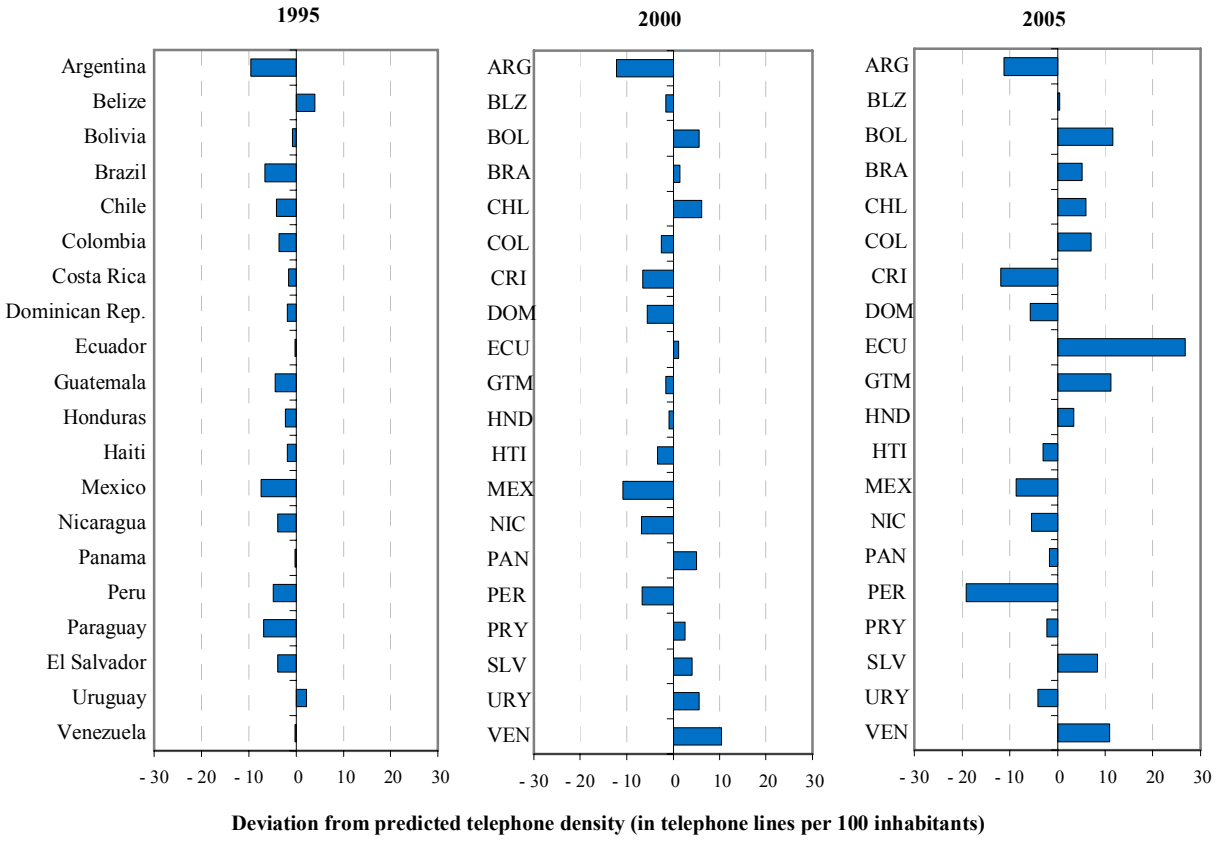


Note: The solid line is a non-parametric smoother based on data from all available countries at each date.
Source: OECD Development Centre (2007); based on ITU (2006) and World Bank (2006) data.
StatLink http://dx.doi.org/10.1787/121206003060

Figure 3.6 attempts to account for both the effect of GDP per capita and the evolution of the changing relationship between per capita income and telephone density. Country-level results are presented for 1995, 2000 and 2005, with each graph showing the deviation of each country's actual telephone density from the value predicted by the country's GDP per capita. Negative figures mean that a country is below the teledensity expected from its level of income, positive figures mean that the country's teledensity is above the expected level[11].

Figure 3.6. **Telephone Density and Per Capita GDP (1995, 2000 and 2005)**

Deviations from non-parametric prediction of telephone penetration based on GDP



Note: Data for Haiti, 2005, are actually from 2004.
Source: OECD Development Centre (2007); based on ITU (2006) and World Bank (2006) data.

StatLink http://dx.doi.org/10.1787/121227805614

ISBN: 978-92-64-03826-4

In 1995, almost every country in the region exhibited a substantial lag in density of telephone services relative to the level that its per capita income would predict. The only exceptions were Belize, one of the pioneers in the privatisation process, and Uruguay, which maintained the incumbent public operator; other early privatisers, including Argentina, Guyana, Mexico and Venezuela, had not yet achieved significantly better results. Five years later the picture was brighter. Chile, one of the first countries to liberalise the market, had more than caught up with the level of connectivity predicted by its level of income, and Brazil had also reduced the difference between actual and predicted connectivity. In both countries, foreign operators played a leading role.

There are wide disparities across Latin America in performance as well as in the commitment and results of telecommunications market reforms.

Yet the latest data available (2005) still present a mixed picture for the region. While several countries that privatised their incumbent telephone provider perform well, even when accounting for the rise in income levels (Brazil, Chile, El Salvador and Guatemala all exhibit more connectivity than expected), others, including Argentina, Mexico and Nicaragua, which have also privatised their incumbent operator, are behind their expected levels of connectivity. The remarkable case of Ecuador, which is clearly outperforming its peers both within and beyond the region, came about through a doubling of mobile subscribers in 2005 — probably the result of intense competition between the two major players, Telefónica's Movistar and América Móvil's Porta, spurred by the entry in 2003 and rapid expansion in coverage of a third mobile operator, Alegro.

Figure 3.6 also shows that privatisation is neither sufficient nor necessary for good performance in terms of teledensity relative to income level. Both Uruguay and Costa Rica, which have maintained public incumbents, have recently fallen behind their predicted levels of connectivity, but they have managed to sustain adequate progression in absolute terms.

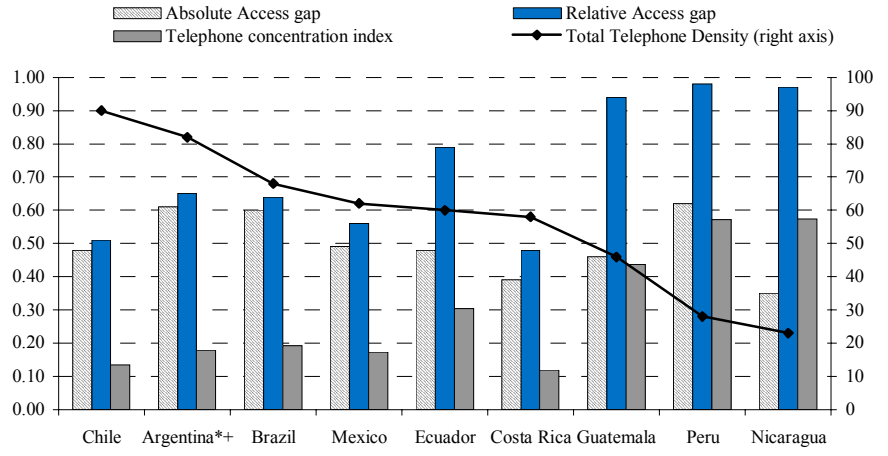
Inequality remains a problem

Despite good aggregate performance, the degree to which the poor have benefited from the region's increased access to telecommunications varies greatly across countries. Figure 3.7 displays both the gap in rates of access to telephone services between the highest and lowest income quintiles (the absolute access gap), and the size of this gap relative to the proportion of individuals with telephone services in the highest income quintile (the relative gap)[12]. Table 3.A3 in the statistical annex to this chapter gives these inequality indicators for all countries in the region for which they are available. Very high relative access gaps, such as those found in Bolivia, Guatemala, Haiti, Nicaragua and Peru, reflect very low telephone connectivity amongst the poor in those countries. While both the relative and the absolute gaps therefore depend on the total level of connectivity, substantial differences exist across countries with comparable average levels of connectivity: for example, in the six countries that have telephone densities between 57 and 65, the relative access gap ranges from 0.48 (Costa Rica) to 0.79 (Colombia and Ecuador).

ISBN: 978-92-64-03826-4

Figure 3.7. **Access Gap in Telephony for Selected Latin American Countries**

latest data available



Note: + Urban areas only.
Source: OECD Development Centre (2007); based on SEDLAC (2007) data except *, based on IADB (2007) data.

StatLink http://dx.doi.org/10.1787/121265414215

Figure 3.7 also displays the telephone concentration index. While both the absolute and the relative access gaps measure the differences in access between the highest and lowest income quintiles, the telephone concentration index also reflects the rates of access to telephone service in intermediate income quintiles[13]. As in the case of the two access-gap measures, a higher telephone concentration index corresponds to higher inequality in access. Importantly, the data in Figure 3.7 reveal an inverse correlation between the concentration index and total density, which suggests that as telephone density increases, households in the poor (but not the poorest) segments of a country's population gain access.

Coverage of telephony services and access to them, though varying across countries and still beyond the reach of significant segments of the poorer populations, has made spectacular progress.

These measures of telephone access inequality rely on household data and are based on telephone-line *ownership*, rather than access strictly speaking. While it can be argued that having access to one's own telephone line is a qualitative improvement over public access, the main avenue for the poor to gain access to telephone and other information technology services is often through public pay-phones or communal-access telecentres. Data on the density of public pay-phone networks (table 3.A3) show significant differences even within the group of countries with the most unequal access. Thus, while Peru and Nicaragua exhibit similar relative access gaps, of close to 1 (Figure 3.7), Peru boasts 5.42 pay-phones for every 1 000 inhabitants to Nicaragua's mere 1.27, and Bolivia's 1.75[14].

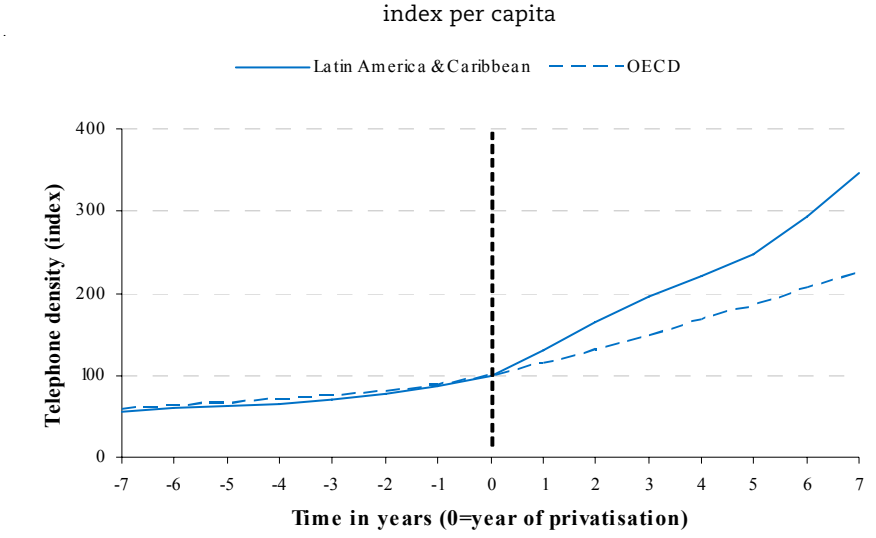
Although access gaps are generally high, relative access gaps exhibit a decreasing trend in almost every country for which a long enough data series exists. Brazil provides an important illustration: until 1997, the country's relative access gap was higher than 0.9 — similar to those found in the most unequal countries in Latin America today — but by 2004 it had fallen significantly, to 0.6, thanks to an increase in the access rate of the poorest quintile from five telephones per 100 persons to more than 30.

ISBN: 978-92-64-03826-4

Privatisation and performance in telecommunications

The good aggregate connectivity performance of the telecommunications sector in Latin America has often been attributed to the successful privatisation of incumbent operators (IADB, 2001). Figure 3.8 shows that indeed, on average, the rate of growth of connectivity per capita increased substantially, from 10 to 25 per cent per year, after privatisation. While these data may be interpreted as suggesting that privatisation played a key role in enhancing performance as measured by telephone density, such an interpretation is subject to important caveats. In addition to those noted earlier, it is important to recall that the 1990s saw the implementation of a series of reforms that accompanied privatisation: in some cases, as for example in Brazil, telecommunications markets were liberalised immediately after privatisation of the incumbent. Moreover, as the trends shown in Figure 3.8 reveal, a second break has tended to occur in the upward trend of teledensity around year 5 after privatisation, probably due to the end of exclusivity periods and the subsequent opening of the market. Indeed, exclusivity periods have been shown to limit the benefits of privatisation substantially in terms of network extension (Wallsten, 2003).

Figure 3.8. **Telephone Lines and Privatisation**



Note: Time 0 is the year of privatisation of the incumbent operator; the scale of telephone density is normalised to be 100 at the time of privatisation. The plot is the average of data for countries in which privatisation had occurred at least seven years previously and which had available data for the post-privatisation period (Argentina, Belize, Bolivia, Brazil, Chile, El Salvador, Guatemala, Guyana, Mexico, Panama, Peru and Venezuela).
Source: OECD Development Centre (2007); based on ITU (2006) data.

StatLink http://dx.doi.org/10.1787/121266340824

Two further developments that have had a major impact on the industry worldwide, including Latin America, are the reduction in costs and rapid spread of mobile telecommunications, and the previously described progressive consolidation in the sector.

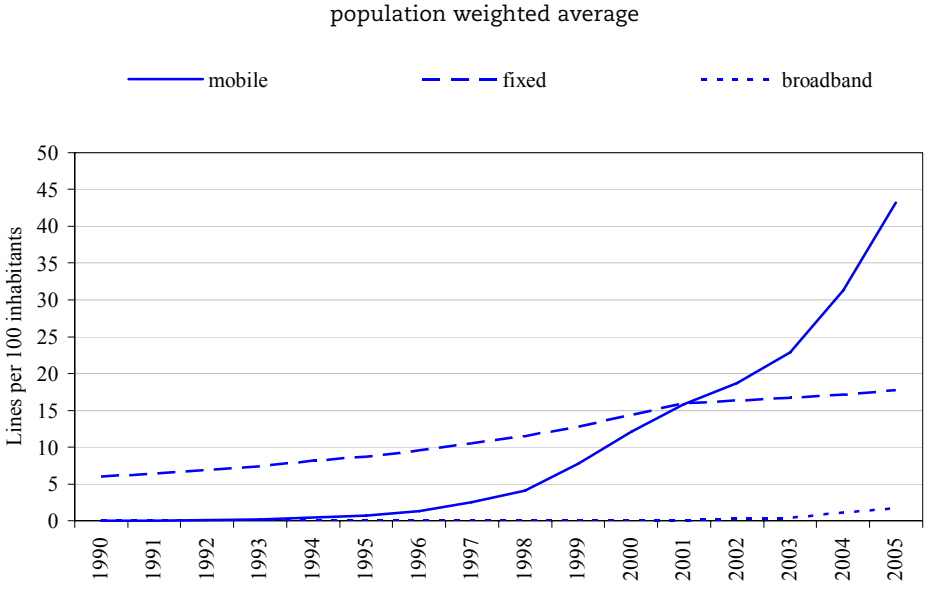
The mobile factor: technology and performance

Privatisation and technological progress have played important roles in the success of telecommunications in Latin America.

Technology and innovation have played a major role in the success story of spreading telephony in Latin America. Figure 3.9 shows the respective contributions of land and mobile telephony to the growth of teledensity in the region. While landlines have become steadily more available, the great advances since the late 1990s correspond to rapid increases in mobile telephony[15].

The rising importance of mobile communications, and the segmentation of land and mobile telephony that telecommunications markets have witnessed as a consequence, make assessments of the performance of telecommunications policies more difficult. Indeed, mobile communications have typically been less stringently regulated and led to more competitive markets than landline communications. This difference reflects two factors: the lower initial investment necessary in mobile telephony, which reduces entry costs, and the absence of established public monopolistic providers.

Figure 3.9. **Mobile, Landline and Broadband Penetration, Latin America**



Source: OECD Development Centre (2007); based on ITU (2006) data.

StatLink http://dx.doi.org/10.1787/121327185628

The interaction between the diffusion of mobile technology and the consolidation process in the sector is one of the main determinants of the competitive structure of the sector. The spread of mobile communications was accompanied by a number of new entrants into the sub-sector and a segmentation of the market. Moreover, the absence of an incumbent in most cases was a unique opportunity to create competitive markets from the start. Yet subsequent technological advances have tended, on the contrary, to blur the lines between landline, mobile and data transmission services, thereby reinforcing a process of consolidation and giving rise to fierce oligopolistic competition amongst a reduced number of actors.

ISBN: 978-92-64-03826-4

The role of multinationals

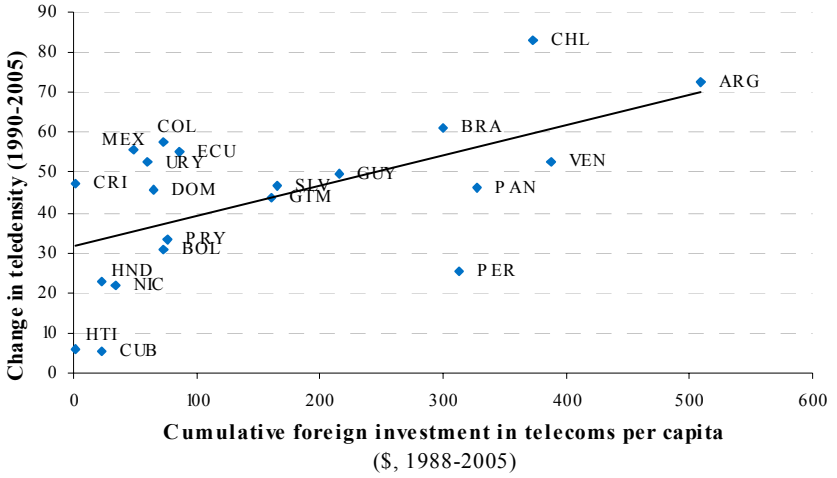
The superior overall performance of the telecommunications market – including sharply increased coverage – is due amongst others to resolute market-seeking strategies.

The entry and expansion of multinational firms in the telecommunications sector in Latin America has been driven by multinational firms' market-seeking strategies observable not only in their cross-border activity, but also within countries, as competitors strive to acquire customers beyond the affluent classes. Indeed, providers, and especially mobile providers, spend substantial resources to acquire new customers. To attract customers, mobile-telephony enterprises have even shown themselves willing to bear a substantial part of the cost of new telephones, to make the acquisition of a telephone very attractive to new customers — essentially subsidising the price of terminals for customers. The average enterprise subsidy for the purchase of a mobile telephone is four times the average monthly revenue per customer in Ecuador, Peru and Colombia, for example, and six times the average revenue in Argentina and Brazil — meaning that the cost of the telephones is only recovered, on average, four and six months, respectively, after customer acquisition (Fundación Telefónica, 2007).

Such market-seeking multinational corporate behaviour explains the positive correlation visible in Figure 3.10 between the level of FDI in a country's telecommunications sector and the change in the country's telephone density between 1990 and 2005. While the FDI data in Figure 3.10 are limited in terms of coverage and comprehensiveness, alternative data sources provide a similar aggregate picture[16].

Figure 3.10. **FDI in Telecommunications and Telephone Density (1990-2005)**

Cumulative investment in telecoms per capita versus change in telephone density



Source: OECD Development Centre (2007); based on ITU (2006) data, World Bank PPI database and World Bank (2007) data.

StatLink http://dx.doi.org/10.1787/120881745684

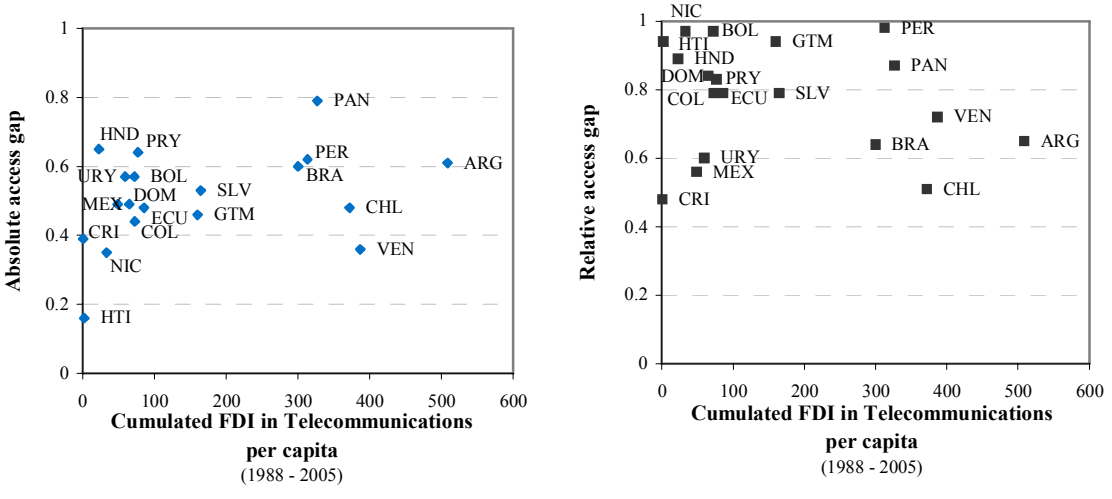
ISBN: 978-92-64-03826-4

The level of FDI inflows to the sector is only weakly associated, however, with lower inequality in access. While the impressive development of the mobile-telecommunications market has substantially lowered the cost of serving voice-telephony customers, market-seeking FDI has not yet brought private telephone service to the poorest segments of the population. Figure 3.11 thus shows a weak positive correlation between the *absolute* access gap and our measure of FDI in the sector; it also shows a weak negative correlation between the *relative* access gap and FDI in the sector. Since improvements in the *absolute* access gap require that more people in the poorest quintile gain access to service than in the highest quintile, whereas improvements in the *relative* access gap only require that *proportionally* more poor people gain access than people in the highest income quintile, these data suggest that foreign entry has first addressed the needs of higher-income customers, only later turning to the less well-off.

Still, the increased connectivity rate displayed by countries in which the telecommunications sector has received substantial FDI has benefited the population as a whole, if not the lowest income groups. Figure 3.12 plots FDI in the sector against a measure of the concentration of telephone ownership across income groups that puts less weight on the lowest income group. Increased access by the less poor and the middle class tends to lower the concentration index, which can still be interpreted as signalling lower inequality in access. Again, the size of foreign investment inflows is weakly associated with lower inequality in access. While one cannot determine causality from this exercise, a probable explanation of the relationship is the attractiveness, for foreign capital in the sector, of markets with sizeable middle classes.

Figure 3.11. **Foreign Direct Investment and the Access Gap**

FDI in $ per inhabitant, absolute and relative access gaps as in text



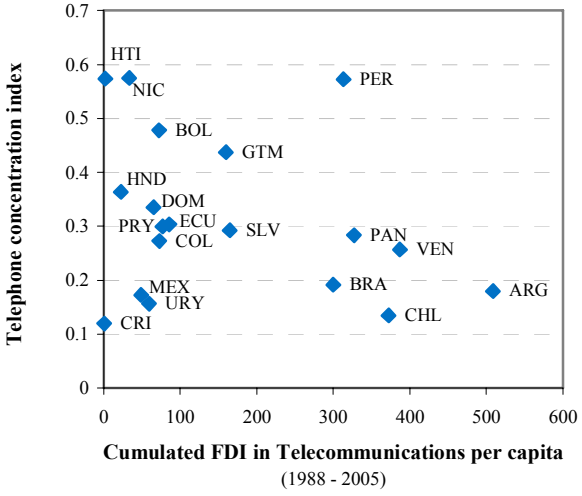
Source: OECD Development Centre (2007); based on SEDLAC (2007) data and World Bank PPI database (2007).

StatLink http://dx.doi.org/10.1787/121010414241

ISBN: 978-92-64-03826-4

Figure 3.12. **Telephone Concentration and FDI in Telecommunications (1990-2005)**

Index of telephone concentration (latest available) versus cumulated FDI in telecommunications (in $)



Source: OECD Development Centre (2007); based on SEDLAC (2007) data and World Bank PPI database (2007).

StatLink http://dx.doi.org/10.1787/121070463061

Consolidation, competition and market structure

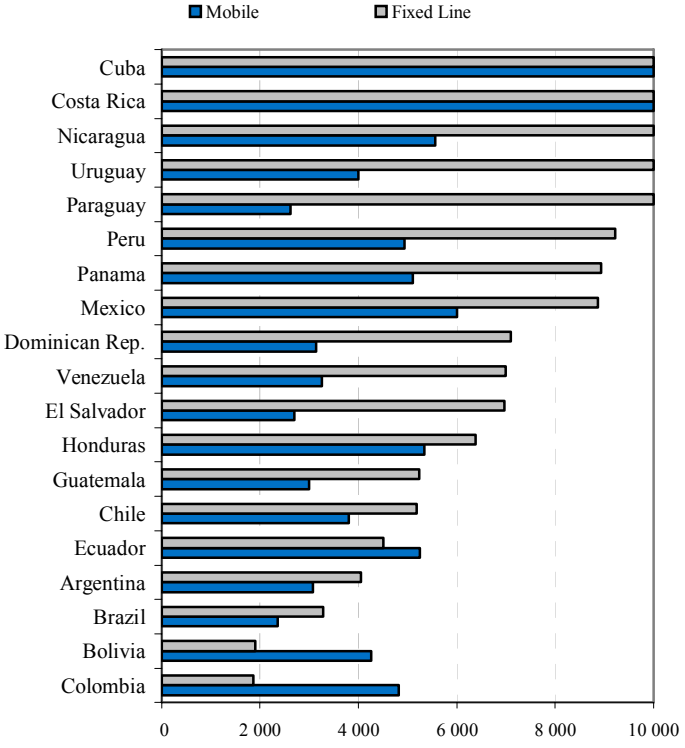
Another consequence of multinational corporate activity in telecommunications has been consolidation into a quasi-duopolistic market, raising concerns about its effects on competition and equitable access.

The consolidation process in the industry has raised concerns of an evolution towards an increasingly duopolistic market. This process notably accelerated in 2004, with Telefónica's acquisition of Bell South's Latin American mobile operations, on the one hand, and Telmex's purchase of AT&T's operations in Argentina, Chile, Colombia and Peru on the other. But the land and mobile segments of the market remain quite different, in terms of their competitive structures, and there is also wide dispersion across countries, as indicated by the Herfindahl-Hirschman Index (HHI) values presented in Figure 3.13. Mobile-telephony markets tend to be less concentrated than landline markets (an observation that is only reinforced by the fact that the low values of the HHI for Colombia and Bolivia hide substantial local market power in the hands of local telephone co-operatives in those countries). Significantly, Brazil and Argentina, which have received large inflows of FDI and are the main battlegrounds for supremacy, exhibit HHI values consistent with effective competition. But it also true that amongst the major markets, Mexico displays very high concentration indexes — well above those of Brazil, Argentina, Colombia and Chile — and that the HHI tends to underestimate market power, especially when competition takes place at the sub-national level[17].

ISBN: 978-92-64-03826-4

Figure 3.13. **Supply Concentration in Telephony (at end 2005)**

Herfindahl-Hirschman Index, by segment



Note: The Herfindahl-Hirschman concentration index is constructed as the sum of market shares in each segment expressed in percentages: 0 corresponds to an atomistic market, 10 000 to a monopoly.

Source: OECD Development Centre (2007); based on regulators' and operators' annual reports data.

StatLink http://dx.doi.org/10.1787/121081401370

The relationships between supplier concentration and the sector's performance, both in terms of density of coverage and in terms of equality of access, are fairly weak. Figure 3.14 presents the relationships in each segment — mobile and landline — between supplier concentration on the one hand and performance outcomes in terms of density and total inequality (access indicators are not available by segment) on the other.

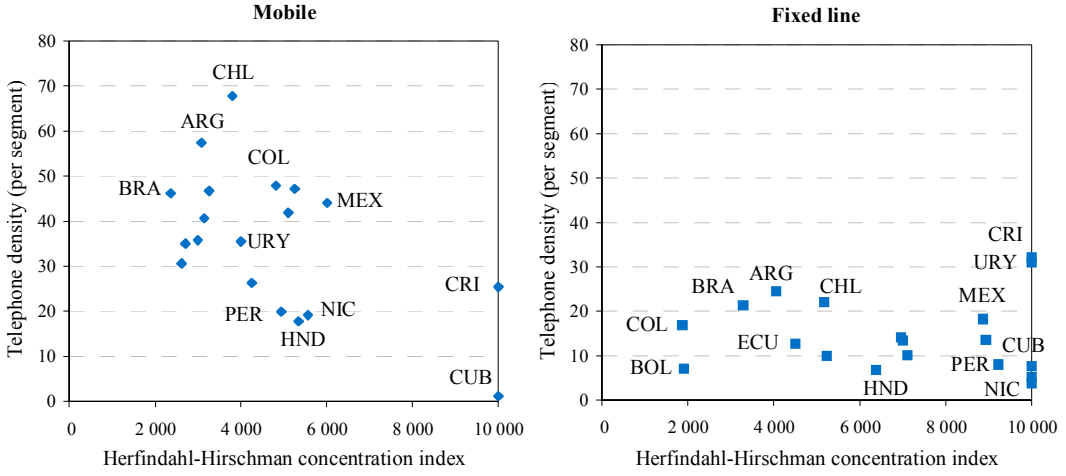
In the mobile segment, which is much more important than the landline segment for almost all countries, there is a weak negative correlation between telephone density and market concentration (Panel A). The best performers in terms of total density (Chile, Argentina, Brazil) all exhibit fairly low supplier concentration. On the other end, the Costa Rican monopoly clearly stands out as having missed the great expansion of mobile telephony witnessed in the region since the mid-1990s, despite having achieved the highest density of landlines and the most equitable access in the region. Other relatively weak performers in mobile density include Peru, Honduras and Nicaragua, all of which have, in contrast to the previous group, very concentrated landline markets. These patterns suggest that dominant positions in the landline market may be hampering entry into the mobile market, while within the landline segment, supply concentration and teledensity are not strongly associated.

ISBN: 978-92-64-03826-4

Panel B presents the relationship between inequality in telephone access and supply concentration. Once the particularities of the Colombian and Bolivian markets are taken into account (supply in both these markets appears fairly dispersed, but local suppliers have significant local-market shares) lower concentration in the supply of land telephony is associated with more equal access (in Brazil, Argentina and Chile). The sector's performance in terms of equality when the landline incumbent remains a monopoly ranges from the lowest inequality (in the state-monopoly cases of Uruguay and Costa Rica) to the highest inequality (in the case of Nicaragua's monopoly, ENITEL, whose privatisation was finalised in 2004)[18]– showing that monopolies, as such, neither guarantee nor preclude good results in terms of equality of access.

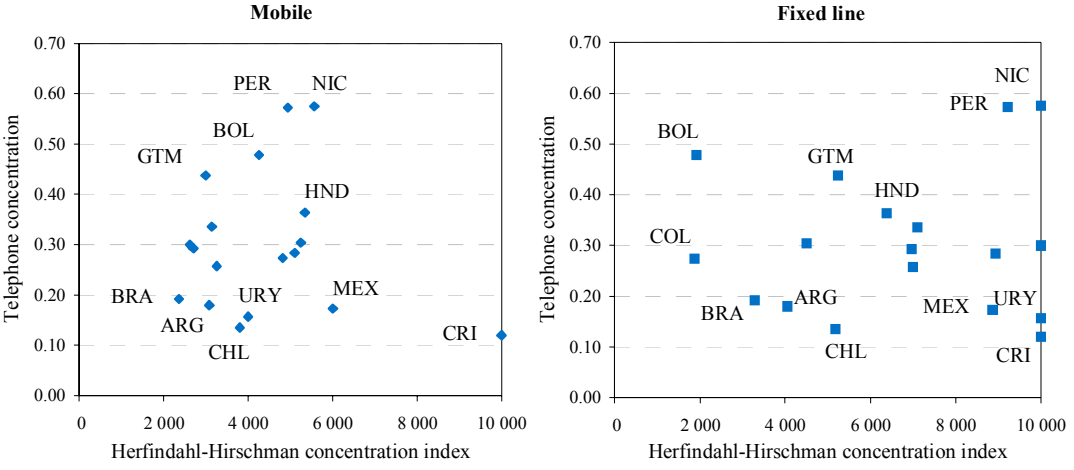
Figure 3.14. **Market Concentration and Performance**

Market concentration at end 2005, performance at end 2005 or latest available



Panel A: Market Concentration and Telephone Density

Panel B: Market Concentration and Telephone Concentration



Source: OECD Development Centre (2007); based on regulators' and operators' annual reports, and ITU (2006) and IADB (2007)

StatLink http://dx.doi.org/10.1787/121161251674

Regulation is crucial

Market concentration matters, but it is the regulations underpinning the competitiveness of markets and providing incentives for extended coverage that are key for good performance.

Regulation quality plays a key role in the link amongst market concentration, market power and sector performance. Independent regulators are needed to address two major commitment problems. One derives from the state's difficulty to credibly commit to not expropriating the substantial investments involved in telecommunications infrastructure after the cost of those investments has been incurred by investors. The other reflects the fact that effective regulatory independence includes independence from the industry, and often especially from the local-loop monopolist, or the incumbent, due to issues related to interconnection (the obligation of an operator to carry calls generated by another operator and the compensation it receives for doing so). When this independence is not effective, market power translates into excessively low density coupled with higher prices. The opportunities for rent-seeking that exist in regulated industries, both by the regulated and by politicians and regulators, link the performance of these industries with the political process in a country, and therefore with the institutions that underpin its political and regulatory checks and balances (Henisz and Zelner, 2001).

Most countries in Latin America have independent telecommunications regulators (although not always exclusively dedicated to the industry). The exceptions, according to the criteria set by the International Telecommunication Union, are Chile, Haiti, Peru, Suriname and Uruguay. Countries with independent regulators have on average received more FDI per capita in the sector, have progressed more in the last 15 years in terms of density, and have less unequal access to telephone service. But there is great diversity within each group of countries — those with and those without independent regulators — and recent analysis suggests both that the statutory independence of the regulator is a weak indicator of the institutional environment (Baudrier, 2001) and that the importance of mobile telephony — whose infrastructure is both less costly and more easily removable (if threatened with expropriation for example) — reduces the sensitivity of the telecommunications sector to political conditions (Andonova, 2007).

Table 3.4. **Regulator Independence and Telecommunications Performance Indicators**
Simple average of selected indicators

	Number of countries	Telephone density (2005)	Change in telephone density (1990-2005)	Telephone concentration index	Cumulative FDI in the sector (per capita)
With autonomous regulator	16	55.6	50.4	0.29	151
No autonomous regulator	5	49.6	43.0	0.35	58

Source: OECD Development Centre (2007); based on ITU (2006) and (2007) data.

StatLink http://dx.doi.org/10.1787/122403880856

ISBN: 978-92-64-03826-4

The heterogeneity of regulatory regimes and market structures, even amongst countries whose regulators are categorised as independent, explains the relatively weak differences in teledensity between countries with and without independent regulators. Still, cross-country analyses of the importance of regulatory independence find that countries that have independent regulators at the time of privatisation tend to have lower prices (Estache *et al.*, 2006). An important reason is that independent regulators help ensure that an increase in prices due to tariff rebalancing in conjunction with privatisation does not erode the potential gains for users from technological progress brought about by more dynamic providers. Regulatory performance in turn depends both on the governance of regulation itself, and on the political environment that the regulator faces. Chile, which does not have an independent regulator but has a political environment characterised by relatively high levels of transparency and accountability, illustrates the latter point. Studies also suggest that political accountability improves regulatory performance (Gasmi *et al*, 2006), and that while even corruption can lead to performance improvements in the face of resistance to needed change and red tape (Estache *et al.*, 2006), reform policies can lead to better performance.

Beyond ensuring competition, Latin American regulators have shown great commitment to extending service. The models used vary greatly, ranging from a commitment to market liberalisation, to the creation of funds to finance universal-access projects or to state-mandated command-and-control mechanisms (Stern *et al.*, 2006). Countries with strong landline incumbents, including Bolivia, Panama and Mexico, have relied on universal-access obligations imposed on the incumbent with varying degrees of success and stringency. In Costa Rica and Uruguay, state or corporative objectives have achieved high levels of landline connectivity. Other countries, including Guatemala and El Salvador, have created very liberal regulatory regimes that have achieved increased teledensity without reducing significant regional disparities. More balanced approaches, finally, notably Brazil's combination of a liberal licensing regime and universal-service obligations enshrined as regional development targets, have proved very successful.

The most noteworthy experiments have been in so-called universal access funds (UAFs). Most countries in the region have created such funds, although in some countries they have not begun their action (e.g. the Argentine fund was legislated in 2000 but was not yet in operation as of June 2007), and the accumulation of funds by the Brazilian *Fundo Fiduciario do Serviço de Telecomunicações* has raised questions about their future use. Chile's UAF is particularly innovative and interesting, because of its competitive bidding mechanism, in which enterprises bid for universal-access projects (with the one requesting the lowest subsidy being awarded the project), and because the fund has been very successful: within five years of its establishment in 1995, the fund had succeeded in extending access to basic service to the majority of rural Chileans (Xavier, 2006). The majority of universal-access actions have been to provide public pay-phones and community telecentres that offer a wider array of telecommunications services, although Peru's UAF (FITEL) has also financed pilot projects that extend individual access to the local network.

ISBN: 978-92-64-03826-4

Looking ahead, it is clear from the experiences in the region that, while an access policy with clear and stable rules is necessary and can be very successful, well-regulated open and contestable markets can do much to provide access on commercial terms to a large part of the population. Given the degree of supply concentration in much of Latin America's landline segment, and just as eyes turn to Brazil's and Chile's successes in extending coverage, Brazil is in the process of shifting to new interconnection regulations, with rates based on a fully allocated cost model (OECD, 2007).

The challenges ahead: inclusion and mobile service

Latin America's telecommunications sector has received substantial FDI flows in conjunction with three sectoral phenomena — privatisation, mobile telephony and industry consolidation — of varying importance across countries. The market-seeking nature of these flows, the arrival of mobile technology and an emerging political commitment to foster universal service have created a major opportunity to provide better service to more people. Despite recent progress, however, the gap in access to telephone services between the rich and the poor remains substantial in most countries.

Providing voice service can go a long way towards enhancing communications to strengthen social ties and increase physical, economic and social mobility. It can also improve the efficiency of markets by allowing timely communication between potential buyers and sellers (Jensen, 2007).

Access to telecommunications services is a strong factor of economic, social and even political development, and its universality should be maintained as a prime objective.

However, voice communication is only a first step to bridging the communication and digital divide. With mobile-phone-based internet still far from maturity in terms of coverage and expansion, there is dire need for the mobile-phone-based services that can bridge the immense disparity that still exists in such areas as e-banking and e-government (paying taxes or voting through the internet, for instance). Moreover, while internet access is outpacing the growth of landline expansion thanks to communal forms of access, broadband access remains limited by the restricted expansion of the land network.

Indeed, notwithstanding great progress in most countries, access to land telephone lines remains difficult for many people. As both a medium of communication and a source of content, the internet holds great promise for enhancing transparency and governance. Yet to play this role for all, it needs to be accessible across all segments of the population. The rise of mobile banking in southern Africa, for example, shows how process innovations in business organisation can be as important as technological innovations — mobile banking actually started with customers using pre-paid telephone-card numbers as a vehicle for money transfers, and was then picked up by operators and the banking industry. Similarly, in Latin America, initiatives that allow individuals to use their mobile telephones to retrieve remittances from migrant family members have paved a new way for providers of banking services to establish and maintain relationships with low-income or other previously inaccessible populations.

ISBN: 978-92-64-03826-4

Conclusions

The evolution in Latin America of FDI inflows and outflows and of the strategies of multinational corporations, home-grown as well as from outside the region, provides a lens through which to assess the progress and impact of the region's opening-up to the global economy. Significant privatisation and liberalisation in the region during the 1990s provided an avenue for substantial FDI inflows and, in many cases, for the first time for European — especially Spanish — firms to establish important footholds in the region. Europe has thus taken its place with the United States as a second major external contributor, through FDI as well as trade, to growth in Latin America, as well as to enhancing the region's integration into the global economy.

Since 2000, two major new forces have further altered this landscape. One is the irruption of emerging-market multinationals, including notably Latin American multinationals — the so-called *multilatinas*. Driven by the search for markets and ambitious global strategies, helped by global liquidity and a reduced emerging-market sovereign-risk premium that reduce their cost of capital, a number of new Latin American multinationals now occupy places of honour in global corporate rankings. The other major new force is the rise of China, and to a lesser extent India, whose implications for Latin America are the focus of the next chapter in this volume. Suffice it here to note that amongst the largest *multilatinas* are oil and mining companies, whose current behaviour is shaped by the strong demand and historically high price levels for their products that are in part driven by Asian growth.

Most Latin multinationals, especially in services and manufactured products, are eminently regional players. Their ambitions, visible in industries as diverse as cement, foods and telecommunications, not only to be regional multinationals but also to become fully global ones, nevertheless bear witness to the dynamism of corporate Latin America. While the fall in the cost of capital globally, and especially the dramatic fall in the emerging-market risk premium, have greatly facilitated their multinational growth, the broader institutional environment (reflected also in the risk premium) has been critical too.

The path towards universal access to telecommunications services requires an intelligent balance between liberalised market forces, an access-promotion policy, and effective regulation authorities.

Indeed, the prevailing institutional environment plays a crucial role not only in determining the incentives for both incoming and outgoing investment, but also in determining the effective contribution of multinational corporations to development. The example of telecommunications shows that their contribution has been, and will undoubtedly continue to be, significant in this sector of vital importance for aggregate economic performance and development — albeit initially mainly to the benefit of the better-off segments of local populations, thereby also increasing access inequalities — in countries across the region.

The example of telecommunications also draws attention to the crucial importance of regulatory regimes, certainly in key public services. While some countries, most notably Costa Rica, have restricted the entry of private actors in telecommunications services and performed relatively well in terms of equity of access to existing services, those same countries have not performed well in terms of service extension,

ISBN: 978-92-64-03826-4

letting crucial opportunities pass them by. The experiences of other countries in the region show that a regulatory regime that allows foreign actors into the sector has great potential to accelerate service extension. The combined effects of significant new FDI, the competitive market-seeking behaviour of the main investors, the spread of digital mobile technology and market liberalisation have been to greatly increase connectivity in the region — faster than in other regions. Effective access-promotion policies with clear and stable rules are nevertheless required to ensure access to the poorer segments of the population, which is vitally important for economic and political development. Well-regulated, open and competitive markets that encourage innovation from within as well as from outside will induce and facilitate corporate strategies that maximise the contribution of multinationals to development throughout the region.

ISBN: 978-92-64-03826-4

Notes

1. This chapter draws on and builds upon a series of background papers produced at the OECD Development Centre, including Santiso (2007*a, 2007b, 2007c*) and de Laiglesia (2007).
2. OECD Development Centre (2007) estimate based on EIU data accessed through Thomson Datastream.
3. As of 2007, two of Spain's largest banks — Banco Bilbao Vizcaya Argentaria (BBVA) and Grupo Santander — had 49 and 30 per cent of their respective worldwide operations in Latin America, and the Spanish telecommunications company Telefónica is one of the major players in the region. The other major sector of Spanish activity has been energy, including extractive industries, and electricity generation and distribution
4. Bandyopadhyay (2006) finds inequality to be negatively related to ICT development for her whole sample, but positively for the developing-country sample, suggesting a non-linear relationship.
5. See Rozas Balbontín (2005) for a detailed presentation of successes and failures in privatisation.
6. OECD Development Centre (2007); based on World Bank PPI Project Database, 2005 update, http://ppi.worldbank.org/, accessed 23 March 2007.
7. M.I.C. (Millicom International Cellular) is incorporated in Luxembourg and has operations in Central and South America, Africa and Asia.
8. A 21 per cent share was sold in the market in 1997, the Spanish administration keeping a "golden share" that was expected to expire in 2007 and was finally abolished at the end of 2005.
9. A similar pattern of accelerated internationalisation of latecomer multinationals from emerging markets has also been noted in other sectors, such as the white-goods sector (Bonaglia *et al.,* 2007), although the strategies differ between manufacturing and service sectors.
10. Telefónica's mobile business was floated independently in 2000 and reintegrated in 2006. Since mid-2006, Telefónica has been organised by regional divisions (Telefónica España, Telefónica O2 and Telefónica Latinoamérica).
11. The actual model fitted is a non-parametric lowess smoother of telephone density over GDP per capita in PPP terms. The results are broadly unchanged if a parametric approach is used by applying the best-fitting Box-Cox transformation to per capita GDP for each year.
12. The relative gap is (Q5-Q1)/Q5 where Q1 is the proportion of individuals in income quintile 1 with access to a telephone (and likewise for Q5). This measure is therefore between 0 (perfect equality) and 1 (if no one in the lowest quintile has a telephone).

ISBN: 978-92-64-03826-4

13. The telephone concentration index measures the concentration of telephone ownership by the area over the Lorenz curve, plotting the cumulative share of owned telephones against income quintiles. It can be interpreted like a Gini coefficient: 0 is perfect equality (all individuals have the same probability of owning a telephone) and 1 perfect inequality (only individuals in the highest income quintile have a telephone).

14. Data are from ITU (2006). See table 3.A3 for details.

15. Comparable data on mobile phone coverage of the population for the countries considered that would allow a comparative perspective are not available.

16. Sector-disaggregated data are not available from official sources in a comparable fashion. The data used are drawn from the World Bank's Private Participation in Infrastructure database. They do not therefore strictly correspond to the OECD definition of Foreign Direct Investment (OECD, 1999) and should be interpreted as a proxy. This database records total investment per project as well as the participation of foreign actors, but seldom the participation (share) of foreign actors in each project and never its change over time. All investment data are weighted by the share in the joint venture when available. They will therefore underestimate (sometimes substantially) actual investment, especially in the case of acquisitions. Moreover, the data do not account for losses or repatriation of profits. For further details on the advantages and shortcomings of the database for this purpose, see Guislain and Qiang (2006).

17. Costa Rica stands out as the only country in the region where not only landline, but also mobile, telephony remains state monopolies.

18. ENITEL was privatised in two stages. It was controlled by the Honduran consortium Megatel between 2001 and 2004, and since 2004, by América Móvil.

ISBN: 978-92-64-03826-4

Statistical Annex

Methodological Notes

Table 3.A1. Exposure of Selected Main Foreign Multinationals in Latin America, 2004-06

This table presents the ratio of sales in Latin America to total sales by the enterprise. An enterprise is included when it has more than 10 per cent of total sales in Latin America and its home economy is European or North American. The main source for inclusion is the specialised magazine América Economía.

Data are calculated from annual reports of each individual company wherever disaggregated sales are reported. When no value for Latin America can be obtained, the value for South America is reported.

Table 3.A2. Telephone Density — Fixed and Mobile Lines per 100 Inhabitants

Data as reported by the 2006 edition of the World Telecommunication/ICT Indicators (ITU, 2007).

Table 3.A3. Inequality and Access to Telephone Service in Latin America

Three indicators of telephone ownership inequality are presented. The data are drawn from income-quintile disaggregated data produced by CEDLAS and the World Bank and presented in SEDLAC (2007). These compile data from household surveys from across the region.

The **absolute access gap** is the difference between the probability that a person in the highest (richest) quintile has a phone (Q5) and the probability that a person in the lowest (poorest) quintile has a phone (Q1).

$$A = Q_5 - Q_1$$

The **relative gap** is that difference divided by the probability that a person in the highest quintile has a phone.

$$R = (Q_5 - Q_1)/Q_5$$

In both of these cases, 0 indicates that telephone ownership is independent of income, 1 indicates that only the rich have access to their own telephone line (land or mobile). While the absolute gap provides an immediate sense of the number of lines that would need to be provided to achieve equality, the relative gap allows comparison across economies with different levels of teledensity.

ISBN: 978-92-64-03826-4

The **telephone concentration index** is constructed following the definition of the Gini coefficient for telephone concentration. The telephone access Lorenz curve relates the position i of an individual in the income distribution, normalised to be from 0 (lowest) to 1 (highest), to the proportion q(i) of individuals with a telephone line who have income below i. The telephone concentration index is defined as the ratio of the area between the telephone ownership Lorenz curve and the diagonal line representing equality.

$$G = 1 - 2\int_0^1 q(i)$$

Given data availability, the Lorenz curve is approximated by the piecewise linear union of the points provided by the quintile access rates.

In effect, the telephone access inequality index depends not only on the differences between the extreme income groups, but also between intermediate quintiles.

This indicator is between zero (0) and one (1) whenever telephone ownership prevalence is increasing with income.

Table 3.A4. Foreign Investment in Telecommunications in Latin America

Data on foreign investment in telecommunications are drawn from the World Bank Private Participation in Infrastructure Database (World Bank, 2007).

The series presented is the cumulative per capita investment in telecommunications reported for those projects where an affiliate of a foreign company is cited as a sponsor of the project, weighted by the sponsor's share, when available.

The source for population information is the World Development Indicators database (World Bank, 2006).

Table 3.A5. Market Concentration in Telecommunications in Latin America

The measure of market (supply) concentration presented is the Herfindahl-Hirschman index. It is constructed as the sum of squares of market shares (expressed in percentages) of operators in each landline and mobile telephony, taken as integers between 0 and 100.

$$HHI = \sum_i share_i^2$$

The resulting indicator (HHI) is between 0 and 10 000, with 0 corresponding to an atomistic market and 10 000 corresponding to a monopoly.

Market shares are constructed as shares of total country markets from total line data collected from annual reports of operators and regulator publications. When necessary, they are rescaled to sum up to ITU totals for the year. Missing values are ignored (i.e. taken as zeros).

ISBN: 978-92-64-03826-4

ISBN: 978-92-64-03826-4 © OECD 2007

Table 3.A1. **Exposure of Selected Main Foreign Multinationals in Latin America, 2004-2006**

			Latin America share of total sales %			Fortune Global 500 Ranking
			2004	2005	2006	
Company	**Country**	**Sector**				
BBVA	Spain	Commercial banks	39	46	49	410
Inbev	Belgium	Beverages	14	34	38	472
Portugal Telecom SGPS	Portugal	Telecommunications	27	32	34	--
Telefónica	Spain	Telecommunications	35	41	34	108
Phelps Dodge	United States	Natural resources	29	25	32	--
Santander	Spain	Commercial banks	41	29	30	93
Endesa	Spain	Energy	23	29	30	280
Bunge	United States	Agribusiness/Food/Fertiliser	21	22	23	247
Iberdrola	Spain	Energy	11	15	21	466
Cimpor	Portugal	Cement	15	15	16	--
Clariant	Switzerland	Chemicals	13	15	16	--
Tenaris	Italy/Argentina	Manufacturing	22	29	20	--
Gas Natural	Spain	Natural resources	16	17	15	--
Holcim	Switzerland	Construction	21	17	15	458
Beiersdorf	Germany	Drugs/Cosmetics and healthcare	14	14	14	--
Repsol YPF	Spain	Oil and gas	15	16	14	84
Syngenta	Switzerland	Agro-chemistry	15	14	14	--
Telecom Italia	Italy	Telecommunications	10	11	14	141
Unilever	United Kingdom/ Netherlands	Food and beverages	10	..	13	106
Whirlpool	United States	Electrical appliances	13	14	13	478
Nestle	Switzerland	Food	..	12	..	53
BG Group	United Kingdom	Energy	14	13	11	--
Coca-Cola	United States	Beverages	10	11	11	267
Lear Corporation	United States	Automotive	9	9	10	380
Ericsson	Sweden	Wireless telecom equipment	11	13	9	--
PepsiCo	United States	Beverages	9	10	9	175

Notes: Phelps Dodge was acquired in early 2007 by Freeport McMoran Copper and Gold to form FCX. Data for Tenaris are for South America only.
-- = not applicable; .. = not available.

Source: América Economía (2006), enterprise annual reports and Forbes (2007).

StatLink http://dx.doi.org/10.1787/122442520467

Table 3.A2. **Telephone Density – Fixed and Mobile Lines per 100 Inhabitants**

	1990	...	1995	...	2000	2001	2002	2003	2004	2005
Latin America										
Argentina	9		17		39	40	38	43	58	82
Bolivia	3		3		13	15	19	21	27	33
Brazil	6		9		31	38	41	47	57	68
Chile	7		14		44	56	65	69	82	90
Colombia	7		11		22	25	29	32	40	65
Costa Rica	10		15		29	32	38	46	53	58
Cuba	3		3		4	5	6	7	8	9
Dominican Republic	5		8		20	27	30	35	39	51
Ecuador	5		7		13	17	23	30	39	60
El Salvador	2		5		22	24	24	29	41	49
Guatemala	2		3		13	16	20	24	34	46
Honduras	2		3		7	8	10	10	16	25
Mexico	7		10		27	36	41	45	54	62
Nicaragua	1		2		5	6	8	12	17	23
Panama	9		12		30	30	30	34	53	56
Paraguay	3		4		20	26	34	35	34	36
Peru	3		5		12	13	15	17	22	28
Uruguay	14		21		42	46	45	44	49	66
Venezuela	8		13		33	37	37	39	45	60
Latin America average	6		10		27	32	35	40	49	61

StatLink http://dx.doi.org/10.1787/122446721030

ISBN: 978-92-64-03826-4

ISBN: 978-92-64-03826-4 © OECD 2007

Table 3.A2. (contd.)

	1990	…	1995	…	2000	2001	2002	2003	2004	2005
OECD Benchmarks										
Australia	48		61		98	111	119	127	133	139
Canada	57		69		95	101	103	105	105	108
Czech Republic	16		24		80	106	120	131	134	141
Finland	58		75		127	135	139	139	141	143
France	50		57		98	109	110	114	117	122
Hungary	10		24		64	81	98	108	116	120
Ireland	29		40		95	113	119	126	133	140
Italy	40		50		112	127	129	134	147	159
Japan	45		58		94	99	104	108	112	115
Korea	36		46		114	118	126	128	118	121
Luxembourg	48		63		116	141	149	174	179	193
Netherlands	47		55		114	113	112	120	134	127
New Zealand	46		56		102	107	109	118	131	146
Poland	9		15		45	57	67	75	90	104
Portugal	24		39		100	111	115	121	130	139
Slovak Republic	..		21		55	69	80	92	101	101
Spain	33		41		103	117	126	135	131	140
Turkey	12		24		50	54	61	66	75	87
United Kingdom	46		58		121	129	136	140	147	155
United States	56		71		103	109	110	114	100	107
OECD total	41		51		91	99	103	108	109	115
World Average	10		14		28	32	36	40	46	54

Note: Latin America average is population weighted.
Sources: ITU (2007) for Latin America and world; OECD (2007) for OECD countries.

StatLink http://dx.doi.org/10.1787/122446721030

Table 3.A3. **Inequality and Access to Telephone Service in Latin America**

	Telephone line subscription inequality				Public payphones per 100 inhabitants
	Absolute access gap	Relative access gap	Telephone concentration index	Year	
					(2005 or latest)
Latin America					
Argentina+*	0.61	0.65	0.18	2001	5.91
Bolivia	0.57	0.97	0.48	2002	1.75
Brazil	0.60	0.64	0.19	2004	6.83
Chile	0.48	0.51	0.13	2003	4.51
Colombia	0.44	0.79	0.27	2004	2.44
Costa Rica	0.39	0.48	0.12	2004	5.04
Cuba	..	..	..	..	3.07
Dominican Republic	0.49	0.84	0.34	2005	1.47
Ecuador	0.48	0.79	0.30	2003	2.35
El Salvador	0.53	0.79	0.29	2004	4.04
Guatemala	0.46	0.94	0.44	2003	4.31
Honduras	0.65	0.89	0.36	2005	0.48
Mexico	0.49	0.56	0.17	2004	7.12
Nicaragua	0.35	0.97	0.57	2001	1.27
Panama	0.79	0.87	0.28	2003	2.54
Paraguay*	0.64	0.83	0.30	2004	2.54
Peru	0.62	0.98	0.57	2003	5.42
Uruguay	0.57	0.60	0.16	2005	5.44
Venezuela	0.36	0.72	0.26	2003	4.57
Latin America average	0.49	0.75	0.30	--	3.74

Notes: + urban areas only ; .. = not available; -- = not applicable.

Sources: OECD Development Centre (2007); based on SEDLAC (2007), except * based on IADB (2007) and ITU (2006).

StatLink http://dx.doi.org/10.1787/122455535612

ISBN: 978-92-64-03826-4

Table 3.A4. **Foreign Investment in Telecommunications in Latin America**

	Cumulative sum of private investment in telecommunications with foreign participation (1988-2005) weighted by foreign participation share	
	$ per inhabitant	Total, $ million
Latin America		
Argentina	508.7	18 001
Bolivia	72.4	589
Brazil	300.1	51 910
Chile	372.4	5 447
Colombia	72.8	2 986
Costa Rica	1.0	3
Cuba	22.2	244
Dominican Republic	65.2	536
Ecuador	85.6	1 053
El Salvador	164.7	1 056
Guatemala	160.0	1 788
Honduras	22.7	153
Mexico	49.0	4 835
Nicaragua	33.4	175
Panama	327.0	903
Paraguay	77.0	412
Peru	313.2	7 727
Uruguay	59.5	191
Venezuela	387.0	8 932
Latin America total	215.6	108 373

Notes: .. not available ; -- not applicable.
Sources: OECD Development Centre (2007); based on World Bank Private Participation in Infrastructure Investment database (World Bank, 2007).

StatLink http://dx.doi.org/10.1787/122475413313

ISBN: 978-92-64-03826-4 © OECD 2007

Table 3.A5. **Market Concentration in Telecommunications in Latin America**

	Herfindahl-Hirschman Index of Market Concentration	
	Mobile	Fixed line
Latin America		
Argentina	3 080	4 054
Bolivia	4 256	1 914
Brazil	2 359	3 288
Chile	3 801	5 180
Colombia	4 818	1 875
Costa Rica	10 000	10 000
Cuba	10 000	10 000
Dominican Republic	3 142	7 107
Ecuador	5 253	4 507
El Salvador	2 705	6 968
Guatemala	2 996	5 233
Honduras	5 346	6 384
Mexico	6 010	8 869
Nicaragua	5 564	10 000
Panama	5 105	8 934
Paraguay	2 618	10 000
Peru	4 943	9 225
Uruguay	4 001	10 000
Venezuela	3 260	7 004
Latin America average	4 698	6 871

Notes: .. not available ; -- not applicable.

Sources: OECD Development Centre (2007); based on World Bank Private Participation in Infrastructure Investment database (World Bank, 2007).

StatLink http://dx.doi.org/10.1787/122510045414

ISBN: 978-92-64-03826-4

Bibliography

América Economía (2006), No. 326, Santiago de Chile and www.americaeconomia.com.

Andonova, V. (2007), "La importancia de las instituciones políticas y el impacto en las telecomunicaciones", mimeo, Universidad de los Andes, Bogotá.

Bandyopadhyay, S. (2006), "Knowledge-Driven Economic Development", *Discussion Paper* No. 267, University of Oxford, Oxford.

Baudrier, A. (2001), "Independent Regulation and Telecommunications Performance in Developing Countries", paper presented at the Annual Conference of the International Society for New Institutional Economics (ISNIE), www.regulationbodyofknowledge.org/documents/08/003.pdf, accessed 12 July 2007.

Blanco Bermúdez, F. (2002), "La expansión de Telefónica en Iberoamérica: un caso de internacionalización empresarial", Telefónica S.A., Madrid.

Bonaglia, F., A. Goldstein and J. Matthews (2007), "Accelerated Internationalization by Emerging Multinationals: The Case of White Goods", *Journal of World Business*, Elsevier, Amsterdam, forthcoming.

Calderón, C. and L. Servén (2004), "The Effects of Infrastructure Development on Growth and Income Distribution", *World Bank Policy Research Working Paper* No. 3400, World Bank, Washington, D.C.

De Laiglesia, J. (2007), "Telecommunications and Development in Latin America", mimeo, OECD Development Centre, Paris.

ECLAC (United Nations Economic Commission for Latin America and the Caribbean) (2007), *Foreign Investment in Latin America and the Caribbean 2006*, ECLAC, Santiago de Chile.

Estache, A., A. Goicoechea and M. Manacorda (2006), "Telecommunications Performance, Reforms and Governance", *World Bank Policy Research Working Paper* No. 3822, World Bank, Washington, D.C.

Forbes (2007), "The World's 2,000 Largest Public Companies", www.forbes.com.

Fundación Telefónica (2007), "El impacto socio-económico de la telefonía móvil en Latinoamérica", presentation at the seminar, Desarrollo Económico, Desarrollo Social y Comunicaciones Móviles en América Latina, Buenos Aires, 20-21 April, www.fundacion.telefonica.com/noticias/pdf/Estudio%20Impacto%20socioeconomico%20telefonia%20movil%20210407.pdf, accessed 12 July 2007.

García-Canal, E. and Guillén, M.F. (2005), "Risk and the Strategy of Foreign Location Choice in Regulated Industries", mimeo, Universidad de Oviedo and The Wharton School, Oviedo and Philadelphia.

Gasmi, F., P. Noumba and L. Recuero Virto (2006), "Political Accountability and Regulatory Performance in Infrastructure Industries: An Empirical Analysis", *World Bank Policy Research Working Paper* No. 4101, World Bank, Washington, D.C.

ISBN: 978-92-64-03826-4

Graham, E.M. (1998), "Market Structure and the Multinational Enterprise: A Game-Theoretic Approach", *Journal of International Business Studies*, Vol. 29, No. 1, Palgrave Macmillan, Basingstoke.

Guislain, P. and C.Z.-W. Qiang (2006), "Foreign Direct Investment in Telecommunications in Developing Countries", *in Information and Communications for Development: Global Trends and Policies*, World Bank, Washington, D.C.

Henisz, W. and B.A. Zelner (2001), "The Institutional Environment for Telecommunications Investment", *Journal of Economics and Management Strategy*, Vol. 10, No. 1, The MIT Press, Cambridge, MA.

IADB, "Competitiveness: The Business of Growth", *Economic and Social Progress in Latin America 2001*, IADB, Washington, D.C.

IADB (2004), *Foreign Direct Investment in Latin America: The Role of European Investors*, IADB, Washington, D.C.

IADB (2007), *Equity and Social Indicators (EQxIS)*, www.iadb.org/sds/xindicators/, IADB, Washington, D.C.

ITU (2007), ICT Eye Regulatory Information Centre, www.itu.int/ITU-D/icteye/Regulators/Regulators.aspx, accessed May 2007, ITU, Geneva.

ITU (2006), World Telecommunications/ICT Indicators Database, 2006, ITU, Geneva.

Jensen, R. (2007), "The Digital Provide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector", *Quarterly Journal of Economics*, The MIT Press, Cambridge, MA, forthcoming.

Latinobarómetro (2005), *Summary Report*, www.latinobarometro.org.

Mariscal, J. and E. Rivera (2005), "Organización Industrial y competencia en las telecomunicaciones en América Latina: Estrategias Empresariales", *Productive Development Series* No. 169, ECLAC, Santiago de Chile.

OECD (1999), *OECD Benchmark Definition of Foreign Direct Investment*, Third Edition, www.oecd.org/dataoecd/10/16/2090148.pdf, OECD, Paris.

OECD (2004), "Mexico: Progress in Implementing Regulatory Reform", *OECD Reviews of Regulatory Reform*, OECD, Paris.

OECD (2005), "OECD Economic Surveys: Mexico", *OECD Economic Surveys*, Vol. 2002, No. 7, OECD, Paris.

OECD (2007), *OECD Communications Outlook 2007*, OECD, Paris.

Röller, L.-H. and L. Waverman (2001), "Telecommunications Infrastructure and Economic Development: A Simultaneous Approach", *The American Economic Review*, Vol. 91, No. 4. American Economic Association, Pittsburgh, PA.

Rozas Balbontín, P. (2005), "Privatización, reestructuración industrial y prácticas regulatorias en el sector telecomunicaciones", *Serie Recursos Naturales e Infraestructura*, Vol. 93, ECLAC, Santiago de Chile.

Santiso, J. (2007*a*), "La transformación empresarial de España", *Política Exterior* No. 115, Vol. XXI, January-February.

Santiso, J. (2007*b*), "The Emergence of Latin Multinationals", OECD Emerging Markets Network Working Paper.

Santiso, J. (2007*c*), "Telecomunicaciones y desarrollo en América Latina", *in Digiworld América Latina 2007,* Ariel and Fundación Telefónica, Madrid and Barcelona.

ISBN: 978-92-64-03826-4

SEDLAC (Socio-Economic Database for Latin America and the Caribbean) (2007), CEDLAS and World Bank, La Plata and Washington, D.C., www.depeco.econo.unlp.edu.ar/cedlas/sedlac/default.html, accessed March 2007.

Stern, P.A., J. Monedero and D. Townsend (2006), "New Models for Universal Access in Latin America", report for the Regulatel/World Bank/ECLAC Project on Universal Access for Telecommunications in Latin America, Montreal, Boston and Madrid.

UNCTAD (United Nations Conference on Trade and Development) (2006), *World Investment Report, 2006: FDI from Developing and Transition Economies: Implications for Development*, UNCTAD, New York and Geneva.

Wallsten, S.J. (2003), "Privatizing Monopolies in Developing Countries: The Real Effects of Exclusivity Periods in Telecommunications", *Related Publication* 03-17, AEI-Brookings Joint Center for Regulatory Studies, Washington, D.C.

Waverman, L., M. Meschi and M. Fuss (2005), "The Impact of Telecoms on Economic Growth in Developing Countries", *Africa: The Impact of Mobile Phones*, The Vodafone Policy Paper Series No. 3, Vodafone, Berkshire.

World Bank (2006), *World Development Indicators Database 2006*, World Bank, Washington, D.C.

World Bank (2007), *Private Participation in Infrastructure Database*, http://ppi.worldbank.org, accessed 4 May 2007.

Xavier, P. (2006), "Universal Access to Telecommunications in a Competitive Environment", *Liberalisation and Universal Access to Basic Services: Telecommunications, Water and Sanitation, Financial Services, and Electricity*, OECD Trade Policy Studies, OECD and World Bank, Paris and Washington, D.C.

ISBN: 978-92-64-03826-4

Chapter 4

Trade for Development

China, India and the Challenge of Specialisation[1]

Abstract

China and India represent trade opportunities rather than trade competition for the bulk of Latin American countries. Most of China's increased exports raise stronger competitive challenges to its Asian neighbours than to Latin American countries, although some of the latter, such as Mexico, do face substantial Asian export competition. Chinese and Indian growth also opens Latin American export opportunities to new markets. For a few countries, notably Mexico and Brazil, this includes intra-industry trade, though for a majority of Latin American countries, the foremost trade opportunities are to be found in commodities exports. Already, the Asian Drivers' heightened demand for oil and minerals has increased both revenues — through the rising prices of commodities — and direct trade with Latin America. Commodity-export specialisation can, however, have some unwanted effects on the economy unless it is managed by responsible macroeconomic policies and well-governed and efficient institutions. Most Latin American economies appear to be coping well, but the challenges will persist. One of the important factors for ensuring long-term diversified growth is investment in innovation. Brazil and Chile are among the prime innovators in Latin America but are still behind OECD-country levels, mainly because innovation in the private sector has remained limited. Another important factor that would help long-term competitiveness and growth is well-functioning and efficient infrastructure. In 2007, this is one of the most important drawbacks in Latin American economies. Investment in infrastructure is therefore also a golden opportunity for improving export competitiveness and, particularly for Mexico and the countries in Central America, for capitalising on their favourable geographic position.

ISBN: 978-92-64-03826-4

Introduction

China's emergence from nearly 30 years of state-controlled autarky and its rapid integration into the global economy has become one of the defining features of our decade. With an average growth rate of 9.5 per cent from 1978 to 2005, China overtook Germany as the world's third-biggest economy in 2006. Its economic expansion continues to raise very important questions, both concerning the future of China itself and its impact on the rest of the world.

In what ways do China and India as leading global traders affect Latin America, and how can Latin America use this as an opportunity for its own development?

China's rise has partly overshadowed that of another giant, namely India. Although the Indian contribution to world growth rates is still below the leading Asian Driver, its impact on the world economy should by no means be underestimated. Since about the mid-1990s, average Indian growth has been twice that of the global average. A remarkable dimension of Indian growth has also been the integration of Indian firms into world markets and their success in competing against large developed-country multinationals on their own turf. In 2006, Indian companies invested a total of $2.3 billion abroad, measured as outward direct investment (EIU, 2007). In 2007-08, Indian overseas investment is expected to reach nearly $15 billion thanks to the remarkable boom of deals in various sectors. One example is Tata Steel, which in early 2007 secured a $12 billion bid on the Anglo-Dutch Corus. In May of the same year, Suzlon Energy won a bid for German REpower after French Areva decided not to top the Indian wind-turbine maker's $1.8 billion offer.

What exactly is the trade impact of China and India on Latin America?[2] Overall, is it negative or positive? Areas of exploration here include establishing whether there are, indeed, benefits to be had through new and extended export opportunities for Latin American countries.

Most Latin American countries are not particularly threatened by China and India, and may see their incomes rise as commodities exports become more valuable. For these, the risk of relying excessively on commodities exports is also evaluated, along with the problems that this can cause for the rest of the economy[3].

For the industries competing against Chinese and Indian exports, such as the bulk of Mexican and Costa Rican export industries and also many labour-intensive sectors in the rest of Latin America, it is particularly important to focus on their competitive advantages. One of these is proximity to the United States, an advantage that is dependent on good infrastructure. This aspect will therefore also be investigated.

These issues will be treated with case studies of Chile, Brazil and Mexico.

ISBN: 978-92-64-03826-4

What's in the Trade? Comparing Trade Structures to Assess Competition

The remarkable growth of the two Asian Drivers is influencing both industrialised and emerging economies, and Latin America is no exception. To assess these trade impacts with precision, the developments of the Chinese and Indian economies and their trade structures of the past years are discussed, and then compared with Latin American trade structures — first, to identify potential trade competition, and then, to identify trade complementarities and opportunities.

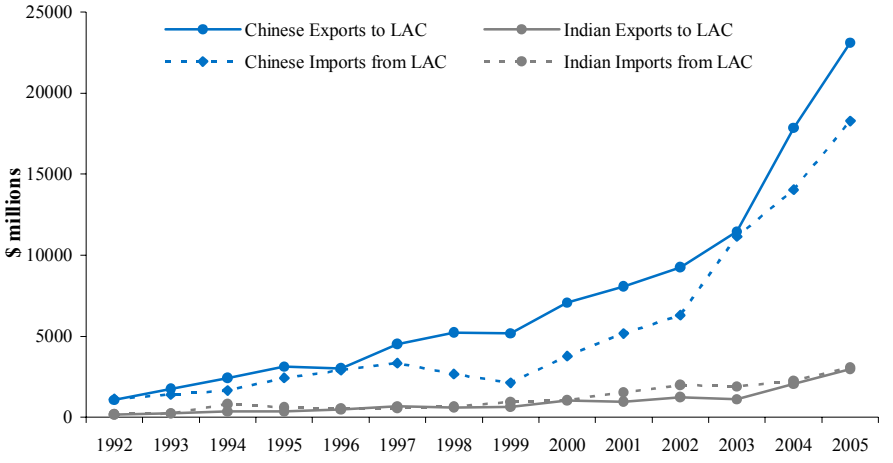
While Latin America's export-market shares have remained stable, India's have increased and China's have skyrocketed.

China's and India's contributions to global output growth is remarkable. In 2007, 27.9 per cent of world growth could be attributed to China, and 7.9 per cent of it to India (Statistical Annex Table 4.A2). Since 2001, their combined contribution to global output growth has been around 35 per cent. Growth in both countries has been accompanied by growing export-market shares towards both emerging and OECD economies. In 2006, China was the world's third-biggest merchandise exporter after Germany and the United States, with a global market share of 8 per cent, and in the second half of that year, its exports were exceeding even those of the United States (WTO, 2007). OECD estimations project that by 2025, China will represent 17 per cent of world trade. Furthermore, Chinese export volumes are estimated to grow at nearly twice the speed of global export-market growth, whereas OECD economies are facing a gradually declining export performance (Hervé *et al.*, 2007). China's current contribution to growth may seem astonishing, but the country has in fact played a prominent role in world economic growth in the past: between the 16th and 18th centuries, for instance, the Chinese empire was responsible for about one-fourth of total world output[4]. India has also increased its export performance considerably. Although its share of world exports — 1 per cent in 2006 — is substantially lower than China's, it has more than doubled during the past 25 years. Moreover, its commercial-service sector is probably the world's most dynamic, and service exports have strengthened steadily, growing by 34 per cent between 2005 and 2006, making India the world's tenth-largest service exporter. As its economy is also more restrictive to trade than China's, there is substantial room for further economic and export growth through trade reform (OECD, 2006*a*).

These developments in India and China have impacted on other emerging markets. Indian as well as Chinese companies are flocking to Latin America and Africa, their interest centred on raw materials (Santiso, 2006, Goldstein *et al.*, 2006). The China Development Bank is extending its financial presence, especially in Africa, accompanying the commercial penetration of Chinese enterprises. Recently, for instance, China began releasing a $3 billion loan to Angola, its biggest oil supplier (IEA, 2006*a*). At the same time, India has changed into a main source of low-cost technology for Africa, and a group such as Tata Steel has undertaken a large number of investments in the continent. Chinese investments have also reached Latin America. In 2004, nearly 50 per cent of Chinese foreign direct investment (FDI) went to the region. The following year, the figure was down to 16 per cent, but of a record Chinese total outward FDI of $7 billion. In the realm of trade, both Chinese and Indian exports to Latin America have been increasing, as can be seen in Figure 4.1.

ISBN: 978-92-64-03826-4

Figure 4.1. **Latin America and the Caribbean's Trade with China and India**

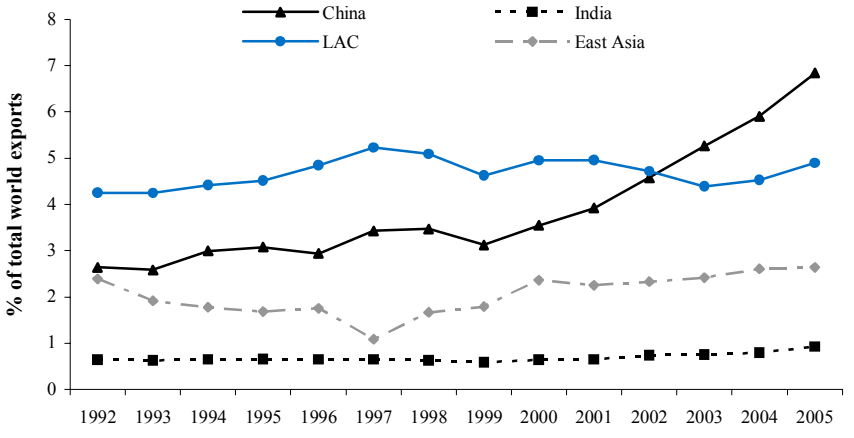


Source: OECD Development Centre (2007); based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/121346751175

Increased Chinese and Indian exports have at times been met with apprehension. China's increasing market shares, in particular, have led countries to fear for their own exports. Some voices have expressed concern that China's growth would be achieved to the detriment of other emerging countries (Lora, 2007). China's competitive low-cost wages in both skilled and unskilled sectors, together with the competitive value of the renminbi, have contributed to claims branding China as a "trade devil". Some Latin American voices have also expressed concern regarding the impact of China's growth (Lederman *et al.*, 2006). In public opinion polls, China is seen as the least desirable foreign investor (Latinobarómetro, 2007). Chinese manufacturing exports are also facing relatively high tariffs in Latin America (Figure 4.3). As shown by Figure 4.2, however, while China — and to some extent India — have captured world markets, Latin America has maintained its share of world trade, albeit relatively low.

Figure 4.2. **Development of Global Export Market Shares**

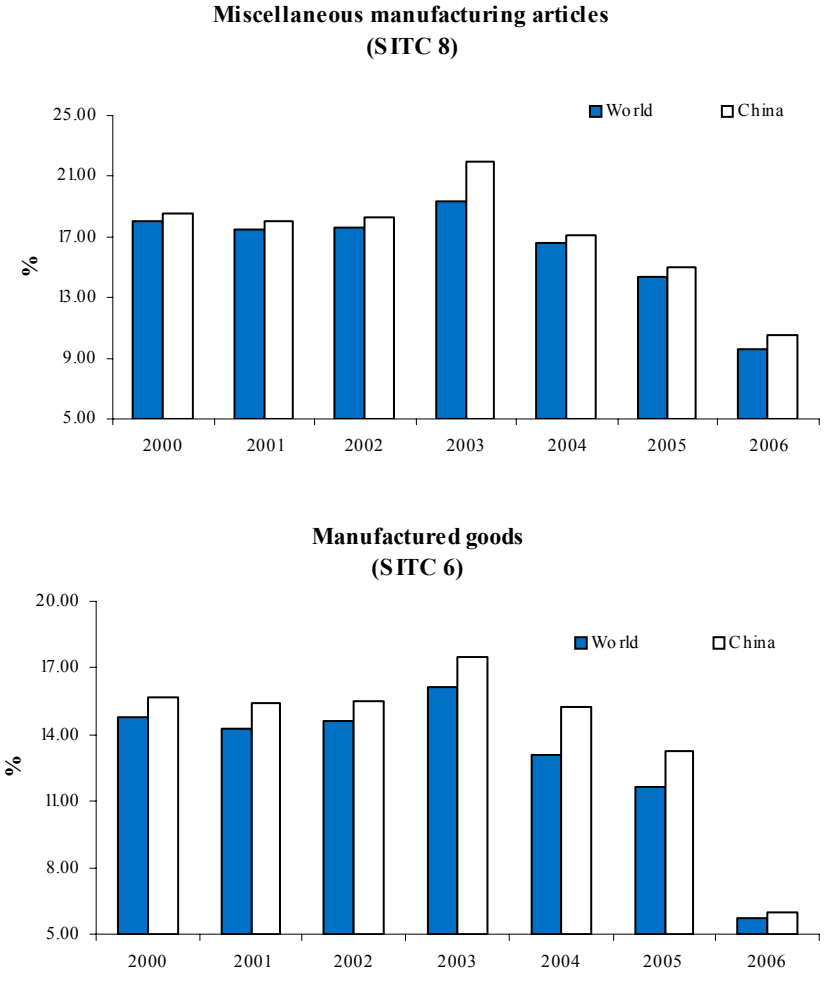


Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/121373123814

ISBN: 978-92-64-03826-4

Figure 4.3. **Latin American Tariffs on Imports from the World and from China**



Source: OECD Development Centre (2007); based on WITS, Trains (2007) and Nomenclature SITC Revision 3 (2007) data.

StatLink http://dx.doi.org/10.1787/121417105445

Chinese and Indian exports are mainly made up of manufactures.

A more in-depth study of trade structures can shed light on the accuracy of the perceptions of Chinese and Indian trade. By comparing them, it is possible to identify the strengths and weaknesses of specific sectors, as well as upcoming opportunities. Trade structures do not tell the whole story, though, since the effect of the Asian Drivers is produced not only directly, through increasing demand, but also indirectly, through increasing prices. Trade structures do, however, serve as an important starting point for further analysis.

An examination of China's trade structure (Statistical Annex Table 4.A3a) shows that its exports are concentrated in three key sectors: manufactured goods, machinery and transport equipment, and miscellaneous manufactured goods. Together, these amounted to 88.7 per cent of total exports in 2005. The evolution of machinery and

ISBN: 978-92-64-03826-4

transport equipment is particularly noteworthy, as this sector contains numerous products that require relatively high technological standards. In fact, export earnings from this sector have nearly doubled in the past few years, from only about 28 per cent in 1998 to more than 46 per cent in 2005. Another interesting development is the increasing similarity of China's export and import structures, suggesting mounting intra-industry trade, and indicating China's new role as a regional production centre.

In India, too, the machinery and transport-equipment sector is gaining ground, albeit on a lower scale (Statistical Annex Table 4.A3*b*). The primary exports are still manufactured goods and machinery. It is also worth noting that food and livestock, which was India's third largest export sector in 2000, was only the sixth most important in 2005. The two sectors that have seen the most remarkable growth in India, however, are those of mineral fuels and lubricants, and crude materials. Altogether, the Indian economy is also moving towards higher use of technology and increased intra-industry trade. In spite of this, India is still considered to be largely reliant on labour-intensive industries for its most important exports (Qureshi and Wan, 2006).

Trade in services, where India has been a prime mover, is not captured in the above overview. Recently, India was termed the most dynamic service exporter by the World Trade Organization (WTO). Both China and India have been outpacing world growth in commercial-service exports to the United States, while the growth of Latin American service exports has lagged behind (Freund, 2006)[5]. This is especially the case in the business, professional and technical services (BPT) sector, where Argentina and India were exporting about equally to the United States in 1994. Since then, United States imports from India have increased by 2 400 per cent, compared with 200 per cent from Latin America as a whole. In the same time period, however, there has also been a sharp decline in similarity between Latin American and Indian service exports, suggesting that competition is becoming less fierce. Due to lack of data, trade in services does not form part of the following analysis, but it remains an important part of India's impact on world markets and must be seen as such.

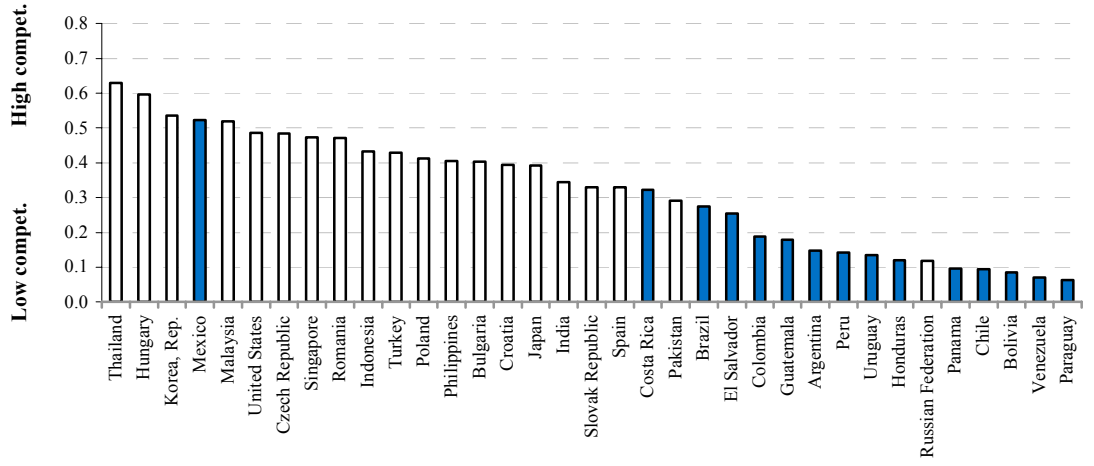
How exposed is Latin America to competition from China and India?

Most Latin American countries have little to fear from trade competition with China and India because Latin America is mainly exporting commodities.

The extent to which domestic firms will suffer from increased Asian competition is a central issue for Latin America. Currently, much of the competition takes place in the United States, the European Union and Japan. Nearly 70 per cent of Latin American exports go to these countries, compared with around 50 per cent of Chinese and more than 40 per cent of Indian exports. Competition is the most fierce in the United States, which alone received 57 per cent of Latin American exports in 2006, and where China and India have been increasing their market shares. However, the following analysis shows that compared to most Asian and Eastern European countries, most of Latin America has little to fear from increased trade with China and India.

ISBN: 978-92-64-03826-4

Figure 4.4. **Export Competition with China for Selected Countries (2000-05)**
Average coefficients of specialisation (CS) and coefficients of conformity (CC)



Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.

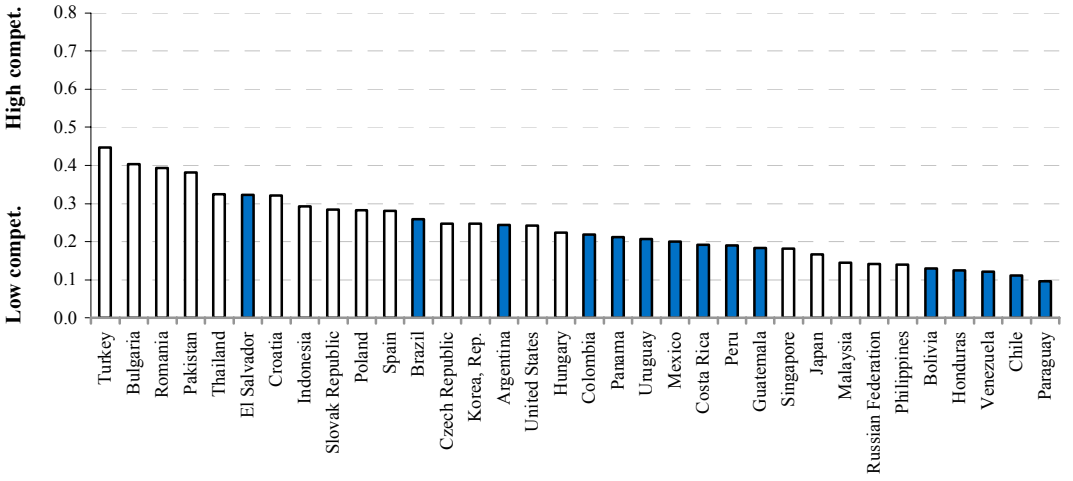
StatLink http://dx.doi.org/10.1787/121447200442

Figure 4.4 shows export competition with China for selected Latin American and emerging economies. Export competition is measured by comparing the trade structure of each country with China's. A high measure indicates similarity in export structures, as determined by the specialisation and conformity coefficients (see Statistical Annex, Methodological Note). If export structures are similar — as in Mexico's case, where Chinese and Mexican exports resemble each other closely — export competition is assumed to be high. For most of Latin America, however, there is little to support the perception of China and India as threatening competitors. In fact, Latin American states are among the least exposed. Other emerging economies such as Thailand, Hungary, and Malaysia are facing substantially tougher competition from Chinese exports. There are some exceptions to this general trend: Mexico, as mentioned above, as well as Costa Rica, and to a certain extent Brazil and El Salvador. The specific challenges for Mexico and Brazil will be discussed further below. Not surprisingly, countries that export mainly commodities face lower competition, as China is a net importer of these products. Paraguay, Venezuela, Bolivia, and Chile suffer the least from Chinese trade competition[6].

Competition with India is also relatively low (Figure 4.5). As with China, emerging countries in other parts of the world are more exposed to Indian export competition, among them Pakistan, Romania, Turkey and Bulgaria. El Salvador, Brazil and Argentina are among the Latin American countries faced with the most competition, but even here, competition is not very high.

ISBN: 978-92-64-03826-4 © OECD 2007

Figure 4.5. **Export Competition with India for Selected Countries (2000-05)**
Average CS and CC



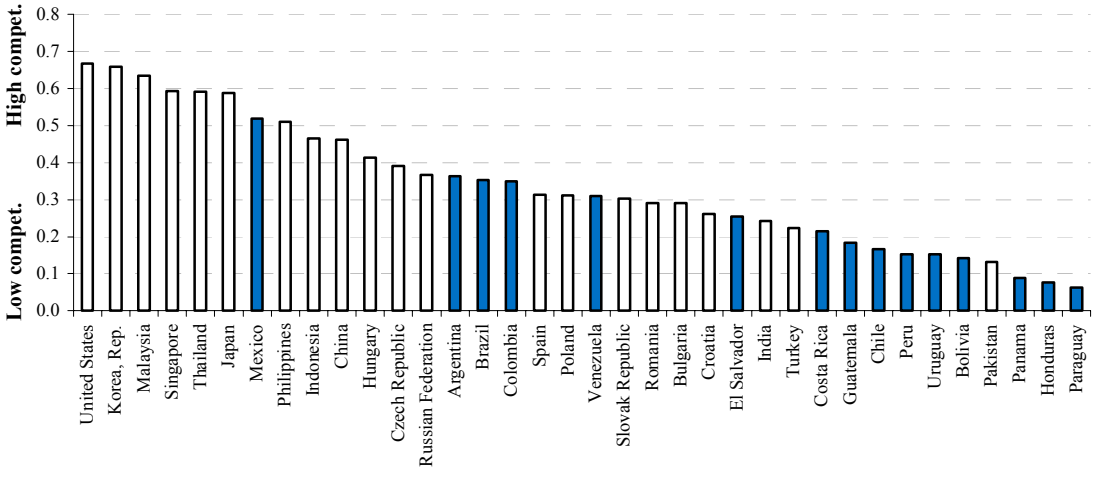
Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/121480464125

China and India are promising export destinations for Latin America

In fact, China and India offer an opportunity as potentially large importers of Latin American commodities.

China's and India's growth can also be seen as an opportunity, even for the countries facing increasing competitive pressure. China and India are the world's two most populous countries, and with rapidly growing internal markets accompanying increasing living standards, they are also very promising as export destinations.

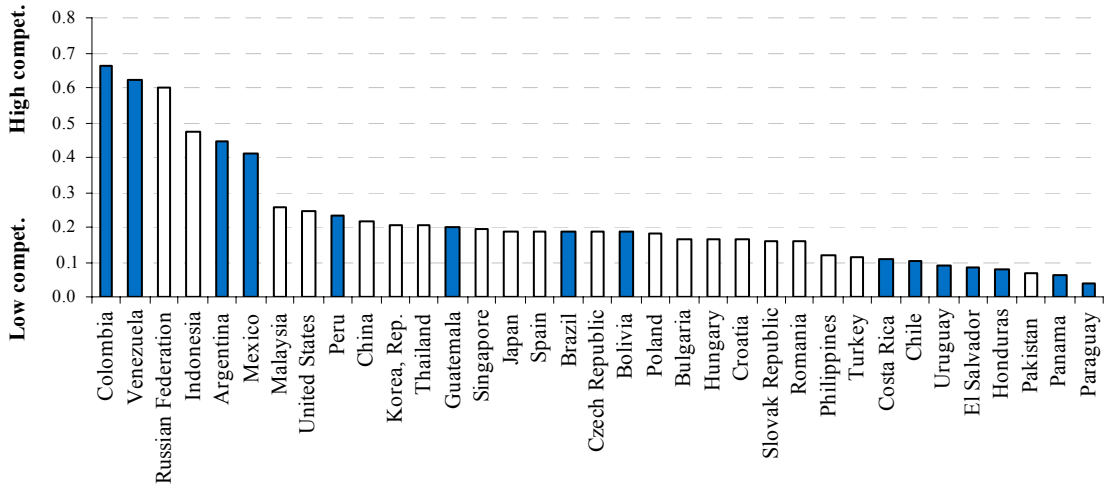
Figure 4.6. **Trade Opportunities with China for Selected Countries (2000-05)**
Modified CS and modified CC (average)



Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/121486007455

ISBN: 978-92-64-03826-4

Figure 4.7. **Trade Opportunities with India for Selected Countries (2000-05)**
Modified CS and modified CC (average)



Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/121488702387

At first glance (Figures 4.6 and 4.7), however, these results do not seem to suggest very strong complementarities for most of the Latin American countries. East Asian economies, such as Korea, Thailand, Japan and the Philippines, seem to have much stronger complementarities with China. This is not actually due to a lack of trade opportunities, but rather to the fact that potential trade is concentrated in a relatively small basket of goods. Many Latin American countries are commodity exporters. The main complementarity thus arises from Latin American exports of commodities, given the low prevalence of manufacturing-type goods in the exports of most countries in the region. The strong complementarity of Venezuela's exports with India, for instance, originates primarily from potential trade in oil. The fact that China's import growth is concentrated mainly in commodities suggests that its demand for these goods will have a positive impact on the region even if direct trade does not increase. Since commodities are almost homogenous goods, global prices would increase as China's demand rises, providing export opportunities to Latin American producers.

Yet for the countries with the largest trade potential with India and China, there are also substantial opportunities for intra-industry trade. Mexico, for instance, has considerable exports in telecommunications equipment and electric circuit equipment, sectors where China's and India's imports are also high, but where little trade is currently taking place[7]. For Brazil, beyond the large potential in commodities exports, other sectors also represent trade potential with China, including aircraft, telecommunications equipment and motor-vehicle parts. Colombia, both in relation to India and China, enjoys considerable trade potential in its natural-resource sectors, including oil and coal, but also in its manufacturing sectors. Argentina's main export opportunities are mainly found in natural resources, yet there could be substantial future opportunities in the export of processed food.

ISBN: 978-92-64-03826-4

Agriculture and agri-business are probably among the most promising areas for Latin America in terms of trade potential with China and India. As Chinese and Indian consumption behaviour evolves, new opportunities will appear insofar as Latin American agro-exporters manage to move up in the value chain, and diversify, brand and innovate in their export products. Argentina, Brazil, Chile and Uruguay all have established agricultural industries with expansion potential. They will also need to have open access to — and perhaps negotiate collectively — the Asian Giants' agro-product markets.

Our findings thus far indicate that Latin America has little reason to feel threatened by the growth of the Asian Giants and that significant trade opportunities do, in fact, exist, including in more "sophisticated" parts of the value chain. There are, however, countries that will have to contend with increased Indian and Chinese competition, and some sectors are likely to face difficulties. Another point worth mentioning in this regard is that, although China has improved its access to Latin American markets through its WTO membership, this also gives Latin American exporters increased access to Chinese markets, as well as the possibility to bring China before the dispute-settlement mechanism in case of conflict.

Trade complementarities and opportunities between Latin America and Asia do not only have an impact on exports and commercial imbalances. There are also important side-effects that impact on Latin American economies and pose new challenges to economic policy. Two of the main dimensions of these challenges are the danger of excessive specialisation in commodities and the need to take advantage of synergies between trade development and infrastructure[8].

Cornered? The Risks of Natural-resource Specialisation and How to Overcome Them

China's and India's high demand for commodities could, however, be weakening Latin American manufacturing sectors.

Of the 19 biggest Latin American and Caribbean exporters, 11 are specialised in commodities (Mulder, 2006), while both China and India are prime importers of these products. This sector is thus representing export opportunities for Latin America. In spite of the overall positive outlook, however, countries with an export structure that relies primarily on commodities run the risk of being cornered into natural-resource exports to the detriment of their other industries.

It is therefore important to examine whether trade with India and China has benefited the commodity-producing economies of Latin America, and then, the potential hazards that the latter might encounter, in particular the macroeconomic risks of Dutch disease, whereby heightened commodity-sector exports appreciate the exchange rate and lead to a decline in non-commodity exports. Two particular cases, Chile and Brazil, are considered in detail.

Latin American specialisation in the production of raw materials and their derivatives has increased in the past years, while manufacturing sectors have lost ground. Table 4.1 illustrates the export-specialisation pattern for the region's seven largest countries by using the Balassa index,

ISBN: 978-92-64-03826-4

calculated for the years 2000 and 2005, the period of the Asian Drivers' emergence. The Balassa index is a measure of each country's exports in a specific sector relative to global exports in the same sector. Figures greater than 1 indicate that a country has a comparative advantage in the sector. To a large extent, these figures point to raw-materials sectors as areas of specialisation: Latin American comparative advantage in soft commodities, such as grains and sugar, and hard commodities, such as metals and oil, has actually increased over the five-year period (see Statistical Annex Table 4.A10). At the same time, comparative advantage in the manufacturing sectors has weakened. Even Mexico, which had a strong relative position in manufacturing in 2000 and which from the mid-1980s managed an impressive trade diversification towards manufactures, has seen its comparative advantage diminish in this area. With the exceptions of Peru and Chile, Latin American specialisation in chemical products has also waned.

Table 4.1. **Specialisation Sectors for Selected Latin American Countries (2005)**
Balassa Index

Good	Product Name	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Average LAC
0	Food and live animals	**6.30**	**3.81**	**3.40**	**3.27**	0.85	**3.24**	0.07	**2.51**
1	Beverages and tobacco	**1.57**	**1.72**	**2.68**	0.51	**1.29**	0.11	0.12	**1.31**
2	Crude materials. except food/fuels	**3.13**	**5.46**	**10.52**	**1.77**	0.46	**7.94**	0.16	**2.82**
3	Mineral fuels/lubricants	**1.60**	0.60	0.21	**3.83**	**1.45**	0.91	**8.66**	**2.14**
4	Animal/veg. oils/fats/waxes	**22.07**	**3.56**	0.30	**1.60**	0.10	**2.63**	0.01	**2.86**
5	Chemicals/products n.e.s*	0.74	0.55	0.47	0.74	0.32	0.21	0.16	0.44
6	Manufactured goods	0.75	**1.32**	**2.54**	0.92	0.59	**1.44**	0.49	0.92
7	Machinery/transport equipment	0.27	0.66	0.04	0.15	**1.33**	0.02	0.03	0.71
8	Miscellaneous manuf. articles	0.17	0.36	0.06	0.68	**1.10**	0.70	0.02	0.64
9	Commodities n.e.s	0.57	0.12	0.90	0.88	0.11	**5.28**	0.06	0.40

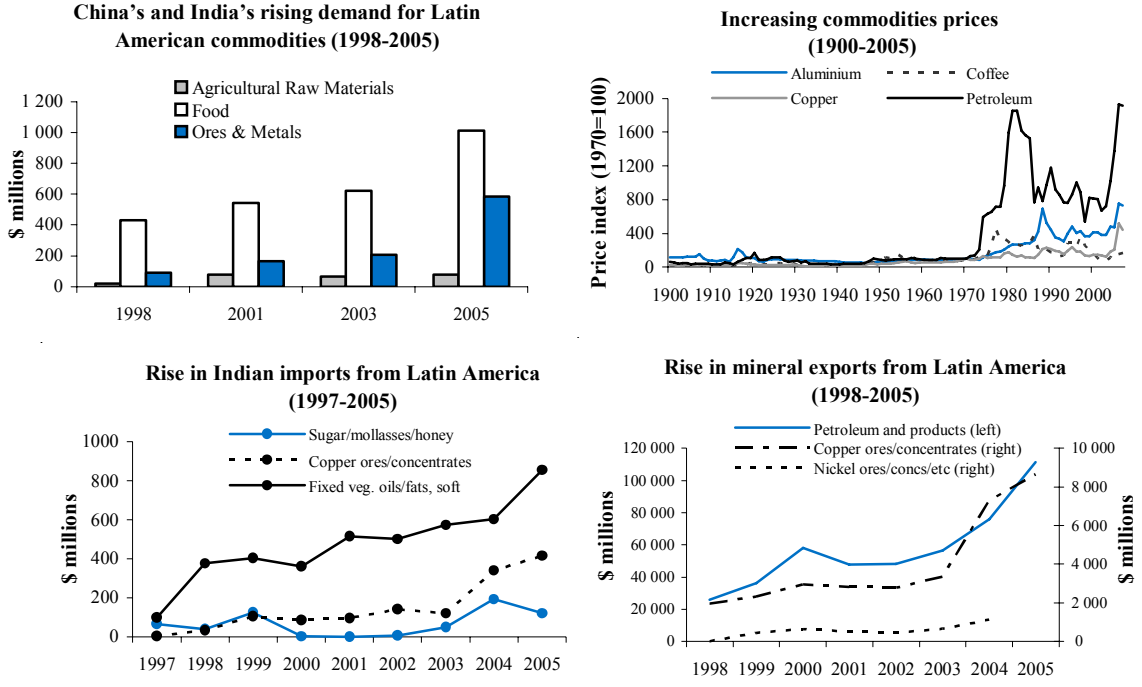
Note: * n.e.s. = not elsewhere specified.
Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122513460383

China's and India's strong demand could lead to even higher commodity concentration in Latin American exports. The four main Latin American commodity exports — oil, copper, soy and coffee — amount to 66 per cent of total Latin American raw material exports (Blázquez-Lidoy *et al.*, 2007). China absorbs an important share of these products, coffee excepted. Since 2003, it has been the world's first importer of copper and soybeans, and the fourth importer of oil, another sector that has benefited Latin American exports. Today, it is the second-largest

importer of oil, having overtaken Japan and Germany. The country accounted for 30 per cent of the growth of demand for oil in 2005 (IMF, 2006). Furthermore, with the Chinese private-car market expanding rapidly, the OECD International Energy Agency predicts that China will need to import 80 per cent of its oil by 2030 if current policies continue[9] (IEA, 2006*b*). In addition, in the three years leading up to 2005, China accounted for 50 per cent of the increase in world consumption of copper and aluminium, and for almost all the growth in nickel and tin consumption (IMF, 2006). Figure 4.8 shows how Latin American commodity prices have risen as the Asian Drivers' demand for commodities has increased. As the Indian industrial sector is smaller than China's, India is likely to have less impact on the metal prices than its north-eastern neighbour (IMF, 2006). Nonetheless, India was the world's sixth importer of oil in 2005 and has also been stepping up its demand for important Latin American commodities.

Figure 4.8. **China and India as Drivers of the Resource Boom**



Source: OECD Development Centre (2007); based on WITS and Comtrade data, Oxford Latin America Economic History Database and Thomson Datastream (2007).

StatLink http://dx.doi.org/10.1787/121506872280

China and India are affecting Latin American commodity exports both directly and indirectly. The growth in Chinese demand has already been reflected in the direct exports of several Latin American countries. Venezuela, for example, saw its crude shipments to China double between 2004 and 2005. Even in cases where direct trade has not grown, there is a favourable impact due to the rise in commodity prices. China's growing thirst for oil has certainly contributed to the current high oil prices. Furthermore, China's and India's overall contribution to world growth has helped maintain global output growth far above the 4 per cent threshold considered necessary for improving the terms of trade for primary-commodity producers.

ISBN: 978-92-64-03826-4

The negative effects of specialisation in commodities

Specialisation in commodities is known to have adverse effects on the rest of the economy and is problematic in the long run.

Increased commodity exports and windfall earnings bring about a number of risks. The extensive literature on the resource-curse phenomenon elucidates these risks, some related to macroeconomic performance, others to low levels of social development (Sachs and Warner, 1995; Gylfason, 2001; Auty, 2001). Governance and institutions have also been stressed as important parts of the equation. There are two main frameworks to explain the resource curse, one focusing on economic effects and another looking more closely at political-economy arguments (Karl, 1997), but there is frequent overlapping between the two.

Political-economy perspectives include increased rent seeking[10], loss of fiscal control and higher inflation, as well as an exacerbation of transparency and accountability problems, and thus increased opportunity for corruption and inefficient governance. In addition, experience has shown that in many cases, high incomes from extractive industries in particular are highly correlated with instability and conflict (Bannon and Collier, 2003). Although the most extreme cases of this have been more prevalent in other parts of the world, corruption and lack of accountability are also features of the Latin American experience. Two large Latin American oil exporters, Ecuador and Venezuela, both obtained unfavourable placements in Transparency International's 2006 corruption ranking, showing the highest rate of corruption and lack of accountability of all Latin American countries, or just after Haiti if the Caribbean is included. In contrast, another natural-resource exporter, Chile, received a very good score in the same ranking. These indicators are consistent with the World Economic Forum 2005 ranking of the prevalence of diversion of public funds in Latin American countries (World Economic Forum, 2006). Policy recommendations to promote fair distribution of income and ensure efficient and accountable handling of public finances are particularly relevant for countries with high resource rents (see Chapter 1 of this publication). This also underscores the need for strong institutions, and checks and balances, even in democratic countries (Collier, 2007; Mehlum *et al.*, 2006; Boschini *et al.*, 2006; Jaspers and Oman, forthcoming).

From the purely economic perspective, the "resource curse" is primarily the case of so-called Dutch disease, whereby the appreciated exchange rate subsequent to high demand for the commodity sector causes crowding out of non-commodity sectors. Linked to this, is the fact that a Dutch-disease-type crowding out of the remaining sectors can instigate increased protection of these industries. Such subsidies are likely to be unsustainable when revenues fall, leaving the protected sector companies in great difficulty (ODI, 2006). In addition, increased specialisation in natural resources entails an increased risk of volatility in the longer term. This emphasises the need for stable and predictable macroeconomic policies, fiscal policies in particular. Furthermore, commodity sectors tend to imply less learning-by-doing and fewer linkages to the rest of the economy because of the often significant differences in technology. Hence, there are fewer beneficial effects for the rest of the economy that can contribute to overall growth[11]. High incomes from the commodity sector also tend to go hand in hand with lower levels of investment in research and development (R&D) (Maloney and Rodríguez-Clare, 2005).

ISBN: 978-92-64-03826-4

The Latin American region has experienced cases of Dutch disease in the past. One example is Colombia's coffee windfall between 1975 and 1980. Mexico, Venezuela, Brazil, Ecuador, Bolivia and Peru can also be said to have endured excessive specialisation in the past and seen their non-commodity export sectors suffer (Mulder, 2006). Currently, the terms of trade have risen considerably in some countries, such as Colombia, Chile and Uruguay, indicating that the prices of their main exports are increasing faster than their imports (Statistical Annex Table 4.A8). This export-sector boom could lead to a rise in real exchange rates, discouraging the development of non-commodity sectors and promoting both non-tradables and imports. The manufacturing industry in Latin America could therefore be adversely affected.

The keys to overcoming the adverse effects of specialisation

Avoiding the adverse effects of specialisation implies investing in innovation, involving the private sector in R&D and implementing good fiscal policy.

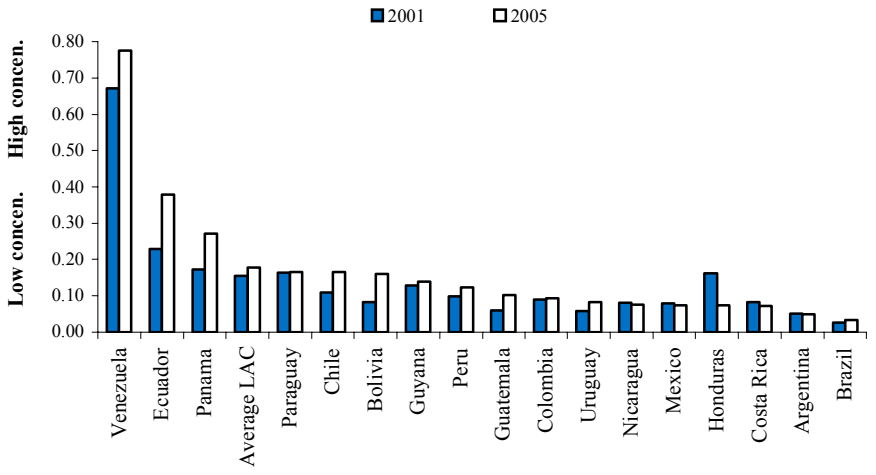
So what is the current Chinese and Indian demand for commodities doing to Latin American economies? Is there indeed a risk of excessive commodity specialisation, Dutch disease, and longer-term problems? As seen above, the rise of exports from Latin America has accompanied growing commodity prices and terms of trade, which means that the region might be suffering from Dutch disease. To ascertain whether that is truly the case, two main characteristics need to be observed: the predominance of a specific good in the export structure of the economy and an appreciation of the real exchange rate.

Figure 4.9 shows the degree of product concentration in Latin American exports for 2001 and 2005, the period of the Asian Drivers' emergence, as calculated using the Herfindahl-Hirschman index. This concentration measure takes into account the share of each exported product in total exports. Where export shares of single products are high, the indicator takes a higher value. Here, it suggests that commodity specialisation could be affecting the countries exporting raw materials. With few exceptions, notably Costa Rica and Argentina, most Latin American countries today are showing a higher degree of export concentration than at the beginning of the century. The most revealing cases are Venezuela, Ecuador, Bolivia and Chile, where product concentration has been increasing substantially.

There are a number of ways to deal with increasing terms of trade without allowing Dutch disease or excessive volatility to develop. In some cases, introducing new mechanisms to prevent appreciation, including stabilisation funds, counter-cyclical fiscal rules and issuing of debt, has worked well. It is also important to ensure that natural wealth is not perceived as benefiting only a segment of the population, whether geographic or socio-economic, in which case natural-resource wealth and inflows can accentuate the political tension that surrounds already existing inequalities. Chile has been one of the countries that have shown stability and economic responsibility, and where institutions have been credible and strong. Its experience is related in Box 4.1 together with Brazil's. Also, other countries — Australia, Finland and Norway, for instance — have been successful in dealing with their natural resources. The challenge for Latin American countries is to be able to manage their commodities with the same amount of success.

ISBN: 978-92-64-03826-4

Figure 4.9. **Export Concentration in Products for Selected Latin American Countries (2001 and 2005)**
Herfindahl-Hirschman index by product



Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/121580806470

The current macroeconomic measures taken by Latin American countries appear to have been relatively successful in dealing with strong commodity demand. Statistical Annex Table 4.A9 displays inflation and real effective exchange rates (REER) for most Latin American countries from 1995 to 2006. The period in which Asian commodity-import demand grew significantly began around 2000. In general, the picture that emerges is one of macroeconomic stability, with inflation and real effective appreciation well contained. This has been accompanied by a recent strengthening of fiscal positions, a consequence not only of the beneficial external trading climate, but also of a deep reform of fiscal institutions (Lora and Cárdenas, 2006; Singh, 2006), although several of these reforms have not yet been completed (see Chapter 1 of this publication). For instance, 12 of 18 Latin American countries have introduced numerical restrictions since the early 1990s, and a number of countries have recently established oil or stabilisation funds (Filc and Scartascini, 2006)[12]. In addition, 12 Latin American countries have recently introduced laws and regulations for free access to information and fiscal results, moves which should work to further stimulate accountable and responsible policies. These measures are not necessarily enough, however. Some countries, for example, while placing their revenues in funds, have also increased their borrowing. To avoid such effects and for prudent stabilising and savings policies to work, responsible and accountable policy implementation is crucial.

Specialisation in natural resources underscores the need to innovate. Although a low degree of product variety and low shares of intra-industry trade can limit long-term growth, Latin America scores unimpressively in innovation rankings: according to the Global Competitiveness Index (World Economic Forum, 2006), the region has the weakest score of all, with Costa Rica, Brazil and Chile being exceptions to the overall modest performance. Another problem is that

ISBN: 978-92-64-03826-4

Latin American R&D is largely focused on basic research and has relatively little private-sector participation. Furthermore, a good record in educational attainment is imperative for improving R&D performance and represents a challenge, even for the best performers in Latin America (Box 4.1). Not only does the bonanza identify the need to focus on innovation, it is also a good context in which to introduce measures for such a focus (Larraín, 2006), given that higher commodity revenues enable investment in innovation and in human capital. This, together with investment in infrastructure, would improve the competitive position of the economy's exporters and offset the negative impact of any exchange-rate appreciation.

Diversifying the economy and taking advantage of export opportunities that may exist in other sectors also require a sound business environment, so that Latin American countries remain attractive destinations for FDI and for co-operation on innovation. Part of the problem for South American countries today, in the realm of specialisation, is that much of the FDI has gone into natural-resource extraction. Only Mexico and Central America have received mainly export-oriented FDI (Garcia-Herrero and Santabárbera, 2007).

Box 4.1. **Profiting from Export Opportunities while Avoiding Excessive Specialisation: Two Latin American Examples**

Chile: Successful macro management and emphasis on innovation

As the world's largest producer of copper, Chile is one of the countries with clear export opportunities to the Asian Giants[13]. Its copper industry has benefited greatly from soaring copper prices. Chile was also the first Latin American country to sign a free-trade agreement with China, in 2005. Yet Chile has also been successful in reducing its reliance on mining over time: from making up 89 per cent of merchandise exports in 1973, the mining content in exports decreased gradually to 41 per cent in 2001, before increasing slightly as a result of the recent high copper price. Copper is, however, still a significant export: copper earnings constituted 15.5 per cent of government revenues in 2005 (OECD, 2007*a*). The Copper Stabilisation Fund, established in 1987, has helped to alleviate the negative effects of the copper cycle. What has been particularly important is the introduction of the fiscal rule, first adopted in 2000, that requires a structural surplus, adjusted both for trend GDP and for the long-term copper price. Added to that, though not included in the rule, is a structural surplus target of 1 per cent, which has been largely met (García *et al.*, 2005; Gregorio, 2006). Chile has also been strengthening its fiscal institutions with, among other features, increased and more transparent reporting. At the same time, monetary policy has consisted of full-fledged inflation targeting and exchange-rate flexibility (Mello and Moccero, 2007). This policy has so far been successful in limiting the unwanted consequences of the copper price boom, as can be seen in a comparison with another copper-based economy, Zambia.

Zambia and Chile are both highly dependent on copper, but have implemented distinctly contrasting macroeconomic strategies to deal with its recent price hike, with distinctly contrasting results. Chile followed a saving rule specifying that all incremental revenue was to be saved, whereas Zambia continued to run a fiscal deficit. In 2005, the real exchange rate mildly depreciated in Chile despite the boom, whereas in Zambia it appreciated by nearly 80 per cent, causing intense problems for its non-copper exports[14].

ISBN: 978-92-64-03826-4

Box 4.1 (contd.)

There is still room for increasing the positive effects on growth of higher value-added sectors surrounding the copper industry, for instance through mining consultancy and mining-machinery production. Chile has, however, done a very good job in diversifying well beyond copper and developing other industries, including fresh fruit, wine and salmon production, in particular. In these sectors, there has also been innovation, though technologies in Chile have been mainly adopted from abroad (OECD, 2007*b*). The introduction of new berry species, quality-wine production and quality control and certification of fruits for export have been among the achievements of Fundación Chile, a front-runner in innovation partnerships[15]. This foundation was initiated by the Chilean government and the United States ITT Corporation to transfer state-of-the-art technology, management techniques and human skills to natural-resource-intensive sectors. In 2005, the Chilean government introduced a mining tax to boost public R&D spending, and also set up a National Innovation Council. One of the chief remaining challenges is to incorporate the private sector into financing innovation, as well as to achieve higher tertiary-education attainment in order to offset the lack of skilled personnel. Shortages in human resources are also one of the main reasons why the relationships between industry and science are not meeting their potential. Significant measures are being implemented, and quality has increased, but there is still room for improvement (OECD, 2005, 2007*b*).

Brazil: Seizing the benefits from export opportunities

Brazil is Latin America's largest economy, and has one of the highest rates of GDP per capita and the most diversified economy, both in terms of products and export destinations (Figures 4.9 and 4.11). Like India and China, it is also among the countries that are home to a large number of emerging-market multinationals (see Chapter 3 of this publication). Brazil is one of the Latin American countries that have gained significantly from increased trade with China, yet it is also exposed to Chinese competition. A particular concern is that trade with China could lead to excessive specialisation in commodities.

On the positive side, China has become Brazil's fastest-growing export market. From 2002 to 2003, for instance, Brazil's exports to China increased by 80 per cent. Altogether, exports to China make up 6.2 per cent of Brazilian exports, up from 1.4 per cent in 1999. Five Brazilian products have benefited particularly from Chinese demand: soybeans, soy oil, iron ore, steel and wood, accounting for 75 per cent of Brazil's exports to China last year. Brazil's exports to India have also increased, though much less so and from a much lower level.

Certain features of Brazil's economy have led some observers to conclude that the country is facing a classic case of Dutch disease. The country has seen an increase in its export earnings, partly due to an increase in quantity but for the most part (70 per cent) due to an increase in price. The real exchange rate has also recently appreciated (Statistical Annex Table 4.A9). On the other hand, the Brazilian economy is still highly diversified and so are its marginal exports (Schwartsman, 2006). An economy affected by Dutch disease can normally be identified by one product, or a narrowly defined group of products, making up the bulk of exports and of export growth. At the same time, manufactured products would be losing ground in exports. This is currently not the case in Brazil. None of the largest growth sectors feature much more than 20 per cent of export growth — and none of the biggest groups in export growth are commodities. In fact, the textiles sector's share of exports is still growing, in spite of sharp competition from China and India. As can be seen in Figure 4.10, exports of agricultural raw materials, ores and metals have increased in the past years, but so have other, higher value-added sectors.

ISBN: 978-92-64-03826-4

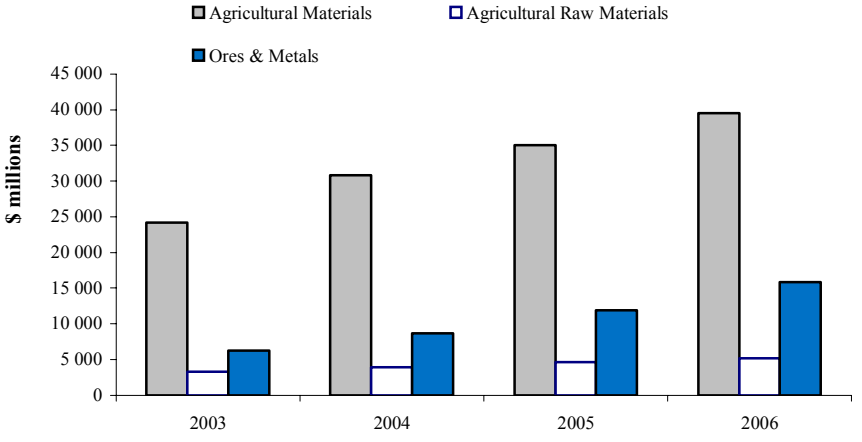
Box 4.1 (contd.)

Brazil has been able to develop a strong manufacturing and industrial base, but this does not mean that there is reason for complacency. The aircraft manufacturer Embraer's 2006 mega-contract with China for the supply of 100 jets is a good sign. If in the future, China continues to expand its exports and to gain market shares in third markets for a wider range of products, Brazil might have to face changing economic dynamics. The low-technology sectors are those particularly facing the strongest competition from China (Paiva de Abreu, 2006). In the longer term, this threat could also be extended to the automobile industry.

There are also problems in trade policies that need to be sorted out. Brazil's and China's profiles in agriculture are quite complementary, so they have an opportunity to strengthen bilateral trade and investment. Chinese agricultural imports from Brazil have skyrocketed since the mid-1990s, yet not without problems. Soybean exports were blocked from entering China in 2002, 2003 and 2004 because of allegations of genetically modified grains and of fungus contamination (Queiroz de Monteiro Jales *et al.*, 2006).

A persistent challenge for Brazil is to maintain the same type of exports to China as to other regions and to avoid excessive specialisation in commodities. To do so, it will be crucial to upgrade Brazil's infrastructure, which is suffering from severe inefficiencies, a subject explored further below. In addition, although Brazil has realised the importance of innovation and although it is among the best performers in Latin America (OECD, 2006*b*; World Economic Forum, 2006), there is still room for improvement. R&D spending is still consistently lower than in OECD countries and is concentrated in the public sector. The latest OECD review of Brazilian innovation policy found that the country is beginning to focus on potential synergies among science and technology promotion, R&D support and trade competitiveness (OECD, 2006*b*), but these policies will need to be supplemented by measures aimed at tackling the shortage of skills in the labour force. There is particular need for increased higher-education attainment, and the gap in this sector is getting larger relative to the OECD area. These innovation, education and infrastructure policies are all central to Brazil's continued growth and diversification.

Figure 4.10. **Revenues from Brazilian Commodities Exports**



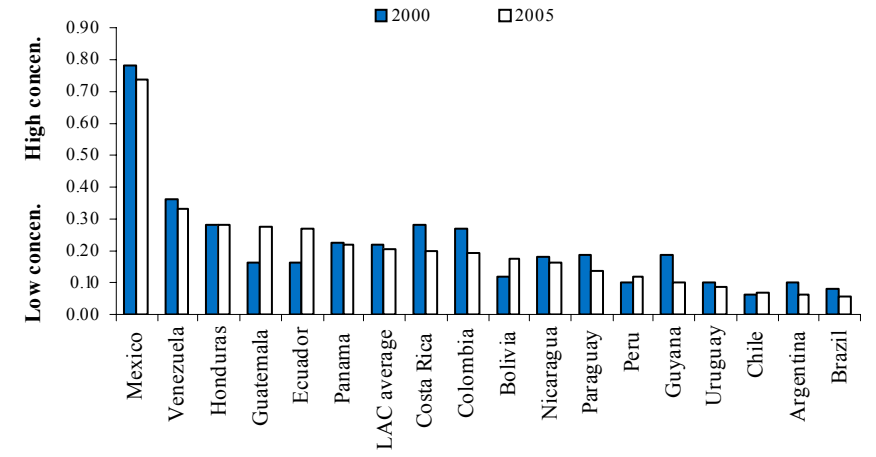
Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/121607318582

ISBN: 978-92-64-03826-4

While China's and India's heightened demand has induced increased commodity specialisation, it has, by contrast, reduced specialisation in terms of export destinations. Figure 4.11 shows the concentration in export destinations among Latin American countries. The measure takes into account the share of goods exported to each export destination. If export shares to single destinations are high, the value of the indicator is also high. As the figure shows, Latin American exports were slightly less concentrated in 2005 than in 2000, which means that they are becoming less dependent on just a few trading partners and are hence less exposed to external shocks emanating from these economies. In fact, this is the first time in its history that the region is dealing with three main trading centres — the United States, the European Union and Asia — although the United States is still by far the most important export destination, receiving over 50 per cent of Latin American exports on average. As Asian domestic markets grow, trade complementarities with Latin America can be expected to bring about further growth in trade and lead to even further diversification in terms of export destinations. In this respect, China and India represent a unique historical opportunity for Latin America.

Figure 4.11. **Export Concentration by Destination for Selected Latin American Countries (2000 and 2005)**
Herfindahl-Hirschman index by destination



Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/121625487382

Latin American countries also have a tremendous geographic comparative advantage, but it needs to be enhanced by infrastructure investment.

Infrastructure in Latin America: A Serious Drawback and a Golden Opportunity

One of the prime competitive advantages of Latin America is its relative proximity to its main markets, particularly for the countries closest to the United States. Not only do Chinese exporters suffer higher

transport costs, but long-distance transport also involves delays that contribute to raising freight and transaction costs (Hummels, 2001). This is particularly important in sectors where time is a strategic advantage.

Good infrastructure can contribute to strengthening Latin America's competitive trade position and the region's ability to take advantage of its proximity to the United States. Yet investment in infrastructure remains inadequate, and poor infrastructure can undermine competitiveness. Indeed, the effect of distance on trade has not decreased, but increased, in recent decades (Deardoff, 2004; Brun *et al.*, 2005; Glaeser and Kohlhase, 2003). Timely delivery is a key asset both because it allows retailers to respond quickly and efficiently to fluctuating final demand without holding costly inventories, and because it is possible only where production is located close to consumers (Evans and Harrigan, 2003; Oman, 1996).

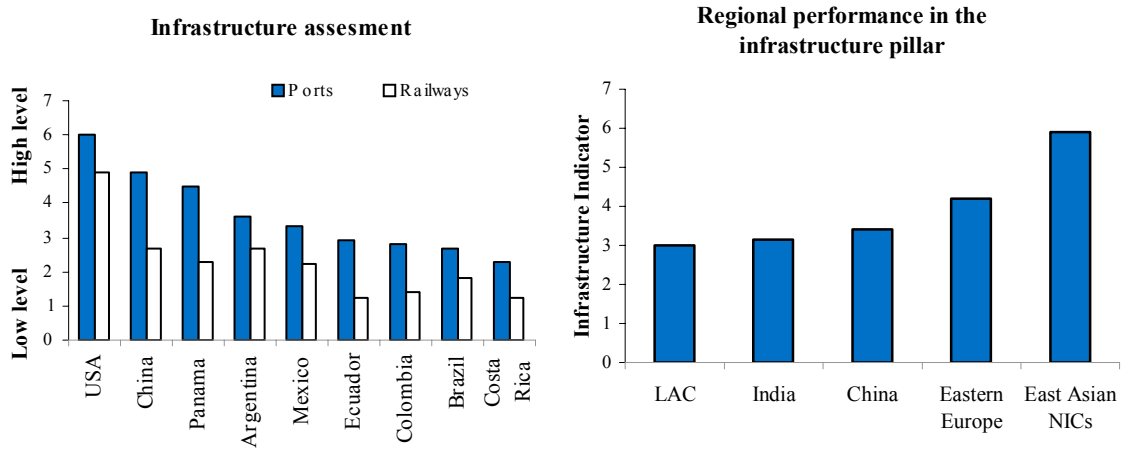
Latin American countries facing competition from the Asian Drivers would benefit from identifying sectors and products where distance and time are key competitive assets — such as clothing whose fashions change frequently and rapidly, and intermediate automotive and electronic goods in lean production systems that rely on just-in-time delivery of these inputs — and they would do well to capitalise on these sectors by improving their infrastructure. In most cases, transport costs actually pose higher barriers to the United States market than do tariffs (Clark *et al.*, 2004). Surprisingly, Latin American average freight costs are similar or even higher than those of China, Mexico excepted. For some countries, such as Chile or Ecuador, transport costs exceed by more than 20 times the average tariffs they face in the United States. A recent study shows that due to the low development of roads and ports in some countries, inventories there tend to be twice as big as in some industrialised economies (Guasch, 2004).

High transport costs are not only due to distance but — crucially — to the quality of infrastructure. In a detailed analysis of shipping costs to the United States market, port efficiency is identified as an important determinant of shipping costs (Clark *et al.*, 2004). It is found that improving port efficiency, as defined by the World Economic Forum's *Global Competitiveness Report*, will considerably reduce shipping costs. In the case of Mexico, which benefits from United States proximity, an improvement in port efficiency to the levels observed in countries such as France or Sweden would reduce transport costs by about 10 per cent. In the case of Brazil or Ecuador, it would reduce their maritime transport costs by more than 15 per cent.

Competitiveness indicators underscore the large heterogeneity in performance across Latin American countries (Figure 4.12). With China seeming to outperform most countries, the geographic advantage of Latin America is not reflected in the data. Certainly, the relevance of infrastructure investment differs for each sector of the economy. Commodity-intensive economies such as Chile and Venezuela focus their infrastructure investments on transport, whereas other countries relying increasingly on manufacturing, such as Mexico, focus on developing energy-related improvements. On the whole, it is estimated that for coastal countries, about 40 per cent of predicted transport costs are related to the quality of onshore infrastructure (Limão and Venables, 2000).

ISBN: 978-92-64-03826-4

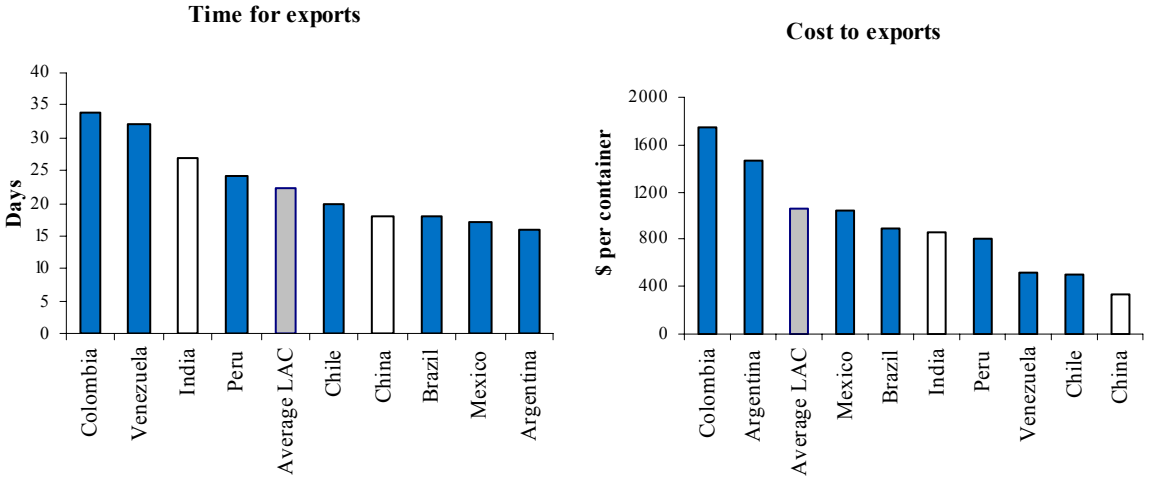
Figure 4.12. **Infrastructure for Trade in Latin America**



Source: OECD Development Centre (2007); based on CG/LA Infrastructure Database on Global Infrastructure Competitiveness (2006) and World Economic Forum (2005) data.

StatLink http://dx.doi.org/10.1787/121627564172

Figure 4.13. **Competitiveness for Trade in Latin America**



Source: World Bank (2007), *Doing Business Report*.

StatLink http://dx.doi.org/10.1787/121635686517

Infrastructure problems persist in several areas. There are twice as many roads per capita in Asia, for instance, as in Latin America. In Brazil, only 5 per cent of roads are paved and both railroad and fluvial systems are underdeveloped. Port efficiency differs drastically across regions, and the ports of Hong Kong, China and Singapore dramatically surpass most Latin American ports. Telecommunications, on the other hand, are a relatively well-developed field (see Chapter 3 of this publication). Investments in this sector have been higher (Calderón and Servén, 2004), particularly due to very high private investment following liberalisation and privatisation, and appropriate regulation mechanisms have been adopted.

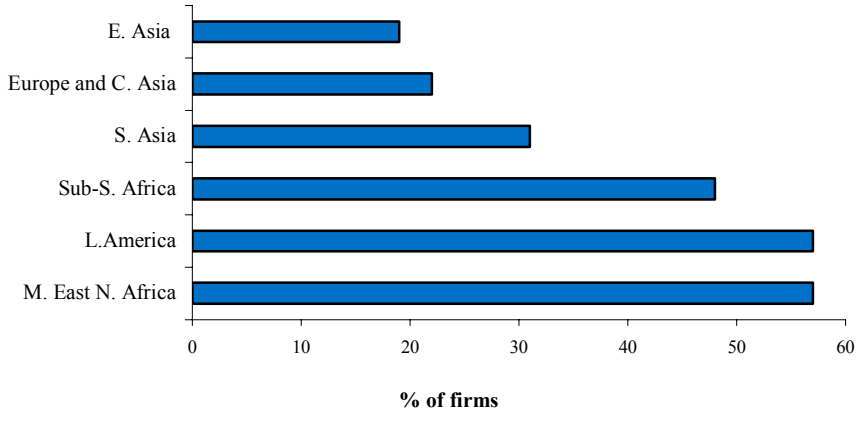
ISBN: 978-92-64-03826-4

The challenges of Latin American infrastructure are also reflected in the views of the private sector. Latin American businesses are very preoccupied by infrastructure. In a recent Investment Climate survey, over 50 per cent of Latin American businesses considered infrastructure to be a serious problem (Fay and Morrison, 2006). In contrast, in East Asia and South Asia, under 20 per cent and 30 per cent agreed to the same statement, respectively (Figure 4.14).

Differences in transport costs and port efficiency reflect not only the infrastructure itself but also its management and the legal variables. Cargo-handling restrictions, that is, special requirements to suppliers, and mandatory port services are considerable limitations to competition and efficiency at the port level[16]. Results from the 2007 World Bank *Doing Business* report show that Latin American countries face high costs to deal with export regulations, and that goods also take longer to leave the country for the same reason (Figure 4.13). Evidence on Latin America shows that moderate levels of regulation are required for improving port efficiency, for instance in Argentina, yet excessive regulation can have detrimental effects, such as those seen in Brazil (Clark *et al.*, 2004).

The main explanations for deficient infrastructure are low investment rates and flawed project implementation. Although the successful examples of Chile and Colombia have confirmed the importance of transforming high growth rates into high infrastructure-investment rates, other countries have not followed. On average, Latin American countries are spending considerably less on infrastructure than what is required. A recent World Bank study on infrastructure in Latin America and the Caribbean concludes that while 4 to 6 per cent of GDP would have been needed as investment in infrastructure to catch up with the Asian Tigers, Latin American countries are only spending around 2 per cent of GDP in that area (Fay and Morrison, 2006).

Figure 4.14. **Perception of the Infrastructure per Region (2005)**
Percentage of businesses seeing infrastructure as a serious problem



Source: OECD Development Centre (2007); based on Investment Climate survey (2005) data.
StatLink http://dx.doi.org/10.1787/121636304113

ISBN: 978-92-64-03826-4

Poor project execution is another reason for continuous distress in infrastructure projects, with short-term planning and management changes as some of the factors aggravating the situation. An important dimension in the implementation of infrastructure projects is also the success of public-private partnerships. Chile, and to some extent Colombia, have used these to their advantage, and it is precisely in these two countries that significant infrastructure investment has taken place since the mid-1990s (Calderón and Servén, 2004). Mexico, despite important efforts, has failed to encourage sound investment in infrastructure (Box 4.2). In the same way, Brazil has not shown any significant improvement in the area of transportation.

Efficient export infrastructure is particularly important for the exporting sectors facing increased competition, often, precisely, as a result of the Asian Tigers' emergence. Deficient infrastructure can also create problems for the sectors benefiting from the current global economic climate. Argentina, for instance, is one of the main exporters of soy oil, but the country's shortcomings in its ports and waterways are likely to be a limiting factor for these exports (World Bank, 2006*a*).

Finding solutions

The solution lies in attracting private investment through the implementation of a stable legal framework.

Although Latin America has authored some successful stories with privatisation policies, for instance in telecommunications, these have occasionally been overshadowed by unsuccessful experiences in partnerships for infrastructure projects. As a result, emphasis on privatisation policies has weakened in recent years, accompanied by a decline in the resources devoted to infrastructure by the private sector (Leipziger, 2004). Any attempt for improving infrastructure levels in the region cannot be accomplished without private participants engaging, and — as shown above — it is in their interest to do so. The promotion of "national projects", such as the Panama Canal, can also be important, but investment projects need to be profitable and well-monitored in order to be attractive to investors. Substantial foreign investments have already taken place in the telecommunications sector of Latin America (see Chapter 3 of this publication), and infrastructure can become a solid candidate for FDI from enterprises based in OECD countries. France, Spain and Germany all have major corporate players in this field.

Regulation, too, is important for infrastructure policies, and legal stability is necessary to attract the private sector. Frequent renegotiations of infrastructure-concession contracts are a common problem in the region, and this should be minimised with the help of adequate regulation policies and their implementation. To make infrastructure projects attractive to the private sector, strengthening transparency in contract concessions is essential. This would also improve confidence in public-private infrastructure ventures. OECD's FDI Regulatory Restrictiveness Index shows that Brazil, Chile and Mexico are relatively closed to FDI in the transport sector, both compared to the OECD average and to the 13 non-OECD countries considered in the index. Argentina, on the other hand, was more open than the OECD average, though FDI restrictiveness in roads was still quite high (Koyama and Golub, 2006).

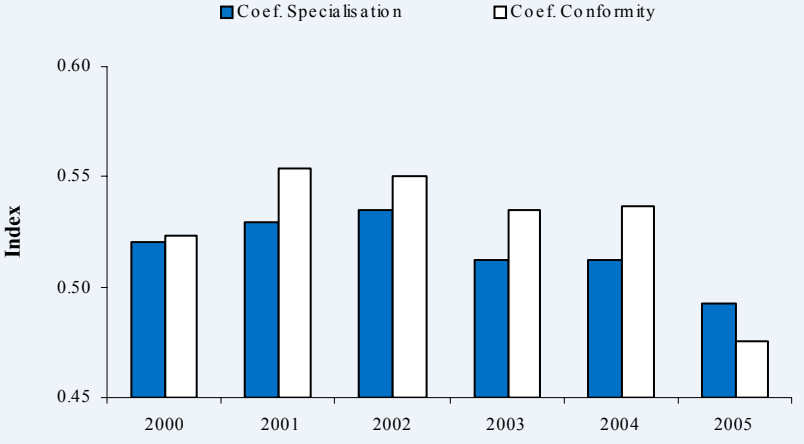
ISBN: 978-92-64-03826-4

Fiscal policy also has an important role to play to ensure the sound development of infrastructure. Reforms are indispensable to give governments a proper platform to launch financially healthy infrastructure projects. The extent to which it is possible to balance fiscal discipline with infrastructure spending needs more detailed country-specific assessments. Latin American governments have, however, started to realise the significant returns that infrastructure expenditure could have for growth, given the well-established link between infrastructure and growth performance, as exemplified by some Asian economies.

Box 4.2. Mexico: So Close to the Big Market but Lagging behind in the Race

The most eye-catching prey to Chinese export competition is Mexico, and this is also one of the countries where improved infrastructure would bring the most significant gains. Out of all the countries in our analysis in Figure 4.4 above, only Korea, Hungary and Thailand suffer from tougher competition with the Asian Giants. China's and Mexico's strong competition is focused on information technology and consumer electronics, electronic components, clothing and miscellaneous manufacturing, thus displaying significant manufacturing trade competition between the two economies[17].

Figure 4.15. **Evolution of Mexico's Competition with China**



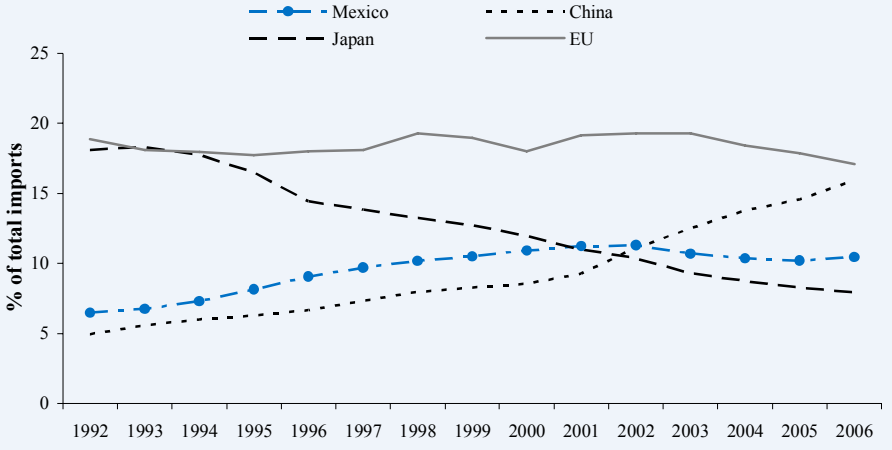
Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/121643843448

The United States market is at the heart of Chinese and Mexican export competition. It is by far Mexico's largest export market, absorbing more than 85 per cent of Mexican exports. Mexico's share of US imports has declined, however, while China's has been increasing in recent years. In 2003, China surpassed Mexico for the first time in terms of exports to the United States market, achieving a share of 12.1 per cent of US imports, as compared to 11 per cent from Mexico, and it has been progressively increasing its lead ever since (Figure 4.16).

ISBN: 978-92-64-03826-4

Box 4.2 (contd.)

Figure 4.16. **United States Imports Share by Exporting Country**



Source: OECD Development Centre (2007); based on WITS and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/121682318243

For Mexico, the global emergence of China represents a challenge. It has been found that if Chinese export capabilities had remained unchanged, Mexico's annual export growth rate would have been 3 percentage points higher in the early 2000s (Santiso, 2007). This is also reflected in an OECD projection showing Mexico as one of the few OECD countries that stand to suffer from Chinese implementation of WTO commitments in all goods and selected services sectors (Greene *et al.*, 2006). Although Mexico would gain on the services side, it would stand to lose $192 million in real income and welfare.

This has led to concerns that the Mexican export model itself is at risk. Mexican *maquiladoras* — factories mostly run by US, European and Asian enterprises, set up since the mid-1960s in Mexico near the United States border — are specialised in low value-added manufactures. Yet this is precisely the area where China can produce at even lower cost, and it is likely that Chinese competition will lead to changes in Mexico's current export structure. Such changes have already taken place in countries such as Singapore, Chinese Taipei and Korea, which have reduced their exports of manufactured goods, machinery and transport equipment (Blázquez-Lidoy *et al.*, 2007). As can be seen from Figure 4.15, Mexico's trade competition with China has in fact decreased from 2001 to 2005. Moreover, North American Free Trade Agreement (NAFTA) regulations have required a phasing out of *maquiladora* benefits starting in 2001, leading *maquiladora* production to decrease (Engman *et al.*, 2007). All this affects Mexican exports to the United States, and heightens the need to improve the competitiveness of Mexican firms.

Mexico has a significant advantage in its proximity to the United States market. It is clear that increased investment in infrastructure and focus on industries where timely delivery amounts to a substantial strategic advantage would be to Mexico's benefit.

ISBN: 978-92-64-03826-4

Infrastructure therefore remains a critical part of the response to increased competition in the exposed sectors. A country such as Mexico, in particular, needs to exploit its geographical position better by improving infrastructure, but in Latin America as a whole, infrastructure investment is a considerable opportunity that can serve to make exports more competitive. Investment in infrastructure is also likely to have significant impact not only on growth, but on inequality and poverty — and estimations show these to be of substantial potential for Latin America (Calderón and Servén, 2004). The challenge remains: increasing investment is crucial but is not the solution alone. It is vital to develop a strategic vision, and a well-organised public sector capable of managing infrastructure projects. Involving the private sector is essential, as is finding a balance between infrastructure expenditure and fiscal discipline.

Transforming Trade Competition into a Development Opportunity

Innovation, infrastructure and macroeconomic prudence are the keywords for using trade competition with the Asian Giants as an opportunity for development in Latin America.

The growth of China and India have impacted on the trade relations of Latin American countries. While the Asian Giants' surge in exports has been the cause of some apprehension, the results in this study show that it poses little threat to most Latin American countries. On the contrary, there are substantial benefits to be had — both directly through increased trade with China and India, and indirectly through the profitable export prices their rapid growth has offered to Latin American commodity exporters.

Although the growth of China and India is not an immediate threat to most of Latin America, it does emphasise a number of the challenges facing the continent. Increased trade with China and India is likely to increase export opportunities for the bulk of Latin American countries, but these exports will likely be concentrated in commodities. As a result, among the main challenges that are likely to arise are the questions of how to ensure continued diversification of the economy and how to manage fiscal revenues in a way that does not expose a country to Dutch disease. It is important to make sure that there are linkages between the commodity-export sectors and other parts of the economy, and in particular to encourage innovation surrounding the commodity.

For the non-commodity sectors of the economy to prosper, however, their competitiveness must increase. At the moment, one of the most serious drawbacks of Latin American economies is their lack of appropriate infrastructure. Inadequacies in the port system, and in the road and railroad networks, hamper export potential. Substantial progress needs to be made by increasing investments in these sectors, yet such investment does not appear to be forthcoming. Part of the problem often lies in poor project implementation and inadequate regulation. For Mexico and the Central American countries, which are the most exposed to competition from China and India, it is particularly important to build infrastructure that will enable efficient trade, thereby allowing them to capitalise on their massive competitive advantage, namely their proximity to the world's largest economy, the United States.

ISBN: 978-92-64-03826-4

Notes

1. This chapter draws heavily on Blázquez-Lidoy *et al.* (2007).
2. For an assessment of the Chinese effect on FDI to Latin America, see for instance Garcia-Herrero and Santabárbera (2007).
3. By "commodity" we denote primary, unprocessed goods, usually used in manufacturing, whose price is determined through the supply and demand of an active market.
4. See Maddison (2006) for further insight on China's role in economic history.
5. The Caribbean region, on the other hand, has also seen growth in its service exports to the United States.
6. For a specific analysis of the competition between Latin American and Chinese exports to the United States market, see López-Córdova, Micco and Molina (2007).
7. Potential opportunities for trade were found by identifying the sectors where large Latin American export shares corresponded to large Chinese import shares.
8. These synergies are not specific to Latin America. For Africa, see Avendaño *et al.* (2007).
9. This is based on the International Energy Agency's "reference scenario", where current policies affecting energy use and production remain unchanged.
10. Rent-seeking activity, in this case, can be described as seeking unproductive gains from natural resources through links with the state.
11. For a study on how differences in specialisation can contribute to meaningful differences in economic growth, see Hausmann *et al.* (2005).
12. The countries studied are Argentina, Bolivia, Brazil, Colombia, Chile, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela. Numerical restrictions include restrictions on budgetary spending, deficits and public debt. Oil funds have been established in Colombia (1995), Mexico (1998), Venezuela (1998) and Ecuador (2002), and stabilisation funds have been set up in Argentina and Peru.
13. For an in-depth study of the trade relations between Chile and China, see Claro (2006).
14. It should be noted, however, that the equilibrium exchange rate may have appreciated more in Zambia than in Chile, as the former benefited from important debt-relief measures. Therefore, the fundamental equilibrium exchange rate may have appreciated correspondingly.
15. Website of the Fundación Chile: www.fundacionchile.cl.
16. Clark *et al.* (2004), however, find that cargo-handling restrictions are not always significant for explaining port efficiency.
17. Potential trade competition was found by identifying the sectors where large Mexican export shares corresponded to large Chinese export shares. The results correspond to the comparison of the two countries' Balassa indexes (measuring comparative advantage) in Blázquez-Lidoy *et al.* (2007).

ISBN: 978-92-64-03826-4

Statistical Annex

Methodological Note

Coefficients of Specialisation and Conformity

Comparing trade structures is common practice when studying the impact of trade on a specific economy. The use of Coefficients of Specialisation (CS) and Conformity (CC) has sometimes met with criticism in the trade literature. It has been noted that these indicators do not always account for the relative importance of each good in world markets and that the approach pays no attention to the size of the economies in question. Moreover, intra-industry trade in intermediate goods is not captured by a study of trade structures. To respond to these weaknesses, several alternatives have been envisaged, including a General Equilibrium framework assessing the trade impact and the use of a Revealed Comparative Advantage index accounting for differences in market size. It should be added that most of these approaches have reached similar conclusions.

In this study, two different approaches are foreseen for comparing trade structures. First, both CS and CC coefficients are calculated. Two modified indicators, using both exports and imports, are also proposed (namely CSm and CCm). Second, an indicator of relative comparative advantage (RCA) is constructed to verify the robustness of results. The Coefficients of Specialisation (CS) and Conformity (CC) are traditionally calculated as follows:

$$CS = 1 - \frac{1}{2}\sum_{n}\left|a_{it}^{n} - a_{jt}^{n}\right|$$

$$CC = \frac{\sum_{n} a_{it}^{n} a_{jt}^{n}}{\sqrt{\sum_{n}(a_{it}^{n})^{2}\sum_{n}(a_{jt}^{n})^{2}}}$$

where a_{it}^{n} and a_{jt}^{n} represents the share of good "n" in total exports of country *i* and *j* in period *t*. China and India are each measured against a sample of Latin American and other emerging economies. If two countries (i,j) have exactly the same exporting structure, then both indexes are equal to 1 and potential trade competition is high. In the opposite case, if there is no coincidence, both indexes equal 0. To ensure consistent results, two separate indexes are employed. Coefficients are calculated yearly for the period 2000-2005. The data source is Comtrade (UNCTAD, World Integrated Trade System), and the three-digit Standard International Trade Classification (Revision 3) has been used.

ISBN: 978-92-64-03826-4

Relative Comparative Advantage Index

The Vollrath Relative Comparative Advantage (RCA) Index is calculated as follows:

$$RCA^{c}_{s,t} = \ln(RXA^{c}_{s,t}) - \ln(RMA^{c}_{s,t})$$

where

$$RXA^{c}_{s,t} = \frac{(X^{c}_{s,t})/(X^{c}_{-s,t})}{(X^{-c}_{s,t})/(X^{-c}_{-s,t})} \qquad RMA^{c}_{s,t} = \frac{(M^{c}_{s,t})/(M^{c}_{-s,t})}{(M^{-c}_{s,t})/(M^{-c}_{-s,t})}$$

The term $X^{c}_{s,t}$ represents the exports of country *c* in sector *s* at time *t*; $X^{c}_{-s,t}$ represents the exports of country *c* in all sectors except *s*, at time *t*, and successively. The Vollrath RCA index addresses some of the flaws found on other indexes (e.g. Balassa), especially by the fact that it takes into account both supply and demand sides on each sector. A positive value of Vollrath's index reveals a comparative advantage, whereas negative values indicate a comparative disadvantage.

Herfindahl-Hirschman Index of Concentration

The Herfindahl-Hirschman Index is a concentration measure that takes into account the weighted average of each good and country, so where values exported values are low (high), the influence on the indicator is reduced (increased). Following Kuwayama and Duran (2003), the Index is calculated as follows:

$$HH = \frac{\left(\sum_{j=1}^{n} p_j^2 - \frac{1}{n}\right)}{1 - \frac{1}{n}}$$

where $p_j = x_{ij} / X_i$ represents the market share of country *j* on the exports of country *i* in its total exports (X_i). The squared-sum of all shares in also known as the Herfindahl-Hirschman Index, and in this chapter is estimated for both goods and geographic destinations.

ISBN: 978-92-64-03826-4

Table 4.A1. **Descriptive Statistics on Trade for Selected Countries**

Country	Share in Latin America GDP (%) 2006 in PPP	Exports Goods-Services as % of GDP	Share of Exports to Asian Drivers (Avg. 2000-2006)	Trade Restrictiveness Index (WB-OTRI 2005)	Main Exports
Argentina	12.8	23.6	9.7	22.8	Animal feed, fixed veg. oils/fats, soft, heavy petrol, oil crude, oil seeds
Brazil	34.1	14.5	6.8	30.1	Iron ore, oil seeds, meat, passenger cars, petrol/bitum., sugar
Chile	4.0	39.6	11.5	14.2	Copper, metal ore, fish, fruit/nuts, pulp, wood
Colombia	7.7	21.1	0.9	25.3	Petrol, coal, coffee, heavy petrol, crude materials, iron
Mexico	23.2	29.7	0.7	32.0	Petrol, passenger cars, telecomms. equipment, computer equipment
Peru	3.7	21.4	9.9	21.0	Metal ore, copper, heavy petrol, animal feed, silver
Venezuela	4.0	32.9	0.2	21.8	Petrol, iron, aluminium

Source: OECD Development Centre (2007); based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122516222285

Table 4.A2. **China's and India's Contributions to Global Growth**

	2000	2001	2002	2003	2004	2005	2006	2007
Global growth	7.01	4.97	4.81	6.12	7.98	7.13	6.70	6.71
China	18.14	27.20	30.01	27.75	23.78	27.25	28.14	27.88
India	5.90	6.96	7.45	8.92	7.35	8.23	7.67	7.91

Source: OECD Development Centre (2007); based on *World Economic Outlook* (IMF, 2007).

StatLink http://dx.doi.org/10.1787/122558276381

ISBN: 978-92-64-03826-4

Table 4.A3a. **Chinese Trade Structure (as % of exports)**

Exports

Prod.	Product Name	1998	1999	2000	2001	2002	2003	2004	2005
0	Food and live animals	5.77	5.37	4.93	4.80	4.49	4.00	3.18	2.95
1	Beverages and tobacco	0.53	0.40	0.30	0.33	0.30	0.23	0.20	0.16
2	Crude mater. ex. food/fuels	1.91	2.01	1.79	1.57	1.35	1.15	0.98	0.98
3	Mineral fuels/lubricants	2.82	2.39	3.15	3.16	2.59	2.54	2.44	2.31
4	Animal/veg. oils/fats/waxes	0.17	0.07	0.05	0.04	0.03	0.03	0.02	0.04
5	Chemicals/products n.e.s.*	5.61	5.32	4.85	5.02	4.71	4.47	4.44	4.69
6	Manufactured goods	17.67	17.06	17.07	16.47	16.26	15.75	16.96	16.95
7	Machinery/transp. equipmt.	27.32	30.18	33.15	35.66	39.00	42.85	45.21	46.23
8	Miscellaneous manuf. arts.	38.19	37.12	34.51	32.74	31.07	28.77	26.36	25.48
9	Commodities n.e.s.	0.00	0.09	0.21	0.22	0.20	0.22	0.19	0.21

Imports

Prod.	Product Name	1998	1999	2000	2001	2002	2003	2004	2005
0	Food and live animals	2.70	2.18	2.11	2.04	1.77	1.44	1.63	1.42
1	Beverages and tobacco	0.13	0.13	0.16	0.17	0.13	0.12	0.10	0.12
2	Crude mater. ex. food/fuels	7.64	7.68	8.89	9.09	7.70	8.27	9.86	10.64
3	Mineral fuels/lubricants	4.83	5.38	9.17	7.17	6.53	7.07	8.55	9.69
4	Animal/veg. oils/fats/waxes	1.06	0.82	0.43	0.31	0.55	0.73	0.75	0.51
5	Chemicals/products n.e.s.*	14.37	14.50	13.42	13.18	13.22	11.87	11.67	11.78
6	Manufactured goods	22.16	20.71	18.57	17.22	16.43	15.48	13.18	12.30
7	Machinery/transp. equipmt.	40.53	41.92	40.84	43.94	46.42	46.72	45.05	44.01
8	Miscellaneous manuf. arts.	6.03	5.84	5.63	6.19	6.71	8.00	8.93	9.22
9	Commodities n.e.s.*	0.54	0.83	0.77	0.69	0.53	0.31	0.27	0.30

Note: n.e.s. = not elsewhere specified.
Source: World Integrated Trade Solution (WITS) and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/122567183522

Table 4.A3b. **Indian Trade Structure (as % of exports)**

Exports

Prod.	Product Name	1998	1999	2000	2001	2002	2003	2004	2005
0	Food and live animals	15.65	12.59	11.38	11.772	11.259	9.91	8.57	7.95
1	Beverages and tobacco	0.58	0.67	0.47	0.43	0.44	0.41	0.38	0.33
2	Crude mater. ex food/fuels	4.08	3.76	3.72	3.7611	4.5214	4.93	6.92	7.27
3	Mineral fuels/lubricants	0.42	0.25	4.33	4.9799	5.1334	5.85	8.63	11.52
4	Animal/veg. oils/fats/waxes	0.52	0.72	0.53	0.4171	0.328	0.38	0.44	0.29
5	Chemicals/products n.e.s.*	9.36	10.04	10.46	10.799	11.196	11.64	11.44	11.62
6	Manufactured goods	37.39	41.49	38.15	36.516	37.92	36.81	35.54	32.28
7	Machinery/transp. equipmt.	7.10	6.94	7.92	8.60	8.42	9.72	9.73	10.87
8	Miscellaneous manuf. arts.	22.46	21.36	20.84	19.818	18.417	19.24	17.26	16.86
9	Commodities n.e.s.*	2.42	2.18	2.20	2.91	2.35	1.10	1.08	1.01

Imports

Prod.	Product Name	1998	1999	2000	2001	2002	2003	2004	2005
0	Food and live animals	3.21	2.43	1.43	2.4318	2.1768	1.77	1.56	1.38
1	Beverages and tobacco	0.04	0.02	0.03	0.0297	0.0344	0.05	0.07	0.06
2	Crude mater. ex food/fuels	5.61	5.87	5.67	6.7573	5.2787	5.25	5.09	4.99
3	Mineral fuels/lubricants	18.96	28.85	34.72	30.698	32.05	29.05	31.54	33.73
4	Animal/veg. oils/fats/waxes	4.72	4.15	2.92	3.0326	3.1907	3.45	2.37	1.61
5	Chemicals/products n.e.s.*	12.36	11.56	8.99	10.15	9.24	9.54	9.02	9.27
6	Manufactured goods	18.29	18.67	17.06	16.755	17.145	16.82	16.37	14.34
7	Machinery/transp. equipmt.	15.80	14.39	15.14	16.209	18.889	20.87	19.93	22.78
8	Miscellaneous manuf. arts.	3.80	3.52	3.95	4.5051	4.5526	4.14	3.73	3.64
9	Commodities n.e.s.*	17.21	10.53	10.09	9.4316	7.4442	9.08	10.33	8.21

Note: n.e.s. = not elsewhere specified.
Source: World Integrated Trade Solution (WITS) and Comtrade (2007) data.
StatLink http://dx.doi.org/10.1787/122567183522

ISBN: 978-92-64-03826-4 © OECD 2007

Table 4.A4. **Country Sample – Coefficients of Specialisation and Conformity**

Argentina	Croatia	Poland
Bulgaria	Hungary	Paraguay
Bolivia	Indonesia	Romania
Brazil	Japan	Russian Federation
Chile	Korea	Singapore
Colombia	Mexico	El Salvador
Costa Rica	Malaysia	Slovak Republic
Czech Republic	Pakistan	Thailand
Spain	Panama	Turkey
Guatemala	Peru	Uruguay
Honduras	Philippines	United States
		Venezuela

Source: World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122600214682

Table 4.A5a. **Coefficients of Specialisation (CS) and Conformity (CC) with China**

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Argentina	CS	0.2238	0.2216	0.2061	0.1881	0.1906	0.2002	0.2051
	CC	0.1266	0.1089	0.0931	0.0756	0.0642	0.0760	0.0908
Bulgaria	CS	0.4222	0.4405	0.4463	0.4441	0.4240	0.4118	0.4315
	CC	0.3806	0.4375	0.4441	0.3948	0.3129	0.2750	0.3742
Bolivia	CS	0.1426	0.1413	0.1183	0.1226	0.1070	0.1017	0.1222
	CC	0.0782	0.0673	0.0476	0.0411	0.0302	0.0258	0.0484
Brazil	CS	0.3346	0.3294	0.3116	0.3013	0.2992	0.3085	0.3141
	CC	0.2733	0.2716	0.2456	0.2091	0.1900	0.2265	0.2360
Chile	CS	0.1570	0.1612	0.1494	0.1390	0.1248	0.1242	0.1426
	CC	0.0523	0.0524	0.0470	0.0411	0.0359	0.0393	0.0447
Colombia	CS	0.2403	0.2746	0.2517	0.2454	0.2589	0.2479	0.2531
	CC	0.1356	0.1543	0.1231	0.1144	0.1081	0.1021	0.1229
Costa Rica	CS	0.3042	0.3518	0.3585	0.3205	0.3359	0.3381	0.3348
	CC	0.2603	0.3174	0.3516	0.3081	0.3069	0.3229	0.3112
Czech Republic	CS	0.4451	0.4699	0.4963	0.4868	0.5034	0.5088	0.4850
	CC	0.3875	0.4225	0.4921	0.5287	0.5501	0.5120	0.4822
Spain	CS	0.4277	0.4405	0.4321	0.4200	0.4150	0.4225	0.4263
	CC	0.2519	0.2604	0.2435	0.2151	0.2042	0.2252	0.2334
Guatemala	CS	0.2193	0.2324	0.2193	0.2507	0.2481	0.2918	0.2436
	CC	0.0919	0.1128	0.1002	0.1107	0.1063	0.1690	0.1152
Honduras	CS	0.1158	0.0999	0.1956	0.1671	0.1953	0.2103	0.1640
	CC	0.0413	0.0341	0.1463	0.0545	0.0810	0.0924	0.0749
Croatia	CS	0.4286	0.4476	0.4649	0.4542	0.4327	0.4162	0.4407
	CC	0.3822	0.3805	0.3957	0.3441	0.2909	0.2922	0.3476
Hungary	CS	0.5250	0.5685	0.5674	0.5376	0.5342	0.5404	0.5455
	CC	0.5815	0.6371	0.6678	0.6439	0.6774	0.6647	0.6454

StatLink http://dx.doi.org/10.1787/122644648123

ISBN: 978-92-64-03826-4

Table 4.A5a (contd.)

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Indonesia	CS	0.4956	0.4915	0.4677	0.4485	0.4752	0.4323	0.4685
	CC	0.4613	0.4370	0.4034	0.3471	0.4245	0.3027	0.3960
India	CS	0.4520	0.4530	0.4291	0.4261	0.3988	0.4060	0.4275
	CC	0.3401	0.3239	0.2717	0.2475	0.1885	0.1973	0.2615
Japan	CS	0.4108	0.4225	0.4104	0.4083	0.4222	0.4287	0.4172
	CC	0.3910	0.3767	0.3560	0.3462	0.3689	0.3574	0.3660
Korea	CS	0.4663	0.4995	0.5068	0.4985	0.4989	0.4972	0.4945
	CC	0.5037	0.5548	0.6037	0.6028	0.6033	0.5890	0.5762
Mexico	CS	0.5205	0.5296	0.5349	0.5121	0.5125	0.4924	0.5170
	CC	0.5235	0.5542	0.5502	0.5346	0.5370	0.4757	0.5292
Malaysia	CS	0.4290	0.4541	0.4695	0.4789	0.5066	0.5128	0.4751
	CC	0.4872	0.5414	0.5528	0.5430	0.6168	0.6388	0.5634
Pakistan	CS	0.3077	0.2973	0.3045	0.3076	0.2952	0.2849	0.2995
	CC	0.3567	0.3277	0.3022	0.2597	0.2345	0.2148	0.2826
Panama	CS	0.1406	0.1706	0.1546	0.1047	0.0941	0.0828	0.1246
	CC	0.0888	0.0998	0.0833	0.0504	0.0433	0.0364	0.0670
Peru	CS	0.2177	0.2217	0.2009	0.1903	0.1768	0.1689	0.1961
	CC	0.1210	0.1092	0.0893	0.0734	0.0675	0.0707	0.0885
Philippines	CS	0.3604	0.3921	0.4005	0.4165	0.4377	0.4326	0.4066
	CC	0.3507	0.3788	0.3981	0.3942	0.4487	0.4402	0.4018
Poland	CS	0.4604	0.4584	0.4495	0.4400	0.4409	0.4440	0.4489
	CC	0.4425	0.4189	0.3899	0.3440	0.3251	0.3273	0.3746
Paraguay	CS	0.1193	0.1028	0.0883	0.0798	0.0829	0.5000	0.1622
	CC	0.0490	0.0384	0.0296	0.0226	0.0186		
Romania	CS	0.4683	0.4790	0.4551	0.4431	0.4378	0.4400	0.4539
	CC	0.6089	0.6086	0.5284	0.4408	0.3897	0.3552	0.4886
Russian Federation	CS	0.1827	0.1783	0.1604	0.1529	0.1637	0.1652	0.1672
	CC	0.1017	0.0763	0.0656	0.0589	0.0502	0.0592	0.0686
Singapore	CS	0.4006	0.4216	0.4391	0.4809	0.4718	0.4528	0.4444
	CC	0.4460	0.4778	0.5192	0.5409	0.5240	0.4961	0.5007
El Salvador	CS	0.3155	0.3151	0.3112	0.2936	0.3163	0.5000	0.3419
	CC	0.1526	0.2300	0.2117	0.1884	0.2166		
Slovak Republic	CS	0.3848	0.4016	0.4013	0.3824	0.4170	0.4348	0.4037
	CC	0.2467	0.2731	0.2465	0.1959	0.2588	0.3192	0.2567
Thailand	CS	0.5515	0.5626	0.5860	0.5788	0.5729	0.5808	0.5721
	CC	0.6027	0.6384	0.7122	0.7187	0.7173	0.7393	0.6881
Turkey	CS	0.4579	0.4514	0.4414	0.4295	0.4217	0.4302	0.4387
	CC	0.5367	0.4993	0.4520	0.3835	0.3178	0.3192	0.4181
Uruguay	CS	0.2122	0.2109	0.1796	0.1841	0.1731	0.1737	0.1889
	CC	0.1112	0.1130	0.0803	0.0686	0.0591	0.0589	0.0819
United States	CS	0.4669	0.4730	0.4606	0.4527	0.4563	0.4638	0.4622
	CC	0.5049	0.5058	0.4993	0.5051	0.5252	0.5169	0.5095
Venezuela	CS	0.0979	0.1044	0.1090	0.0971	0.0901	0.0782	0.0961
	CC	0.0889	0.0632	0.0354	0.0293	0.0186	0.0249	0.0434

Source: OECD Development Centre, based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122644648123

Table 4.A5b. **Coefficients of Specialisation (CS) and Conformity (CC) with India**

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Argentina	CS	0.3207	0.3324	0.3243	0.3298	0.3217	0.3372	0.3277
	CC	0.1666	0.1948	0.1707	0.2107	0.2327	0.3080	0.2139
Bulgaria	CS	0.4404	0.4569	0.4598	0.4556	0.4566	0.4792	0.4581
	CC	0.3673	0.4148	0.3991	0.4105	0.4435	0.5560	0.4319
Bolivia	CS	0.1636	0.1786	0.1521	0.1701	0.1685	0.1480	0.1635
	CC	0.0951	0.0966	0.0784	0.0899	0.0928	0.0672	0.0867
Brazil	CS	0.3286	0.3459	0.3432	0.3701	0.3801	0.3802	0.3580
	CC	0.1904	0.2206	0.2126	0.2557	0.2803	0.3209	0.2467
Chile	CS	0.1688	0.1794	0.1673	0.1699	0.1561	0.1658	0.1679
	CC	0.0545	0.0675	0.0749	0.0893	0.0857	0.1169	0.0815
China	CS	0.4520	0.4530	0.4291	0.4261	0.3988	0.4060	0.4275
	CC	0.3401	0.3239	0.2717	0.2475	0.1885	0.1973	0.2615
Colombia	CS	0.3171	0.3631	0.3428	0.3373	0.3590	0.3410	0.3434
	CC	0.1211	0.1724	0.1656	0.1864	0.2209	0.2370	0.1839
Costa Rica	CS	0.2725	0.3087	0.2967	0.2523	0.2309	0.2554	0.2694
	CC	0.1113	0.1607	0.1362	0.1084	0.1084	0.1275	0.1254
Czech Republic	CS	0.3161	0.3136	0.3005	0.3120	0.3049	0.3216	0.3115
	CC	0.1798	0.1754	0.1623	0.1910	0.1730	0.1884	0.1783
Spain	CS	0.3890	0.3998	0.4012	0.4147	0.4145	0.4309	0.4083
	CC	0.1713	0.1783	0.1827	0.2178	0.2317	0.3074	0.2149
Guatemala	CS	0.2532	0.2645	0.2700	0.2878	0.2970	0.3292	0.2836
	CC	0.1146	0.1476	0.1511	0.1601	0.1613	0.2096	0.1574
Honduras	CS	0.1482	0.1326	0.2125	0.1950	0.1933	0.1899	0.1786
	CC	0.1022	0.0963	0.1381	0.0980	0.0960	0.0969	0.1046
Croatia	CS	0.3768	0.4047	0.4086	0.4098	0.4103	0.4320	0.4070
	CC	0.2639	0.2574	0.2719	0.2916	0.3357	0.4817	0.3170
Hungary	CS	0.3003	0.3164	0.3061	0.3198	0.3117	0.3161	0.3117
	CC	0.1459	0.1618	0.1379	0.1497	0.1344	0.1735	0.1505
Indonesia	CS	0.3751	0.3889	0.3732	0.3715	0.3739	0.3543	0.3728
	CC	0.2091	0.2067	0.1865	0.1890	0.2228	0.1796	0.1989
India	CS	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	CC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Japan	CS	0.2405	0.2523	0.2600	0.2780	0.2813	0.2916	0.2673
	CC	0.0923	0.0975	0.0961	0.1292	0.1320	0.1482	0.1159
Korea	CS	0.3355	0.3571	0.3462	0.3449	0.3430	0.3524	0.3465
	CC	0.1578	0.1823	0.1571	0.1748	0.1909	0.2581	0.1869
Mexico	CS	0.2702	0.2733	0.2685	0.2854	0.2802	0.2883	0.2776
	CC	0.1291	0.1308	0.1308	0.1511	0.1401	0.1527	0.1391

StatLink http://dx.doi.org/10.1787/122650046567

ISBN: 978-92-64-03826-4

Table 4.A5b. (contd.)

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Malaysia	CS	0.2121	0.2313	0.2225	0.2346	0.2432	0.2496	0.2322
	CC	0.0770	0.0922	0.0770	0.0892	0.1087	0.1307	0.0958
Pakistan	CS	0.3561	0.3580	0.3625	0.3530	0.3206	0.3435	0.3489
	CC	0.4083	0.3853	0.3548	0.3416	0.2927	0.3226	0.3509
Panama	CS	0.2313	0.2680	0.2499	0.1533	0.1316	0.1286	0.1938
	CC	0.1928	0.1923	0.1589	0.0814	0.0682	0.0754	0.1282
Peru	CS	0.2488	0.2743	0.2621	0.2644	0.2388	0.2771	0.2609
	CC	0.1299	0.1481	0.1262	0.1416	0.1562	0.2528	0.1591
Philippines	CS	0.2212	0.2402	0.2244	0.2369	0.2181	0.2299	0.2284
	CC	0.0584	0.0694	0.0623	0.0655	0.0633	0.0749	0.0656
Poland	CS	0.3451	0.3396	0.3302	0.3317	0.3237	0.3443	0.3358
	CC	0.2204	0.2009	0.1863	0.1958	0.1926	0.2337	0.2050
Paraguay	CS	0.1474	0.1467	0.1259	0.1265	0.1138		
	CC	0.0795	0.0604	0.0499	0.0656	0.0498		
Romania	CS	0.4027	0.3968	0.3996	0.4136	0.4439	0.2972	0.3923
	CC	0.3826	0.3814	0.3515	0.3707	0.4442	0.2279	0.3597
Russian Federation	CS	0.1981	0.2020	0.2065	0.2167	0.2632	0.3017	0.2314
	CC	0.0842	0.1042	0.1020	0.1222	0.2082	0.2176	0.1397
Singapore	CS	0.2528	0.2667	0.2723	0.2863	0.3210	0.3446	0.2906
	CC	0.1100	0.1250	0.1340	0.1636	0.2488	0.2031	0.1641
El Salvador	CS	0.3572	0.3776	0.3564	0.3612	0.4240		
	CC	0.2591	0.2592	0.2513	0.2815	0.3009		
Slovak Republic	CS	0.3609	0.3831	0.3857	0.3568	0.3796	0.3858	0.3753
	CC	0.2061	0.2251	0.2141	0.2052	0.2678	0.3519	0.2450
Thailand	CS	0.4013	0.4184	0.4093	0.4007	0.4006	0.3994	0.4050
	CC	0.2469	0.2743	0.2643	0.2638	0.2889	0.3065	0.2741
Turkey	CS	0.4859	0.4853	0.4672	0.4670	0.4349	0.4626	0.4671
	CC	0.4084	0.4068	0.3805	0.3854	0.3254	0.3913	0.3830
Uruguay	CS	0.2602	0.2503	0.2195	0.2147	0.2462	0.2397	0.2384
	CC	0.1548	0.1701	0.1435	0.1417	0.1764	0.1925	0.1632
United States	CS	0.3156	0.3318	0.3346	0.3672	0.3607	0.3709	0.3468
	CC	0.1674	0.1879	0.1934	0.2319	0.2450	0.2776	0.2172
Venezuela	CS	0.1411	0.1581	0.1505	0.1133	0.1020	0.0775	0.1237
	CC	0.1000	0.1072	0.0157	0.0095	0.0077	0.0062	0.0411

Source: OECD Development Centre, based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122650046567

ISBN: 978-92-64-03826-4

Table 4.A6a. **Modified Coefficients of Specialisation (CS) and Conformity (CC) with China**

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Argentina	CS	0.3484	0.3245	0.3051	0.3043	0.3123	0.3098	0.3174
	CC	0.3780	0.2974	0.2362	0.2237	0.2302	0.2324	0.2663
Bulgaria	CS	0.3415	0.3478	0.3500	0.3518	0.3304	0.3194	0.3401
	CC	0.2404	0.2337	0.2230	0.2251	0.2054	0.1948	0.2204
Bolivia	CS	0.1573	0.1622	0.1464	0.1621	0.1750	0.1738	0.1628
	CC	0.1255	0.0934	0.0737	0.0854	0.1067	0.1251	0.1016
Brazil	CS	0.3847	0.3918	0.3918	0.4022	0.3966	0.4097	0.3961
	CC	0.3223	0.3679	0.3356	0.3329	0.3183	0.3443	0.3369
Chile	CS	0.1904	0.1949	0.1813	0.1670	0.1557	0.1568	0.1743
	CC	0.1410	0.1419	0.1263	0.1117	0.1031	0.1053	0.1215
China	CS	0.4410	0.4444	0.4396	0.4282	0.4291	0.4329	0.4359
	CC	0.4830	0.4969	0.4940	0.4801	0.4699	0.4604	0.4807
Colombia	CS	0.2674	0.2693	0.2544	0.2423	0.2651	0.2672	0.2610
	CC	0.4316	0.3213	0.2730	0.2609	0.3094	0.3288	0.3208
Costa Rica	CS	0.2151	0.2555	0.2389	0.2205	0.2621	0.3322	0.2540
	CC	0.2140	0.2474	0.2412	0.2276	0.2920	0.4980	0.2867
Czech Republic	CS	0.4463	0.4631	0.4630	0.4612	0.4422	0.4244	0.4500
	CC	0.3362	0.3785	0.4013	0.4054	0.3716	0.3098	0.3671
Spain	CS	0.4090	0.4147	0.3990	0.3922	0.3770	0.3666	0.3931
	CC	0.2180	0.2394	0.2268	0.2333	0.2064	0.1928	0.2194
Guatemala	CS	0.2303	0.2258	0.2051	0.2473	0.2571	0.2031	0.2281
	CC	0.1365	0.1248	0.1247	0.1492	0.1612	0.1117	0.1347
Honduras	CS	0.1186	0.1032	0.1211	0.1423	0.1618	0.1675	0.1357
	CC	0.0328	0.0340	0.0451	0.0317	0.0529	0.0520	0.0414
Croatia	CS	0.3298	0.3377	0.3532	0.3377	0.3325	0.3209	0.3353
	CC	0.1937	0.2098	0.2289	0.2073	0.1993	0.1829	0.2036
Hungary	CS	0.4244	0.4424	0.4265	0.4265	0.4209	0.4192	0.4266
	CC	0.4022	0.4741	0.4316	0.4169	0.3822	0.3612	0.4114
Indonesia	CS	0.4355	0.4050	0.3926	0.3880	0.4190	0.4041	0.4074
	CC	0.4959	0.4219	0.3660	0.3618	0.4097	0.3618	0.4029
India	CS	0.3217	0.3313	0.3323	0.3438	0.3533	0.3481	0.3384
	CC	0.1633	0.1726	0.1589	0.1661	0.1763	0.1679	0.1675
Japan	CS	0.5722	0.5821	0.5873	0.5927	0.5797	0.5525	0.5778
	CC	0.6034	0.5826	0.5655	0.5851	0.5679	0.5142	0.5698
Korea	CS	0.5768	0.5936	0.5792	0.5920	0.5743	0.5901	0.5843
	CC	0.7419	0.7190	0.7261	0.7159	0.6571	0.6491	0.7015

StatLink http://dx.doi.org/10.1787/122658412128

ISBN: 978-92-64-03826-4

Table 4.A6a. (contd.)

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Mexico	CS	0.4590	0.4388	0.4330	0.4462	0.4474	0.4485	0.4455
	CC	0.5789	0.5177	0.4785	0.4963	0.5115	0.5014	0.5141
Malaysia	CS	0.5008	0.5064	0.5278	0.5405	0.5588	0.5781	0.5354
	CC	0.7679	0.8079	0.8471	0.8597	0.8426	0.8410	0.8277
Pakistan	CS	0.1407	0.1483	0.1395	0.1416	0.1410	0.1406	0.1420
	CC	0.1215	0.1135	0.0860	0.0647	0.0563	0.0501	0.0820
Panama	CS	0.1145	0.1409	0.1331	0.0823	0.0840	0.0749	0.1049
	CC	0.0616	0.0680	0.0537	0.0287	0.0267	0.0255	0.0440
Peru	CS	0.1756	0.1810	0.1634	0.1645	0.1459	0.1484	0.1631
	CC	0.1302	0.1166	0.0984	0.0920	0.0876	0.1050	0.1050
Philippines	CS	0.3339	0.3514	0.3785	0.3824	0.4035	0.4156	0.3775
	CC	0.6848	0.7288	0.7988	0.8073	0.8066	0.8081	0.7724
Poland	CS	0.3649	0.3569	0.3535	0.3455	0.3322	0.3251	0.3463
	CC	0.2582	0.2561	0.2507	0.2513	0.2225	0.1942	0.2388
Paraguay	CS	0.1113	0.0977	0.0966	0.0877	0.0998	0.5000	0.1655
	CC	0.1072	0.0998	0.0713	0.0851	0.0839		
Romania	CS	0.3414	0.3381	0.3068	0.3048	0.3038	0.2992	0.3157
	CC	0.2416	0.2177	0.1838	0.1656	0.1692	0.1624	0.1900
Russian Federation	CS	0.3255	0.3050	0.2789	0.2765	0.2794	0.2786	0.2906
	CC	0.4087	0.3178	0.2806	0.3004	0.3667	0.3965	0.3451
Singapore	CS	0.4773	0.4955	0.5317	0.5563	0.5475	0.5515	0.5266
	CC	0.7106	0.7529	0.8177	0.8356	0.8197	0.7963	0.7888
El Salvador	CS	0.2272	0.2252	0.2177	0.2058	0.2014	0.5000	0.2629
	CC	0.0860	0.1436	0.1184	0.1137	0.1008		
Slovak Republic	CS	0.3801	0.3793	0.3672	0.3548	0.3573	0.3572	0.3660
	CC	0.2252	0.2573	0.2441	0.2342	0.2309	0.2222	0.2357
Thailand	CS	0.5142	0.5004	0.5152	0.5380	0.5226	0.5074	0.5163
	CC	0.6686	0.6742	0.7342	0.7421	0.6755	0.6283	0.6871
Turkey	CS	0.2936	0.3080	0.2779	0.2747	0.2618	0.2454	0.2769
	CC	0.1531	0.1741	0.1372	0.1333	0.1186	0.1070	0.1372
Uruguay	CS	0.2051	0.2025	0.1863	0.1730	0.1694	0.1605	0.1828
	CC	0.0986	0.1108	0.0879	0.0717	0.0663	0.0550	0.0817
United States	CS	0.5999	0.5968	0.5906	0.5991	0.5870	0.5623	0.5893
	CC	0.7362	0.7488	0.7257	0.7357	0.6857	0.6220	0.7090
Venezuela	CS	0.1789	0.1709	0.1818	0.1636	0.1574	0.1441	0.1661
	CC	0.4405	0.3407	0.2746	0.2862	0.3410	0.3773	0.3434

Source: OECD Development Centre, based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122658412128

Table 4.A6b. **Modified Coefficients of Specialisation (CS) and Conformity (CC) with India**

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Argentina	CS	0.3332	0.3328	0.3148	0.2957	0.2952	0.3058	0.3129
	CC	0.5531	0.4790	0.4544	0.3835	0.3590	0.3782	0.4345
Bulgaria	CS	0.2562	0.2678	0.2680	0.2716	0.2804	0.3119	0.2760
	CC	0.0802	0.0854	0.0786	0.0837	0.1043	0.1272	0.0933
Bolivia	CS	0.1934	0.2229	0.2064	0.2047	0.2052	0.2350	0.2113
	CC	0.1810	0.2028	0.2033	0.2240	0.2368	0.2972	0.2242
Brazil	CS	0.2857	0.3023	0.3258	0.3284	0.3290	0.3610	0.3220
	CC	0.0933	0.1583	0.2724	0.2763	0.2617	0.3380	0.2333
Chile	CS	0.1675	0.1760	0.1656	0.1675	0.1438	0.1491	0.1616
	CC	0.0421	0.0503	0.0408	0.0500	0.0442	0.0463	0.0456
China	CS	0.2853	0.2999	0.3048	0.3111	0.3077	0.3171	0.3043
	CC	0.1434	0.1411	0.1562	0.1675	0.1579	0.1712	0.1562
Colombia	CS	0.4769	0.4155	0.4224	0.4235	0.4205	0.4296	0.4314
	CC	0.8453	0.7653	0.7880	0.7486	0.7494	0.7691	0.7776
Costa Rica	CS	0.1542	0.1911	0.1805	0.1646	0.1849	0.1863	0.1769
	CC	0.0602	0.0676	0.0655	0.0648	0.0734	0.0739	0.0676
Czech Republic	CS	0.3014	0.3233	0.3160	0.3313	0.3227	0.3222	0.3195
	CC	0.0754	0.0896	0.0999	0.1170	0.1119	0.1037	0.0996
Spain	CS	0.3231	0.3392	0.3327	0.3422	0.3396	0.3551	0.3386
	CC	0.0574	0.0675	0.0717	0.0768	0.0795	0.0983	0.0752
Guatemala	CS	0.1834	0.1944	0.2270	0.2436	0.2437	0.1911	0.2139
	CC	0.2192	0.2043	0.2955	0.3135	0.3051	0.2062	0.2573
Honduras	CS	0.1206	0.1133	0.1286	0.1810	0.1686	0.1658	0.1463
	CC	0.0345	0.0369	0.0401	0.0814	0.0638	0.0483	0.0508
Croatia	CS	0.2488	0.2758	0.2869	0.2910	0.2981	0.2992	0.2833
	CC	0.0772	0.0957	0.1009	0.1279	0.1388	0.1511	0.1153
Hungary	CS	0.2501	0.2724	0.2863	0.3033	0.3002	0.3106	0.2872
	CC	0.0845	0.0995	0.1311	0.1540	0.1557	0.1660	0.1318
Indonesia	CS	0.3846	0.3986	0.3959	0.4089	0.3878	0.3948	0.3951
	CC	0.5654	0.5855	0.5627	0.5516	0.5410	0.5706	0.5628
India	CS	0.3401	0.3476	0.3600	0.3706	0.3616	0.3537	0.3556
	CC	0.2760	0.2968	0.3195	0.3134	0.2997	0.2347	0.2900
Japan	CS	0.2984	0.3272	0.3332	0.3583	0.3497	0.3623	0.3382
	CC	0.0824	0.0928	0.0901	0.1074	0.1061	0.1045	0.0972
Korea.	CS	0.3004	0.3231	0.3335	0.3626	0.3617	0.3669	0.3414
	CC	0.1106	0.1338	0.1513	0.1868	0.1862	0.1749	0.1573

StatLink http://dx.doi.org/10.1787/122673773336

ISBN: 978-92-64-03826-4

Table 4.A6b. (contd.)

Year	Statistic	2000	2001	2002	2003	2004	2005	Average 2000-2005
Mexico	CS	0.3338	0.3357	0.3570	0.3874	0.3955	0.4245	0.3723
	CC	0.4853	0.4220	0.4903	0.5687	0.6137	0.7010	0.5468
Malaysia	CS	0.2929	0.3074	0.3292	0.3573	0.3662	0.3794	0.3387
	CC	0.2223	0.2239	0.2233	0.2542	0.2887	0.3345	0.2578
Pakistan	CS	0.0935	0.1049	0.1027	0.1349	0.1353	0.1368	0.1180
	CC	0.0435	0.0492	0.0412	0.0345	0.0326	0.0357	0.0394
Panama	CS	0.0884	0.1254	0.1302	0.0778	0.0832	0.0764	0.0969
	CC	0.0360	0.0348	0.0356	0.0178	0.0214	0.0209	0.0278
Peru	CS	0.2304	0.2526	0.2224	0.2400	0.2382	0.2192	0.2338
	CC	0.2421	0.2680	0.2466	0.3474	0.2902	0.2416	0.2727
Philippines	CS	0.1792	0.1840	0.1940	0.2041	0.2037	0.1999	0.1942
	CC	0.0611	0.0723	0.0736	0.0755	0.0758	0.0737	0.0720
Poland	CS	0.2921	0.2980	0.2904	0.3018	0.3078	0.3094	0.2999
	CC	0.0739	0.1001	0.0979	0.1017	0.1017	0.1087	0.0973
Paraguay	CS	0.0649	0.0738	0.0720	0.0626	0.0665	0.5000	0.1400
	CC	0.0114	0.0142	0.0129	0.0103	0.0098		
Romania	CS	0.2530	0.2690	0.2592	0.2663	0.2840	0.3057	0.2729
	CC	0.0632	0.0673	0.0780	0.0769	0.0963	0.1247	0.0844
Russian Federation	CS	0.4896	0.4874	0.4776	0.4705	0.4825	0.5098	0.4863
	CC	0.7083	0.7041	0.7587	0.7653	0.8286	0.8836	0.7748
Singapore	CS	0.2886	0.3157	0.3402	0.3513	0.3445	0.3539	0.3324
	CC	0.0986	0.1122	0.1202	0.1328	0.1319	0.1390	0.1224
El Salvador	CS	0.1469	0.1687	0.1646	0.1581	0.1713	0.5000	0.2183
	CC	0.0255	0.0550	0.0518	0.0490	0.0576		
Slovak Republic	CS	0.2659	0.2814	0.2737	0.2722	0.2906	0.3102	0.2823
	CC	0.0587	0.0727	0.0682	0.0591	0.0827	0.1043	0.0743
Thailand	CS	0.2731	0.2818	0.2997	0.3233	0.3208	0.3257	0.3041
	CC	0.1378	0.1478	0.1812	0.2107	0.2067	0.2294	0.1856
Turkey	CS	0.1955	0.2247	0.2142	0.2278	0.2240	0.2429	0.2215
	CC	0.0375	0.0532	0.0496	0.0559	0.0583	0.0741	0.0548
Uruguay	CS	0.1525	0.1578	0.1377	0.1444	0.1538	0.1572	0.1506
	CC	0.0329	0.0439	0.0343	0.0374	0.0463	0.0452	0.0400
United States	CS	0.3575	0.3754	0.4003	0.4110	0.4043	0.4289	0.3962
	CC	0.1394	0.1573	0.1749	0.1958	0.1961	0.2195	0.1805
Venezuela	CS	0.3915	0.3717	0.3985	0.3482	0.3302	0.3388	0.3631
	CC	0.8487	0.8431	0.8899	0.8599	0.8545	0.9016	0.8663

Source: OECD Development Centre, based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122673773336

Table 4.A7a. **Concentration Index for Destination (Herfindahl-Hirschman)**

Country	2000	2005
Mexico	0.7841	0.7363
Venezuela	0.3619	0.3310
Honduras	0.2811	0.2820
Guatemala	0.1602	0.2734
Ecuador	0.1625	0.2675
Panama	0.2252	0.2175
Average LAC	0.2186	0.2044
Costa Rica	0.2816	0.1977
Colombia	0.2670	0.1910
Bolivia	0.1180	0.1730
Nicaragua	0.1839	0.1597
Paraguay	0.1901	0.1381
Peru	0.1020	0.1202
Guyana	0.1859	0.1015
Uruguay	0.0998	0.0856
Chile	0.0647	0.0672
Argentina	0.0993	0.0604
Brazil	0.0835	0.0572

Source: OECD Development Centre, based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122701141420

Table 4.A7b. **Concentration Index for Product (Herfindahl-Hirschman)**

Country	2001	2005
Venezuela	0.6723	0.7760
Ecuador	0.2283	0.3782
Panama	0.1723	0.2705
Average LAC	0.1540	0.1778
Paraguay	0.1639	0.1660
Chile	0.1094	0.1653
Bolivia	0.0822	0.1605
Guyana	0.1282	0.1395
Peru	0.0977	0.1237
Guatemala	0.0596	0.1022
Colombia	0.0902	0.0936
Uruguay	0.0571	0.0829
Nicaragua	0.0811	0.0749
Mexico	0.0786	0.0745
Honduras	0.1616	0.0732
Costa Rica	0.0830	0.0713
Argentina	0.0515	0.0493
Brazil	0.0256	0.0330

Source: OECD Development Centre, based on World Integrated Trade Solution (WITS) and Comtrade (2007) data.

StatLink http://dx.doi.org/10.1787/122740711345

ISBN: 978-92-64-03826-4

Table 4.A8. **Terms of Trade Adjustment (constant Local Currency Unit)**

Country	2000	2001	2002	2003	2004	2005
Argentina	100	104.8	-83.2	55.4	132.1	0
Chile	100	-57.5	67.6	403.6	1436.6	2195.0
Colombia	100	447.3	334.6	204.6	-227.2	-1216.1
Mexico	100	162.5	316.9	174.7	57.2	550.0
Morocco	100	113.4	97.1	123.3	157.7	
Peru	100	140.4	142.4	119.5	-8.7	-133.1
Venezuela	100	46.8	74.6	82.3	182.4	0

Source: World Bank (2006b), *Global Development Finance.*

StatLink http://dx.doi.org/10.1787/122751553567

Table 4.A9. **Real Effective Exchange Rate Index (REER)**

Year	Argentina	Brazil	Chile	Colombia	Mexico	Venezuela
1995	98.50	93.73	91.36	88.89	75.68	94.80
1996	97.40	98.32	93.19	94.00	85.19	78.74
1997	100.00	100.00	100.00	100.00	100.00	100.00
1998	103.20	97.25	98.16	93.85	101.61	123.13
1999	108.20	64.77	93.52	85.16	111.66	140.46
2000	108.60	70.33	92.76	78.08	124.14	146.47
2001	112.70	58.95	83.80	75.64	133.97	155.95
2002	46.70	53.83	81.02	74.37	133.60	122.40
2003	51.10	52.87	76.10	66.27	116.01	105.70
2004	48.70	55.17	80.65	72.43	109.49	103.23
2005	50.00	68.08	85.59	82.22	113.86	101.07
2006	50.10	76.72	89.90	80.29	114.30	104.10

Source: Economist Intelligence Unit and IMF *Statistical Yearbook.*

StatLink http://dx.doi.org/10.1787/122805367124

Table 4.A10. **Vollrath's Relative Comparative Advantage Index**

2000

Good	Product Name	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Average LAC
0	Food and live animals	**3.15**	**1.64**	**1.48**	**1.05**	-0.26	**1.08**	-2.13	**0.94**
1	Beverages and tobacco	**1.76**	**1.72**	**2.65**	-0.33	**1.42**	-0.79	-1.28	**1.09**
2	Crude materials excluding food/fuels	**0.68**	**1.92**	**2.34**	**0.83**	-0.81	**2.03**	-0.13	**1.12**
3	Mineral fuels/lubricants	**1.79**	-2.22	-2.83	**3.73**	**1.01**	-0.99	**7.06**	**1.06**
4	Animal/vegetable oils/fats/waxes	**4.23**	**1.20**	-1.41	-0.57	-2.25	-0.04	-4.17	**0.77**
5	Chemicals/products	-0.97	-1.10	-0.59	-0.66	-1.14	-1.89	-1.51	-1.05
6	Manufactured goods	-0.33	**0.74**	**1.30**	-0.57	-0.81	**0.58**	-0.86	-0.28
7	Machinery/transport equipment	-1.98	-0.64	-3.19	-2.91	**0.27**	-3.76	-4.61	-0.50
8	Miscellaneous manufacturing articles	-1.04	-0.04	-1.83	-0.07	**0.27**	**0.28**	-3.55	-0.08
9	Other commodities	**0.64**	**9.23**	**2.15**	-2.41	-2.38	**9.84**	**1.48**	**0.62**

2005

Good	Product Name	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Average LAC
0	Food and live animals	**3.12**	**1.80**	**1.24**	**0.92**	-0.16	**0.61**	-3.32	**0.98**
1	Beverages and tobacco	**1.93**	**1.73**	**2.40**	**0.03**	**1.69**	-1.48	-2.03	**1.16**
2	Crude materials excluding food/fuels	**0.96**	**1.92**	**2.53**	**0.85**	-0.63	**2.65**	-1.01	**1.40**
3	Mineral fuels/lubricants	**1.57**	-1.02	-2.30	**3.43**	**1.36**	-0.63	**7.15**	**1.21**
4	Animal/vegetable oils/fats/waxes	**4.28**	**1.40**	-1.08	-0.34	-2.32	-0.51	-5.40	**0.90**
5	Chemicals/products	-0.98	-1.33	-0.81	-1.04	-1.19	-2.04	-2.14	-1.17
6	Manufactured goods	-0.41	**0.61**	**1.38**	-0.40	-0.81	**0.27**	-0.90	-0.22
7	Machinery/transport equipment	-2.06	-0.64	-3.57	-2.44	**0.13**	-3.93	-4.34	-0.71
8	Miscellaneous manufacturing articles	-1.27	-0.40	-2.52	**0.07**	**0.27**	**0.21**	-4.00	-0.21
9	Other commodities	**0.63**	**8.91**	**1.74**	**1.26**	-1.21	**9.78**	**2.04**	**0.81**

StatLink http://dx.doi.org/10.1787/122531645471

ISBN: 978-92-64-03826-4

Bibliography

Auty, R. (ed.) (2001), *Resource Abundance and Economic Development*, Oxford University Press, Oxford.

Avendaño, R., H. Reisen and J. Santiso (forthcoming), "The Macro Management of Asian Driver Related Commodity Induced Booms", *Working Papers*, OECD Development Centre, Paris.

Bannon, I. and P. Collier (2003), "Natural Resources and Conflict: What We Can Do", *in* I. Bannon and P. Collier (eds.), *Natural Resources and Violent Conflict – Options and Actions*, World Bank, Washington, D.C.

Blázquez-Lidoy, J., J. Rodríguez and J. Santiso (2007), "Angel or Devil? China's Trade Impact on Latin American Emerging Markets", *in* J. Santiso (ed.), *The Visible Hand of China in Latin America*, Development Centre Studies, OECD, Paris.

Boschini, A., J. Pettersson and J. Roine (2006), "Resource Curse or Not: A Question of Appropriability", *DEGIT Conference Papers*, Dynamics, Economic Growth, and International Trade (DEGIT), Jerusalem.

Brun, J.F., C. Carrère, P. Guillaumont and J. de Mello (2005), "Has Distance Died? Evidence from a Gravity Model", *World Bank Economic Review*, World Bank, Washington, D.C.

Calderón, C.A. and L. Servén (2004) "The Effects of Infrastructure Development on Growth and Income Distribution", *World Bank Policy Research Working Paper* No. 3400, September, World Bank, Washington, D.C.

Clark, X., D. Dollar and A. Micco (2004), "Port Efficiency, Maritime Transport Costs and Bilateral Trade", *Journal of Development Economics*, Vol. 75, No. 2, pp. 417-450.

Claro, S. (2006), "Implications of China's Emergence in the Global Economy for Latin America and the Caribbean Region. The Case of Chile", *Integration and Trade* No. 24, Inter-American Development Bank (IADB), Buenos Aires.

Collier, P. (2007), "Managing Commodity Booms: Lessons of International Experience", Oxford University, Centre for the Study of African Economies, Department of Economics, paper prepared for the African Economic Research Consortium, Yaoundé, March.

Deardoff, A.V. (2004), "Local Comparative Advantage: Trade Costs and the Pattern of Trade", *University of Michigan Discussion Paper* No. 500, Research Seminar in International Economics, Gerald R. Ford School of Public Policy, Ann Arbor.

EIU (Economist Intelligence Unit) (2007), *The Economist*, database, http://eiu.com/.

Engman, M., O. Onodera and E. Pinali (2007), "Export Processing Zones: Past and Future Role in Trade and Development", *OECD Trade Policy Working Paper* No. 53, OECD, Paris.

Evans, C. and J. Harrigan (2003), "Distance, Time, and Specialization", *Working Paper* No. 9729, National Bureau of Economic Research, Cambridge, MA.

Fay, M. and M. Morrison (2006), "Infrastructure in Latin America and the Caribbean: Recent Developments and Key Challenges", World Bank, Washington, D.C.

ISBN: 978-92-64-03826-4

Filc, G. and C. Scartascini (2006), "Chapter 6: Budgetary Institutions", *in* Lora E. (ed.), *The State of State Reform in Latin America*, IADB, Washington, D.C.

Freund, C. (2006), "Latin America and the Caribbean Respond to the Growth of China and India: Effects on Services Trade with the United States", background paper for the Office of the Chief Economist for Latin America and the Caribbean Regional Study: Latin America and the Caribbean's Response to the Growth of China and India, World Bank, Washington, D.C.

García, M., P. García and B. Piedrabuena (2005), "Fiscal and Monetary Policy Rules: The Recent Chilean Experience", *Working Papers* No 340, Central Bank of Chile, Santiago de Chile.

Garcia-Herrero, A. and D. Santabárbera (2007), "Does China have an Impact on Foreign Direct Investment to Latin America?" *in* Santiso, J. (ed.), *The Visible Hand of China in Latin America*, OECD, Paris.

Glaeser, E. and J. Kohlhase (2003), "Cities, Regions and the Decline of Transportation Costs", Harvard Institute of Economic Research, *Discussion Paper* No. 2014, Harvard University, Cambridge, MA.

Goldstein, A., N. Pinaud, H. Reisen and X. Chen (2006), "The Rise of China and India: What's in It for Africa?", Development Centre Studies, OECD, Paris.

Greene, M., N. Dihel, P. Kowalski and D. Lippoldt (2006), "China's Trade and Growth: Impact on Selected OECD Countries", *Trade Policy Working Paper* No. 44, OECD, Paris.

Gregorio, J. de (2006), "Bonanza del cobre: Impacto macroeconómico y desafíos de política", *Estudios Públicos* N° 103, Centro de Estudios Públicos, Santiago de Chile.

Guasch, J.L. (2004), "Granting and Renegotiating Infrastructure Concessions: Doing It Right", World Bank Institute, World Bank, Washington, D.C.

Gylfason, T. (2001), "Natural Resources, Education, and Economic Development," *European Economic Review*, Vol. 45, No. 4-6, Elsevier, Amsterdam.

Hausmann, R., J. Hwang and D. Rodrik (2005), "What You Export Matters", *CID Working Paper* No. 123, Center for International Development, Harvard University, Cambridge, MA.

Hervé, K., I. Koske, N. Pain and F. Sédillot (2007), "Globalisation and the Macroeconomic Policy Environment", *OECD Economics Department Working Papers* No. 552, OECD, Paris.

Hummels, D. (2001), "Time as a Trade Barrier", *GTAP Working Papers* No. 1152, Center for Global Trade Analysis, Department of Agricultural Economics, Purdue University, Lafayette IN.

IEA (2006*a*), *Energy Policies of IEA Countries – 2006 Review*, International Energy Agency, Paris.

IEA (2006*b*), *World Energy Outlook 2006*, OECD International Energy Agency, Paris.

IMF (2006), *World Economic Outlook 2007*, International Monetary Fund, Washington, D.C.

Jaspers, N. and C. Oman (forthcoming), *The Governance Curse: How Resource Abundance Retards Development*, Development Centre Studies, OECD, Paris.

Karl, T.L. (1997), "The Paradox of Plenty: Oil Booms and Petro-States", University of California Press, Berkeley, CA.

Koyama, T. and S. Golub (2006). "OECD's FDI Regulatory Restrictiveness Index: Revision and Extension to More Economies", *Economics Department Working Papers* No. 525., OECD, Paris.

Kuwayama, M. and J. Durán (2003), "La calidad de la inserción internacional de América Latina", *Comercio internacional series,* No. 26 (LC/L.1897-P/E), Santiago, Chile.

Larraín, F. (2006), "Innovation in Latin America", *in The Latin America Competitiveness Review 200: Paving the Way for Regional Prosperity*, World Economic Forum, Geneva.

Latinobarómetro (2007), *Oportunidades de cooperación regional: Integración y energía*, Latinobarómetro, Santiago de Chile.

ISBN: 978-92-64-03826-4

Lederman, D., M. Olarreaga and G. Perry (2006), "Latin America and the Caribbean's Response to the Growth of China and India: Overview of Research Findings and Policy Implications", paper prepared for the Program of Seminars at the World Bank and IMF Annual Meetings held in Singapore.

Leipziger, D. (2004), "The Status of Infrastructure Reform in Latin America", presented to the Planning Workshop on Infrastructure in East Asia: The Way Forward, World Bank, Private Sector and Infrastructure – Latin American and Caribbean Region, Manila.

Limão, N. and A. Venables (2000), "Infrastructure, Geographical Disadvantage and Transport Costs", *Policy Research Working Paper*, Development Research Group, World Bank, Washington, D.C.

López-Córdova, E., A. Micco and D. Molina (2007), "Competing with the Dragon: Latin American and Chinese Exports to the US Market", *in* J. Santiso (ed.), *The Visible Hand of China in Latin America*, OECD, Paris.

Lora, E. (ed.) (2006), *The State of State Reform in Latin America*, IADB, Washington, D.C.

Lora, E. (2007), "Should Latin America Fear China?", *in* J. Santiso (ed.), *The Visible Hand of China in Latin America*, Development Centre Studies, OECD, Paris.

Lora, E. and M. Cárdenas (2006), "La reforma de las instituciones fiscales en América Latina", *Working Paper* No. 559, IADB, Washington, D.C.

Maddison, A. (2006), *The World Economy: Historical Statistics*, OECD Development Centre, Paris.

Maloney, W. and A. Rodríguez-Clare (2005), *Innovation Shortfalls*, World Bank, Washington, D.C.

Mehlum, H., K. Moene and R. Torvik (2006), "Cursed by Resources or Institutions?", *The World Economy* Vol. 29, No. 8, pp. 1117-1131. Blackwell Publishing, Oxford.

Mello, L. de and D. Moccero (2007), "Monetary Policy and Macroeconomic Stability in Latin America: The Cases of Brazil, Chile, Colombia and Mexico", *OECD Economics Department Working Paper* No. 545, OECD, Paris.

Mulder, N. (2006), "Aprovechar el auge exportador de productos básicos evitando la enfermedad holandesa", ECLAC, Santiago de Chile.

ODI (Overseas Development Institute) (2006), *Meeting the Challenge of the Resource Curse: International Experiences in Managing the Risks and Realising the Opportunities of Non-Renewable Natural Resource Revenue Management,* prepared for the Bureau for Resources and Strategic Partnerships – United Nations Development Programme, ODI, London.

OECD (2005), *OECD Economic Surveys – Chile*, 2005/19, OECD, Paris.

OECD (2006*a*), "Brazil and India Trade: What Does the Future Hold?", Working Party of the Trade Committee *Scoping Paper* No. 29, OECD, Paris.

OECD (2006*b*), *OECD Economic Surveys – Brazil*, 2006/18, OECD, Paris.

OECD (2007*a*), *Facilitating Trade and Structural Adjustment: Experiences in Non-Member Economies – Country Case Study on Chile,* Working Party of the Trade Committee, Trade and Agricultural Directorate, OECD, Paris.

OECD (2007*b*), *Review of Chile's Innovation Policy*, Directorate for Science, Technology and Industry, Committee for Scientific and Technological Policy, OECD, Paris.

Oman, C. (1996), "The Policy Challenges of Globalisation and Regionalisation", *Policy Brief* No. 11, OECD Development Centre, Paris.

Paiva de Abreu, M. de (2006), "La aparición de China en el escenario económico mundial: el caso de Brasil", *Textos para discussão* No. 491, Rio de Janeiro, Catholic University of Rio de Janeiro, Rio de Janeiro.

Queiroz de Monteiro Jales, M., M.S. Jank, S. Yao and C.A. Carter (2006), "Agriculture in Brazil and China: Challenges and Opportunities", IADB, *Occasional Paper* No. 44, IADB, Buenos Aires.

ISBN: 978-92-64-03826-4

Qureshi, M.S. and G. Wan. (2006), "Trade Potential of China and India: Threat or Opportunity?", Trinity College, Cambridge, and United Nations University – WIDER, Helsinki.

Sachs, J.D. and A.M. Warner (1995), "Natural Resource Abundance and Economic Growth", *National Bureau of Economic Research Working Paper* No. 5398, Cambridge, MA.

Santiso, J. (2006), "¿Realismo Mágico? China e India en América Latina y África", *Economía Exterior*, No. 38, Estudios de Política Exterior SA, Madrid.

Santiso, J. (ed.) (2007), *The Visible Hand of China in Latin America*, Development Centre Studies, OECD, Paris.

Schwartsman, A. (2006), *On "Dutch Disease" and "Dutch Uncles"*, ABN Amro, Local Markets – LatAm View, São Paolo.

Singh, A. (2006), "Macroeconomic Volatility: The Policy Lessons from Latin America", *IMF Working Papers* 06/166, IMF, Washington, D.C.

World Bank (2006*a*), "Argentina: El desafío de reducir los costos logísticos ante el crecimiento del comercio exterior", *Informe* No. 36606, AR, Departamento de Finanzas, Sector Privado e Infraestructura Región de América Latina y el Caribe, World Bank, Washington, D.C.

World Bank (2006*b*), Global Development Finance, World Bank, Washington, D.C.

World Bank (2007), *Doing Business Report,* World Bank, Washington, D.C.

World Economic Forum (2006), "The Latin America Competitiveness Review 2006 – Paving the Way for Regional Prosperity", World Economic Forum, Geneva.

WTO (World Trade Organization) (2007), *World Trade 2006, Prospects for 2007*, WTO, Geneva.

ISBN: 978-92-64-03826-4

LEO 2006-2007 Activities and Publications

The current report has greatly benefited from previous OECD Development Centre publications and conferences. The following is a non-exhaustive list of the inputs received by each chapter.

Chapter 1 – Policy Coherence for Development
Better, Fairer, More: Fiscal Policy and Legitimacy

OECD Development Centre Working Papers and Publications

- Elizondo, C. and J. Santiso (2007), "Devórame otra vez: Violencia fiscal en América Latina", OECD Development Centre, OECD, Paris. (forthcoming)
- Santiso, J. and P. Zoido (2007) "Fiscal and Democratic Legitimacy", OECD Development Centre, Paris. (forthcoming)

Policy Dialogues and Seminars

- Seminar on Democratic Governance in Mexico – OECD, Paris, July 2007.

Chapter 2 - Finance for Development
Pension Reform, Capital Markets and Corporate Governance

OECD Development Centre Working Papers and Publications

- Blommestein, H. and J. Santiso (2007), "New Strategies for Emerging Domestic Sovereign Bond Markets", Working Paper N° 260, OECD Development Centre, Paris.
- Malherbe, S., C. Oman and R. Short (2007), "The Role of Institutional Investors in Improving Corporate Governance in Developing Countries", OECD Development Centre, Paris. (forthcoming)

Policy Dialogues and Seminars

- Seminar on Institutional Build-up and Economic Performance in Chile – OECD, Paris, January 2007.

ISBN: 978-92-64-03826-4

Chapter 3 - Business for Development
Multinationals, Telecommunications and Development

OECD Development Centre Working Papers and Publications

- De Laiglesia, J. (2007), "Telecommunications and Development in Latin America", OECD Development Centre, Paris. (forthcoming)
- Santiso, J. (2007), "The Emergence of Latin Multinationals", Emerging Markets Network Working Paper, OECD Development Centre, Paris.

Policy Dialogues and Seminars

- Seminar on Multinationals and Development in Latin America – 8th Foro Latibex, Madrid. November 2006.

Chapter 4 - Trade for Development
The Impact of China and India

OECD Development Centre Working Papers and Publications

- Avendaño, R., H. Reisen and J. Santiso (2007), "The Macro Management of Asian Driver Related Commodity Induced Booms", OECD Development Centre, Paris. (forthcoming)
- Blázquez-Lidoy, J., J. Rodríguez and J. Santiso (2006), "Angel or Devil? China's Trade Impact on Latin American Emerging Markets", Working Paper N° 252, OECD Development Centre, Paris.
- Santiso, J. (ed.) (2007), *The Visible Hand of China in Latin America,* OECD Development Centre, Paris.

Policy Dialogues and Seminars

- Seminar on the Impact of Emerging Multinationals from China and India – OECD, Paris, July 2007.

ISBN: 978-92-64-03826-4

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(41 2007 04 1 P) ISBN 978-92-64-03826-4 – No. 55765 2007

Latin American Economic Outlook 2008

While democratic regimes seem to be firmly rooted in the region, Latin American economies continue to experience sustained economic growth, benefiting from the ongoing process of globalisation. How can local governments maximise the current context of unprecedented opportunities? The current *Latin American Economic Outlook*, the first volume in an annual series by the OECD Development Centre, provides original insights and comparative indicators on four key issues affecting Latin America's development: the impact of fiscal performance on democratic legitimacy; the relevance of pension fund reform and governance for national saving and capital markets deepening; the role market-seeking investments by the private sector can have at improving access to telecommunication services; and growing trade with China and India as an incentive to boost the competitiveness of Latin American countries. Policy recommendations and the identification of best practices in the areas under scrutiny aim to put OECD's expertise and well-known analytical rigour at the service of Latin America's development.

"With characteristic rigour this OECD publication explores some of the reasons explaining the current performance of the region in a demonstration of the organisation's genuine interest and ongoing commitment of its member countries to the development of Latin America."
José Luis Machinea, Executive Secretary, United Nations Economic Commission for Latin America and the Caribbean

"Plenty of insights and compelling story lines await Latin American analysts and policy makers who can ill afford not to read this volume. With this first issue, the *Latin American Economic Outlook* will become firmly established as a constructive voice in the Latin American policy debate."
Augusto de la Torre, Chief Economist for Latin America and the Caribbean, The World Bank

"This is a timely and valuable publication that provides strong evidence of how much Latin America has changed – strong public finances, low inflation, deeper financial markets, FDI-friendly environment and successful global integration – just when market turbulences in industrial countries' financial markets are resulting in a reassessment of risks."
Vittorio Corbo, Governor, Central Bank of Chile

"This publication offers a modern and balanced vision of key economic issues in Latin America. Its international focus, rich in statistical information and its careful analysis will awake the interest of those that need to understand the opportunities and challenges of the region without ignoring the great diversity across Latin American countries."
Eduardo Lora, Principal Advisor, Research Department, Inter-American Development Bank

"All those interested in Latin America will find a clear and intelligent analysis in this volume. The immensely readable *Latin American Economic Outlook* highlights today's most important questions of political economy in the region and offers indispensable insights into the challenges it faces."
Eliana Cardoso, Director Economics School, Fundação Getúlio Vargas

"In modern democracies, policy innovations need legitimisation, and that in turn requires public debate and openness to feedback. These new studies … address the broader challenges of promoting good policy making, and they raise the standard for comparative analysis."
Laurence Whitehead, Fellow, Nuffield College, Oxford

www.oecd.org/dev

OECDpublishing
www.oecd.org/publishing

ISBN 978-92-64-03826-4
41 2007 04 1 P