

Alberto R. Musalem (Director)

CAPITAL MARKETS

IN THE SOUTHERN CONE OF LATIN AMERICA
Convergence to International Standards and Integration



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Centro para la Estabilidad Financiera
Center for Financial Stability

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Convergence to International Standards and Integration

CENTRO PARA LA ESTABILIDAD FINANCIERA
CENTER FOR FINANCIAL STABILITY

CAPITAL MARKETS IN THE SOUTHERN CONE OF LATIN AMERICA

Convergence to International Standards and Integration

Directed by
Alberto R. Musalem

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Index

| | |
|---|------|
| Acknowledgements | XIII |
| Preface 1 | XV |
| Preface 2 | XIX |
| | |
| CHAPTER 1 | |
| Introduction | 1 |
| <i>Alberto R. Musalem and Fernando Baer</i> | |
| South American Capital Markets Performance | 7 |
| Foreign Exchange and Capital Mobility Policies | 9 |
| Capital Markets Regulations | 11 |
| Accounting and Auditing Frameworks | 13 |
| Tax Treatment of Financial Instruments | 14 |
| Concluding Remarks | 16 |
| | |
| CHAPTER 2 | |
| South American Capital Markets Performance | 19 |
| <i>Dennis Mark Clark</i> | |
| Stock Markets | 22 |
| Bond Markets | 38 |
| Conclusions | 44 |

CHAPTER 3

Comparative Policies on Foreign Exchange and Capital Mobility 47

María Luisa Streb

Regulations in Argentina, Brazil, Chile, and Peru 52

Transaction Costs 68

Recommendations 72

CHAPTER 4

Securities Markets Regulations and Evaluations on the Degree of Implementation 79

Ricardo A. Pasquini

Methodology 83

Results 84

Conclusions 106

Appendix 108

CHAPTER 5

Observance of International Auditing and Accounting Standards in South America 121

Fernando Baer

International Outline of Accounting and Auditing Standards 124

Performance of Accounting Standards in Argentina, Brazil, Chile, and Peru 127

Performance of Auditing Standards in Argentina, Brazil, Chile, and Peru 142

Conclusions and Recommendations 145

CHAPTER 6

Taxation Structure for Financial Instruments in Argentina, Brazil, Chile, and Peru 149

Fernando Grosz

Main Differences in the Current Taxation Regime with Regards
to Financial Instruments 152

Description of Tax Regimes for Financial Instruments Holdings 154

Tax Rates Borne by Holders of Financial Instruments 159

Conclusions 172

INDEX OF FIGURES

| | | |
|------------------|---|----|
| Figure 1 | Stock Market Capitalization In Selected South American Countries | 22 |
| Figure 2 | Stock Market Capitalization in Selected East Asian Countries | 23 |
| Figure 3 | Stock Market Capitalization in Selected Developed Countries | 23 |
| Figure 4 | Stock Market Liquidity in Selected South American Countries | 24 |
| Figure 5 | Stock Market Liquidity in Selected East Asian Countries | 25 |
| Figure 6 | Stock Market Liquidity in Selected Developed Countries | 26 |
| Figure 7 | Turnover Ratio in Selected South American Markets | 27 |
| Figure 8 | Turnover Ratio in Selected East Asian Markets | 27 |
| Figure 9 | Turnover Ratio in Selected Developed Markets | 28 |
| Figure 10 | Domestic Stock Volume as % of Total Volume for Selected South American Countries (Includes Domestic and US Markets) | 29 |
| Figure 11 | Market Concentration: 5% Most Capitalized Companies Relative to Domestic Market Capitalization in Selected South American Countries | 29 |
| Figure 12 | Market Concentration: 5% Most Capitalized Companies Relative to Domestic Market Capitalization in Selected East Asian Countries | 30 |
| Figure 13 | Market Concentration: 5% Most Capitalized Companies Relative to Domestic Market Capitalization in Selected Developed Countries | 30 |
| Figure 14 | Market Concentration: 5% Most Traded Companies Relative to Domestic Volume Traded in Selected South American Countries | 31 |
| Figure 15 | Market Concentration: 5% Most Traded Companies Relative to Domestic Volume Traded in Selected East Asian Countries | 32 |
| Figure 16 | Market Concentration: 5% Most Traded Companies Relative to Domestic Volume Traded in Selected Developed Countries | 32 |
| Figure 17 | Stock Market Returns in Selected South American Countries (US\$) | 34 |
| Figure 18 | Dispersion of Monthly Returns in Selected South American Countries (1999-2003) | 35 |
| Figure 19 | Dispersion of Monthly Returns in Selected South American Countries (2004-Aug. 2009) | 36 |
| Figure 20 | Stock Issues Over Regions | 37 |

| | | |
|------------------|--|-----|
| Figure 21 | Stock Issues in Selected South American Countries | 38 |
| Figure 22 | Outstanding Corporate and Financial Institution Debt Securities in Selected South American Countries | 39 |
| Figure 23 | Outstanding Corporate and Financial Institution Debt Securities in Selected East Asian Countries | 39 |
| Figure 24 | Outstanding Corporate and Financial Institution Debt Securities in Selected Developed Countries | 40 |
| Figure 25 | Bond Markets Volume Traded in Selected South American Countries (Public and Corporate Bonds, % of GDP) | 41 |
| Figure 26 | Total Value of Bonds Traded: Argentina | 42 |
| Figure 27 | Total Value of Bonds Traded: Brazil | 42 |
| Figure 28 | Total Value of Bonds Traded: Peru | 43 |
| Figure 29 | Nominal US Dollar Exchange Rates (Local Currency per Dollar, Period Average) | 53 |
| Figure 30 | Annual Variation Rates in US\$ Exchange Rates and International Reserves (Local Currency per Dollar and International Reserves Measured in US Dollars) | 54 |
| Figure 31 | Portfolio Assets (Annualized Flows in Million US\$) | 59 |
| Figure 32 | Portfolio Assets as a % GDP (Annualized Flows) | 59 |
| Figure 33 | Portfolio Liabilities as a % GDP (Annualized Flows) | 60 |
| Figure 34 | Average Value of Indicators Grouped by Principle (all Countries)..... | 85 |
| Figure 35 | Average Valuations Grouped by Country..... | 85 |
| Figure 36 | Independence of the Regulator | 88 |
| Figure 37 | Accountability of the Regulator..... | 89 |
| Figure 38 | Proper Resources..... | 91 |
| Figure 39 | Regulatory Processes | 93 |
| Figure 40 | Professional Standards..... | 94 |
| Figure 41 | Self-Regulated Organizations (SROs) Oversight | 96 |
| Figure 42 | Powers to Inspect and Investigate | 98 |
| Figure 43 | Comprehensive Enforcement Powers | 100 |
| Figure 44 | Assurance of Inspection, Investigation, Surveillance and Enforcement Powers, and Implementation of a Compliance Program | 101 |
| Figure 45 | Sharing Information Indicators..... | 103 |
| Figure 46 | Information Sharing Mechanisms | 105 |

INDEX OF TABLES

| | | |
|------------------|---|-----|
| Table 1 | Listed Companies in Latin American Stock Exchanges | 33 |
| Table 2 | Bond Issues in Selected Latin American and Developed Bond Markets | 43 |
| Table 3 | Investment Freedom and Financial Freedom | 58 |
| Table 4 | Sovereign Risk Ratings (as Qualitative Assessments of the Probability of Default by Central Governments) | 61 |
| Table 5 | Foreign Direct Investment, Net Outflows (Annual Average in Millions of Dollars) | 63 |
| Table 6 | Foreign Direct Investment, Net Inflows (Annual Average in Millions of Dollars) | 64 |
| Table 7 | Category Fees as a Percent of Total Issuance Costs (Brazil and Chile) | 70 |
| Table 8 | Costs of Issuing Equities and Bonds in Primary Market (Argentina and Brazil, 2007) | 71 |
| Table 9 | Budget and Number of Professional Supervisors (2008) | 91 |
| Table A.1 | Indices and Variables Definitions | 108 |
| Table A.2 | The Regulator and its Legal Framework | 116 |
| Table A.3 | Self-Regulatory Organizations | 119 |
| Table 10 | International Accounting Standards Issued by IASC | 124 |
| Table 11 | Income Tax Structure Regarding Financial Income in Argentina, Brazil, Chile and Peru | 155 |
| Table 12 | Summary of Tax Treatment on Financial Instruments Held by Resident Individuals | 162 |
| Table 13 | Summary of Tax Treatment on Financial Instruments Held by Resident Companies | 165 |
| Table 14 | Summary of Tax Treatment on Financial Instruments Held by Non-resident Individuals or Companies | 169 |

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Preface 1

Financial development is still a pending issue in Latin America. The causes of this phenomenon are multiple, namely macroeconomic instability, inadequate regulation and enforcement, tax treatment and tax administration, foreign exchange controls, barriers to trade in financial services (including capital flows), among others. Looking at financial development in Latin America; although important restrictions on the operations of financial intermediaries and on the capital accounts of the balance of payments were lifted by several countries since the 1990s, regional integration in financial services has not been contemplated yet. Accordingly, trade liberalization in financial services did not follow the pace of the integration in trade of goods as would have been expected and financial integration among them remains incomplete.

As result of the 2007-2009 financial and economic international turmoil, deceleration of economic growth in the global economy, fiscal and monetary expansionary policies and the crowding-out effect are some of the key elements that should be clearly addressed in order to sustain stability and economic growth in the upcoming years. The financial and real sectors were both the channels through which the crisis was transmitted. However, the financial sector channel operated almost instantly as a transmission vehicle of the crisis mainly over the developed world, while the real sector channel (trade of goods and services) operated with some delay having more of an effect on the industrial based exports countries and less on food based exports countries; including the Latin American region.

However, the wealth destruction, increasing risk aversion and expected tightening in the risk management of the credit and financing policies might affect the developing world to a relatively

large extent in the medium term. The G20 financial agenda and a revisited international financial architecture are some of the key elements that would reshape world economies equity and debt markets as well as financial intermediation. Financial markets and capital flows will probably face a shift in terms of their behavior and regulation. These will imply a new challenge for the international financial community. Although key reforms will be introduced in developed countries, emerging markets will also suffer the consequences in terms of attracting and keeping adequate capital flows consistent with long term economic growth. This would imply that they will have to adjust their existing structures to more flexible and transparent ones.

The establishment of the Center for Financial Stability (CEF) at the end of 2002, in Argentina, aimed at fulfilling the need for the analysis and discussion of financial services structural issues. With a non-partisan and not-for-profit structure in addition to a robust technical approach and policy orientation, CEF has been trying to be effective and timely to start tackling those financial structural issues. The mission of CEF is to contribute to the development of sound financial markets in Latin America, including strengthening financial institutions in order to attain stability as well as sustainable and equitable economic growth. The CEF's regional and unique approach consists of carrying out analysis, producing and widely disseminating policy based publications and in providing a forum for public-private sector discussions of alternative policy strategies compatible with best practices and internationally accepted standards and codes.

It is relevant to this approach that CEF has been successfully spreading its geographical scope, having developed projects for a number of countries in Latin America in the following topics: (i) corporate governance, including non-financial enterprises, banking and non bank financial institutions; (ii) challenges of implementation of Basel II; (iii) financing the private sector investment through alternative instruments –including investment funds and private equity–; (iv) compliance with the 12 international standards and codes on financial services promoted by the Financial Stability Forum, now the Financial Stability Board (FSB); and (v) convergence

and integration of capital markets (which is the basis of this book); among others. This latest project identified the existing gaps in the legal, regulatory, taxation, foreign exchange and accounting frameworks of financial services existing in the capital markets of South America, compared with international standards and codes.

Within this framework and having foreseen the structural needs the region should address –as they proved to be in the aftermath of the crisis– over the period 2007-2009 CEF designed and successfully carried out the project “Latin American Capital Markets Integration”, covering in the initial phase the equity and bond markets of Argentina, Brazil, Chile, and Peru. Specifically, the differences in the way countries regulate their financial sector have made Latin America vulnerable to regulatory arbitrage. Therefore, the best strategy would be to integrate financial services on a regional basis by having each country adopt financial sector standards and codes as established by international standards setter institutions.

The new economic and financial environment represents a favorable context for consolidating economic growth patterns, and an opportunity for improving financial market structure and institutions in Latin America. At the same time, uncertainty and risks are still present: (i) would the existing economic context be sustainable in the medium and long-term?; (ii) would the global imbalances and their adjustment imply significant implications for the region?; (iii) what are the possible consequences of those processes?; (iv) how would the political context in the region affect the implementation of reforms in financial markets?; (v) how could reformed financial sectors contribute to mitigate uncertainties and risks? In summary, what are the challenges ahead for financial markets in Latin America?

The nature and resolution of the challenges would define the extent, timing and priorities of required reforms in financial markets structure and institutions throughout the region. The valuable output that emerged from this original regional analysis presented in this book represents a stepping stone in the financial

integration agenda. It has also become relevant to identify forward alternative public policy recommendations for placing the regional agenda in the frontier of financial services and for fostering further development of financial markets. In this particular effort, we are grateful for the financial support received from the Swiss Agency for Development and Cooperation which co-sponsored the project; and to IDB/INTAL for co-sponsoring both a Regional Roundtable on the subject, which took place last May in Buenos Aires, and this publication.

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Preface 2

This book sets out to explore options to move forward in the integration of capital markets in South America (stocks and bonds, and, in general, financial securities). It examines four case studies (Argentina, Brazil, Chile, and Peru) with particular focus on key aspects of financial integration: exchange rate regimes, capital controls, capital market regulation, accounting and auditing standards, and tax treatment of financial instruments.

It is well known that capital market integration is only a part of the financial integration process. All the countries in the region have in one way or another been given a boost to this process by the use of a variety of instruments, such as liberalizing capital movements, investment regimes favoring hosting of foreign financial intermediaries, or regulation of their institutional investors designed to increase their opportunities for the placement of financial assets in external markets. More recently, in a different albeit related field, the countries in the region have been moving in this direction. The use of local currency in MERCOSUR trade and the adoption of reciprocal credit between the central banks are both tools that contribute indirectly to regional financial deepening and closer integration. In spite of this progress, the provision of financial services on a regional scale remains a pending issue.

As it is the case in goods markets, financial integration is associated with efficiency gains. Various impact studies mentioned by the authors of this book bear this out. The peculiar nature of financial markets is that they develop in more regulated structures at the national level. Therefore, the task of integrating these markets entails the convergence of rules and regulations. In order to address this issue, the chapters of this book take a pragmatic approach: since countries have adhered to international codes and

standards, there is some ground to the convergence of domestic financial regulations.

The studies in this book were coordinated by the Center for Financial Stability (CEF), an institution with a solid tradition of research on topics of international finance. The function of IDB/INTAL in lending support for the diffusion of these works has a twofold origin. In one sense, contributing to the dissemination of research that leads to an improved understanding of the various forms of regional integration process is a specific mission of INTAL. In another sense, the Inter-American Development Bank (IDB) gives priority to these issues, not only at a conceptual level. The IDB has committed to many and varied loan operations with the countries of the region with the objective of expanding and deepening their capital markets in local currency and indirectly bringing about greater regional integration in that area.

IDB/INTAL's sponsorship of this publication does not imply agreement with the approaches, results, or opinions of the authors gathered in this book.

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IDB/INTAL

Introduction

ALBERTO R. MUSALEM

FERNANDO BAER



CHAPTER

Introduction

ALBERTO R. MUSALEM AND FERNANDO BAER

The literature shows that financial development is a key element of any sustainable growth and economic development process (Roubini *et al.*, 1992; Levine, 1999; Khan *et al.*, 2000). That is why governments, academics and market participants are well aware of the importance of promoting financial development. Until the 1970s, most countries executed a stringent policy on the financial services sector, heavily regulating their operations. In a similar fashion, international competition was severely restricted while governments imposed rigid controls on the capital accounts of the balance of payments. Later on, a wave of financial liberalization –with emphasis on prudential regulations and strengthened supervision– followed by opening up of the capital accounts, have been changing the way financial services operate all over the world. Lately, global macroeconomic imbalances, excessive risk-taking by financial intermediaries, loopholes in regulations, particularly, on investment banks and others capital market instruments, conflicts of interests (e.g., credit rating agencies), over reliance on self-regulations and outsourcing of risk assessments, and lax supervision induced the ongoing financial crisis. The key is to strike the right balance on the level of regulation and supervision to prevent financial crisis while not discouraging financial innovation and growth.

In a more open and globalized world, economic growth has been driven by more financial integration and competition among countries and intermediaries. As is the case for most markets, competition in financial services would enhance market efficiency and financial intermediation. However, the issues arising when dealing with integration in a highly regulated market like the financial sector are sufficiently complex so as to take a different approach than the one used in the cases of other markets. Such a complexity may also partially explain the delay in the liberalization process in financial services when comparing to the advances that occurred in the goods markets, even considering the understanding that more integrated financial markets benefit investors, the corporate sector and consumers. In short, investors would enjoy better risk-return opportunities and more liquid markets while users of funds would have easier access to financial resources at better conditions (e.g., lower costs, longer maturity, and lower risks). Overall, this may improve the allocation of regional or world resources and further boost the level of GDP and potentially the long-run GDP growth rate. Finally, a balanced process of liberalization would positively contribute to provide a better framework for the control of money laundering activities and the identification of areas in which regional consolidated structures could increase efficiency (e.g., the possibility of building a single regional capital market).

The greater variety of financial instruments and transactions together with the information technology revolution in the financial services sector imply that differences in the way countries regulate and tax their financial sector (including supervision and tax administration) may be exploited by agents and undermine efforts to develop financial markets, the so-called process of regulatory and tax arbitrage. Specifically, underdeveloped financial systems result in higher financial intermediation costs, including higher volatility, that severely affect international competitiveness of firms. A number of studies by Grandes *et al.* (2005, 2007a, and 2007b), and CEF (2007) show that the financial cost of corporations, either from bond or equity finance, in selected countries in Latin America, is far from homogeneous. Although systematic risk is the main explanatory variable for this behavior; still the high unexplained variance augurs well for harmonizing regulations, standards and tax treatments of financial services along international best practice, thus contributing at financial integration, regionally and internationally.

Although it is difficult to quantify the benefits of financial integration, a study carried out by London Economics for the European Commission in 2002 showed that the integration of EU financial markets would have had positive impacts on economic indicators in the EU. For instance, cost of equity capital would have been reduced, on average, by 47 basis points, the cost of bank finance by 20 basis points, while the

cost of debt for non-financial firms would have fallen by 40 basis points. Altogether, the direct impact of this reduction in the cost of financing would have implied a 1.1% increase in the level of EU-wide real GDP, raising investment, consumption and employment. As the study pointed out, these results “abstract from any dynamic effect that could have permanently raised output and productivity”.

In South America, most countries followed a process that is in some way similar to that experienced by developed economies, albeit with some delays with respect to what was going on in the latter group of countries. Important restrictions on the operations of financial intermediaries and on the capital accounts of the balance of payments were lifted by several countries since the 1990s. Argentina, for example, was considered the leading country in implementing the structural reforms in that period of openness, in the first half of the 90s. It actively participated in that process of reforms, conducting the adjustments that the integration process required both from the competences, scope, operations and roles of regulatory authorities (Central Bank of Argentina –BCRA– and Stocks and Exchange Commission –CNV–) and the existence and transparency of different markets and their functioning. Also, investments in technology and infrastructure in communications, operations and interconnections among different markets, allowed exploding in an efficient way the externalities coming from the financial system development. This contributed to the transparency, the scope, the speed and the volume of operations.

Although several trade agreements (e.g., the North American Free Trade Agreement –NAFTA–, most free trade agreements signed by the USA) included integration in financial services, South American countries trade agreements have not considered integration in financial services yet. Accordingly, trade liberalization in financial services did not follow as would have been expected and financial integration among those countries remains incomplete. Consequently, financial development is still a pending issue in the region. Needless to say, there are several causes of this phenomenon, namely macroeconomic instability, inadequate regulation and enforcement, tax treatment and tax administration, foreign exchange controls, barriers to trade in financial services (including capital flows), among others.

The differences in the way countries regulate their financial sector has made South America vulnerable to regulatory arbitrage. Therefore, the best strategy would be to integrate financial services on a regional basis by having each country adopt financial sector standards and codes as established by international standards setters institutions, i.e., Basle Committee for Banking Supervision (BCBS), International Organization of Securities Commissions (IOSCO), International Association of Insurance Supervisors (IAIS), International Organization of Pension Supervisors (IOPS), International Social Security Association (ISSA), International Accounting Standards

Board (IASB), Organization for Economic Cooperation and Development (OECD). In addition, the adoption of neutral tax treatment to financial intermediation in agreement with international best practices together with the signing of tax treaties to avoid double taxation between countries, and coordination of tax administrations would further contribute to efficient financial integration.

Drawing on the lessons that have emerged from other regional financial integration efforts, perhaps the most relevant approach occurred in 1961 when the OECD issued a Code of Liberalization of Capital Movements and a Code of Current Invisible Operations. The Codes came up as a sustainable strategy to achieve a balanced and comprehensive approach to liberalization that guaranteed benefits to society as a whole. OECD countries created a framework for gradual progress towards liberalization: the OECD Code of Liberalization of Capital Movements which also covers direct investment and establishment, and the OECD Code of Liberalization of Invisible Operations which covers services. The Codes are applicable to OECD countries and establish certain rules for gradually lifting barriers for capital movements and financial services trade *pari passu* to the convergence of their local regulations with international standards.

The positive impacts of reforms and the technological advances for a better development of the financial markets are unquestionable. However, further development would find constraints given the lack of adaptability of structural issues, having direct impact over capital flows and business opportunities and financing. There are still delays in the implementation of required efforts for continuing with the modernization and integration of those markets. As the economic integration process deepens, increasing flows of goods and services, there is a growing need to identify (and remove) those barriers that limit trade in financial services. The main issues to be addressed are the asymmetries in the regulatory, supervisory, settlement, tax treatment, foreign exchange, auditing, and accounting regimes for financial services. Their removal would avoid undesired arbitrages, boost international and regional capital mobility and promote investments and growth.

The current CEF's research allowed identifying differences and asymmetries in those topics for a sample of countries of South America. The program aimed at identifying the existing gaps in the legal, regulatory, taxing, foreign exchange, accounting, and auditing frameworks of financial services provided through capital markets in South America *vis-à-vis* the international best practices, standards and codes. During the last 2 years, CEF carried out this comparative analysis for the experiences of capital markets (stocks and bonds) in Argentina, Chile, Brazil and Peru. Financial integration is needed to furthering domestic financial development. But there are many asymmetries among the countries of the sample, as reported in this study.

The book has six chapters, including this one. Chapter 2 discusses the recent experience and illustrates the features of the South American capital markets, which was authored by Dennis Mark Clark. Chapter 3 discusses the foreign exchange and capital mobility policies, and it was authored by María Luisa Streb (2008). Chapter 4 discusses issues related to convergence to IOSCO principles of securities markets supervision, which was authored by Ricardo Pasquini (2009). Chapter 5 deals with issues related with the adoption of international standards concerning accounting and auditing as defined by the International Accounting Standards Board and the International Federation of Accountants, and it was authored by Fernando Baer (2008). Finally, Chapter 6 presents the tax treatments to financial intermediation, and discusses issues of non-neutrality among instruments and countries, which was authored by Fernando Grosz (2008). In addition, all the above mentioned studies benefited from the contributions of Guillermo Larraín and Vicente Lazen (2008) that produced a working document on these issues in relation to Chile; while Felipe Morris (2008) did it for Peru. An executive summary of the book is presented below highlighting its main findings and recommendations.

South American Capital Markets Performance

The analysis documents the relevant features of capital markets in Argentina, Brazil, Chile and Peru with a focus on stock and bond markets. It aims at providing information hoping to raise awareness of the need to develop South American capital markets, improving channels for efficient allocation of savings into investments in a manner that is secure and sustainable over time. There has been a differential performance of capital markets across our sample of countries during the present decade. In general, the Brazilian, Chilean and Peruvian markets have exhibited important progresses, while the Argentinean market is lagging behind. Furthermore, the Brazilian and Chilean markets have already reached a stage of development comparable to some OECD markets and to the average performance of East Asian markets.

The main findings derived from the analysis pursued in this chapter are presented below.

- While the Peruvian stock market depth is similar to levels observed in East Asian countries; Chile and Brazil surpass these levels and show results nearing those of developed countries. Furthermore, the Chilean stock market has been the deepest in the region for over a decade; while the Argentina stock market has been the shallowest since 2005. Moreover, the Brazilian and Peruvian stock

markets capitalization relative to GDP have been growing throughout the period.

- Both the Brazilian and Chilean markets reach levels of stock market liquidity comparable to the majority of East Asian markets; whereas the Brazilian market experienced an impressive improvement in liquidity in recent years. The Argentine market is the least liquid, as its companies quote its shares mainly through North American markets rather than domestically.
- There does not seem to be much difference in market concentration, either by value or volume traded, between the South American markets and East Asian and developed ones, with the exception of the United States. Chile is the least concentrated of the South American countries in terms of market capitalization, followed by Peru, Argentina and Brazil, respectively. Nevertheless, with respect to liquidity, there appears to be a trend of de-concentration in these markets during the 2000s, Argentina and Peru standing as the least concentrated of the sample in 2008.
- The value of stock issued relative to GDP in East Asian markets is much larger than both Latin American and developed markets throughout the 2000s.
- Volatility of most South American stock markets has changed significantly in the past 5 years. The Peruvian IGBVL index evolved from being one of the least volatile in the region from 1999 to 2003 to the most volatile from 2004 to August 2009. On the other hand, the Chilean IPSA performance remained consistent in both periods, making it the least volatile of the sample.
- The Brazilian stock exchange presents the largest number of listed companies in the region, showing the highest growth in issuers from 2006 to 2008. With the exception of 2007, Argentina proves the least active market of the sample for stock issuance.
- Brazil dominates as the deepest bond market in the South American region for corporate and financial institution debt securities, surpassing Chile in 2004.
- Argentina bond market is dominated by government bonds, while Peru and Brazil show a greater share of private bonds in relation to public and foreign bonds.
- Brazil's corporate and financial institution debt securities market depth reaches that of Japan and is comparable to the average depth of East Asian markets.
- The number of companies issuing corporate bonds in each region is similar to those seen in stock issuance.

The above results suggest the need to further capital markets in South American countries. The trust of this book is to promote adoption of a long term development strategy for these markets based on integration in financial services along adherence to acceptable policies on foreign exchange and capital mobility, to international standards and codes in financial markets, and to best practices in tax treatment to financial instruments, including signing of adequate tax treaties. The next sections elaborate on these topics.

Foreign Exchange and Capital Mobility Policies

Financial liberalization in the capital market is expected to avoid undesired arbitrages, boost international and regional capital mobility, promote investment, and encourage growth. But to be successful, financial liberalization requires a stable macroeconomic policy environment and prudential regulations supported by efficient supervision of financial intermediaries.

While capital controls generate distortions, overabundance of capital mobility has been in part responsible for financial crisis in emerging markets. The discussion in academic and policy forums regarding possible gains and risks for recipients of international capital flows is not settled and there is an extensive literature on both sides. There is consensus among some economists, based on empirical evidence, that financial liberalization may generate instability in the short run, but in the long run it has a positive influence on investment and growth. The path to financial development is certainly not straightforward. This chapter deals with the asymmetries in the foreign exchange framework between Argentina, Brazil, Chile and Peru, focusing on the foreign currency and foreign capital mobility policies, as well as the transactions costs when issuing securities.

The main findings and suggested policy recommendations derived from the analysis pursued in this chapter are presented below.

- As seen through the chapter, direct and indirect controls and prudential norms are variants used by the four countries to slow down the volatility of capital flows, the pressure over the foreign exchange rate and/or international reserves.
- Chile and Peru are the most liberalized of the sample.
- Although, Brazil experienced a gradual process of liberalization during the nineties that was reinforced in the current century, the country still has important restrictions showing certain resistance to financial integration. For example, in mid October 2009, it introduced a tax on financial inflows

directed at purchasing stocks and bonds in order to reduce pressures on its currency to appreciate.

- In Argentina, the liberalization of its capital account in the nineties was deeper than in Brazil. Nevertheless, currently Argentina is the country of the sample with most capital controls and interventions in the foreign exchange market.
- An alternative approach to capital controls in order to manage risks associated with capital flows is to strengthen prudential policies in the capital markets to restrain excessive risk-taking behavior on the part of financial institutions.
- Prudential regulations do not focus on capital flows directly, but they do affect their composition, volume and volatility, and may well be used to manage capital flows. In fact, capital controls and prudential controls are becoming gradually intertwined as countries deregulate their financial sector and liberalize the capital account. The relationship between them requires careful study and coordination in order to put limits in the balance sheet risks while liberalizing. The set up and upkeep of prudential standards rely on public regulation and supervision, internal practices and controls together with market discipline.

Capital Markets Regulations

The analysis of this chapter compares securities markets regulations and its degree of implementation across four South American countries: Argentina, Brazil, Chile and Peru. Several indicators are constructed on the basis of regulators' auto-evaluations on the degree of implementation of securities regulations in their respective institutions and markets. The resulting set of indicators allows the easy recognition of similarities and differences across countries. Also, it provides grounds for future in-depth quantitative research on the topic. In particular, this study focuses on regulatory principles concerning the Regulator, Self-Regulatory Organizations, Enforcement and Cooperation (IOSCO, Principles 1 to 13). The analysis stresses the issues for which attention is needed, and constitutes an initial effort towards the study of the convergence in the regional regulatory framework.

The main findings and preliminary suggested policy recommendations derived from the analysis pursued in this chapter are presented below.

- Overall, the comparative analysis of the securities regulations of Argentina, Brazil, Chile and Peru, in terms of a selection of issues related to the IOSCO principles

of Securities Regulation seems to display diverse patterns. There are principles where countries display more similarities in terms of the respective issues and others where existing regulations differ notably. Moreover, there seems to be no country with an absolute advantage in terms of implementation in all the principles.

- In relation to the principles concerning the Regulator, countries seem to display similar patterns, but in particular, Brazil displays a closer implementation of the related principles. In terms of the issues that have been analyzed, Brazil exhibits clearer and objectively stated responsibilities of the Regulator, and it seems more independent. In terms of the economic powers to perform its functions, once again, the Brazilian Supervisors seem to display stronger powers than Peruvian or Argentinean. In addition, the study has suggested the following needs:
 - The creation of a special body (especially in Argentina and Peru) with the function of identifying and coordinating issues where cooperation between local authorities is needed (e.g., supervision of financial conglomerates).
 - Evaluate if it is necessary a separation of the responsibilities of the Chilean regulator.
 - Increase the independence of regulators by subjecting their authorities' appointment to legislative intermediation, and fixing the length of their tenures. Evaluate the optimal length of supervisor's tenure, taking into account political cycles, and uniform them.
 - Increase mechanisms of public accountability, including continuous and project-based publication of expenses.
 - Increase the Securities and Exchange Commission (CNV, from its name in Spanish) budget in Argentina.
- In terms of Inspection, Investigation and Surveillance powers, the pattern between countries differs in some dimensions. For example, in the case of investigative powers such as the power to command documents or to subpoena the testimony of witnesses when investigating a violation of securities laws, the attributions are quite similar across countries. These investigative powers are not limited to people or entities under the scope of supervision. In the case of other enforcement powers such as the attribution of directing orders to stop and do directed to Issuers, Distributors and Accountants, the country where the Supervisor exhibits more attributions in this respect is Peru, followed by Brazil, Chile, and Argentina in the last place. Furthermore, the study has suggested

the need for establishing especial mechanisms for investigations when they get in conflict with banking secrecy regulations, especially in the cases of Chile and Peru.

- In relation to Self-Regulatory Organizations (SROs) and the Supervisor oversight of the delegated responsibilities, the general patterns observed include the Securities Markets Law (SML) requiring the SRO to present to the Supervisor the regulations for revision or approval, and the cooperation of the SRO in investigations and for the enforcement of the regulation. In relation to the oversight responsibilities that are demanded to the SROs, in all the countries examined, the respective regulations demand SROs to establish their own set of rules, but there seems to be lack of power or will to establish sanctions (i.e., due to conflicts of interest).
- In terms of the local sharing of information with domestic and foreign regulators the results suggest that, at the domestic level, which whereas Argentina and Brazil exhibit laws in accordance with sharing of information, in Chile and Peru there is a need to clarify their legal frameworks. At the international level, Argentina and Brazil exhibit bilateral Memorandum of Understandings (MoUs), and Chile and Peru have signed the IOSCO Multilateral MoU.
- In the case of the Regulation of Collective Investment Schemes (CISs), the comparative analysis has focused to issues related to the eligibility, and the disclosure of information. In the case of requirements, regulations are quite similar across countries, but Argentina and Brazil present less of them. In the case of Argentina, for example, there are no restrictions on the qualifications and experiences for the administrators of CISs; and Brazil does not present capital requirements. In the case of disclosure obligations, the countries display similar requirements, and in general, only some issues are described to be disclosed by regulation; but Chile seems an exception, where regulation seems not to incorporate few of the analyzed requirements.

Accounting and Auditing Frameworks

In a considerable number of countries in Latin America, the differences in accounting rules, which diverge from international standards, represents a restriction for further development of financial markets. The convergence towards the application of accounting and auditing standards in regional stock markets would reduce the uncertainty and the cost of access to other financial alternatives. In this sense, at the global level, there exists a clear compromise to increase transparency and encourage the standardization of financial information

in accord with international accounting and auditing standards as defined by the International Accounting Standards Board and the International Federation of Accountants, respectively.

Among the main findings are: whereas Peru implemented the international standards a decade ago, Argentina, Brazil, and Chile only began defining outlines for the transition to such standards in recent years with clearly defined plans and stages; and with the expectation to complete plans implementation between 2009 and 2011. The resulting new practices will create challenges in the accounting profession. During this transition, constant institutional-professional training, support and monitoring will play a fundamental role in determining the success of adopting international standards.

The main findings and suggested policy recommendations derived from the analysis pursued in this chapter are presented below.

- With the exception of Peru, the other countries in the sample do not base their accounting and auditing codes and rules for the elaboration of their financial statements on international standards. The convergence process –familiarization with the international scheme and active capacity-building ex-post process– it is not an easy one and demands special efforts for achieving an accurate and smoothing development. As a policy recommendation, in the short run, first efforts on pursuing convergence to international standards might be directed to listed corporations, which could be adopted in a harmonized way. In the long run, it might be needed to foster the generalization of the convergence process to non listed corporations as well. This could be achieved by promoting a direct involvement of the accounting and auditing authorities.
- In the region, the convergence schemes towards international standards have different structures and implementation time-horizons depending on the particular country under analysis. As a policy recommendation, it might foster collaboration among countries. It would allow the formation of a learning curve absorbing other experiences and also to minimize the existence of regulatory/normative arbitrages.
- There is a lack of unique criteria for accounting practice of the same operation in the different countries. It might be needed to adapt the accounting principles and legal framework, considering equal treatment in the same transactions. Following this process, foster the convergence towards international standards.
- The adoption of international standards presents conceptual and application procedural challenges, given local practices and habits. As a policy recommendation, it might be implemented an agreed upon and coordinated capacity-building strategy to institutions and professionals.

- There is the presumption that potential troubles arise for an adequate updating of international standards, especially because there does not exist a clear and systemic strategy for monitoring and adapting local practices to them. As a recommendation, it might be designed a strategy that allow to systematically update local principles and codes considering international standards. This would lead to the need of generating adequate mechanisms at a local level –regional interaction would be an asset– for accomplishing that objective. For doing so, the degree of interaction among policy makers and relevant institutions would be crucial.

Tax Treatment of Financial Instruments

The focus of the analysis is to understand the main taxation issues and asymmetries in the current taxation regimes on investments in financial instruments in Argentina, Brazil, Chile and Peru. Different taxes affect the return on financial instruments such as bank deposits, government bonds, private bonds, stocks, mutual funds and financial trusts. Examples of these taxes are income tax, assets tax (for Argentina and Peru), tax on bank credits and debits, among others. The rates that apply depend on the financial instrument and the type of holder: whether it is a resident individual, a resident company, or a non-resident individual or company. Double taxation treaties among countries are also considered.

The main findings and suggested policy recommendations derived from the analysis pursued in this chapter are presented below.

- The four countries analyzed in the chapter tax interest and dividend income, capital gains, and assets differently. Not only are the rates different from one country to another; but there are also exemptions that vary across countries and types of holder.
- In Argentina and Peru there is an assets tax on corporations that can be taken as an advance payment towards corporate income tax.
- Argentina is the only one among the four countries that taxes individuals' wealth (assets tax). The tax is calculated depending on the total value of assets individuals have as of December 31.
- Argentina and Peru tax bank credits and debits. In Peru, it can be taken as a credit towards income tax; while in Argentina, only one sixth can be taken as an advance payment towards income tax. The rest is deductible from income. The rate in Argentina is higher.

- In Argentina, there are taxes such as the value added tax or the turnover tax that introduce asymmetries (some instruments are exempt, while others are not).
- Minimum reserve requirements and their remuneration differ across countries. Minimum reserve requirements that are remunerated at rates below market rates introduce a cost on financial intermediation. Bank spreads will rise and will introduce a bias between bank financing and private debt financing.
- Chile is the only one of the four countries that treats dividends adequately. Individual residents: dividends pay income tax, but the income tax paid by the firm can be taken as a credit. All other countries do not tax dividend distributions, but also do not allow taking as a credit any income tax paid by the firm.
- Government bonds are exempt from certain taxes, which make them, *ceteris paribus*, relatively more attractive in Argentina, Brazil and Peru. Public market offering of private bonds do not receive the same tax treatment, except in Chile, where both government and private bonds pay income tax on interest or capital gains.
- Interests on bank deposits are always exempt from income tax in Peru. In Argentina, interest on bank deposits in local banks are exempt from income tax for individual residents and savings and time deposits are exempt from assets tax (the only exception are interests on deposits with an inflation adjustment clause; in this case, the real interest is subject to income tax). However, interests are not exempt for companies or non-resident individuals. In Brazil, bank interests are taxed depending on the maturity of the deposit, while in Chile, bank interests are subject to income tax.
- When companies receive dividend distributions, they are not required to pay income tax on the dividend. In general, companies are subject to income tax on interests and capital gains.
- Holdings of mutual funds and financial trusts receive a different treatment depending on the country and the type of holder of the instrument (individual resident, resident company or non-resident individual or company).

Treaties to avoid double taxation issues among countries contribute at providing a level playing field for firms to earn their right of establishment across jurisdictions which promote competition; and to avoid tax arbitrage among market participants. Notwithstanding the existence of such treaties, there is still room for cross border tax arbitrage among the group of selected South American countries. Each of the four countries has signed double taxation agreements with other countries. However, there are no such agreements between some of the countries in the sample.

A natural recommendation would be for the formation of a permanent consultative group among tax experts and government officials from these four countries to review tax treatment to financial intermediation aimed at the harmonization of: (1) tax legislations; (2) tax administrations; and (3) double taxation treaties.

Concluding Remarks

Clearly, the reform agenda resulting from this work is quite impressive. Furthermore, it brings new questions and research lines in the same group of countries. In particular: (i) the need for addressing the demand-side by analyzing the applicable treatment for both local and international institutional investors (pension funds, insurance companies, investment funds and mutual funds); and (ii) the analysis of other instruments such as banking, trusts, leasing, factoring, derivatives, assets back securities. Needless to say, expanding these studies for all Latin American countries would also be desirable.

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South American Capital Markets Performance

DENNIS MARK CLARK

2

CHAPTER

South American Capital Markets Performance¹

DENNIS MARK CLARK²

The objective of this chapter is to document and analyze relevant features of capital markets in Argentina, Brazil, Chile and Peru, focusing on stock and bond markets and their development in recent years.

The chapter aims at providing information hoping to raise awareness of the need to develop South American capital markets, improving channels for efficient allocation of savings into investments in a manner that is secure and sustainable over time.

The documentation and analysis of this chapter is divided into three sections including relevant features of stock markets, bond markets, and summary. The main features of stock markets will be covered in the first section, providing information about depth, liquidity, stock issues, returns, volatility and recent public offerings in each of the four countries. The second section will cover bond markets, evidencing the depth of aggregated corporate and financial institutions debt security markets and also including specific illustrations of bond market liquidity and number of listed private bond issuers in each of the four countries under analysis. The previous two sections also include a comparison of South American, East Asian and developed countries performance in stock and bond markets. Finally, the third section summarizes the results.

1 This chapter is a review and update of Ferraro (2008).

2 Clark is grateful to Alberto R. Musalem (CEF) for his helpful comments and thanks Vicente Lazen (SVS Chile) and Alejandro Bour (ROFEX) for their data contributions.

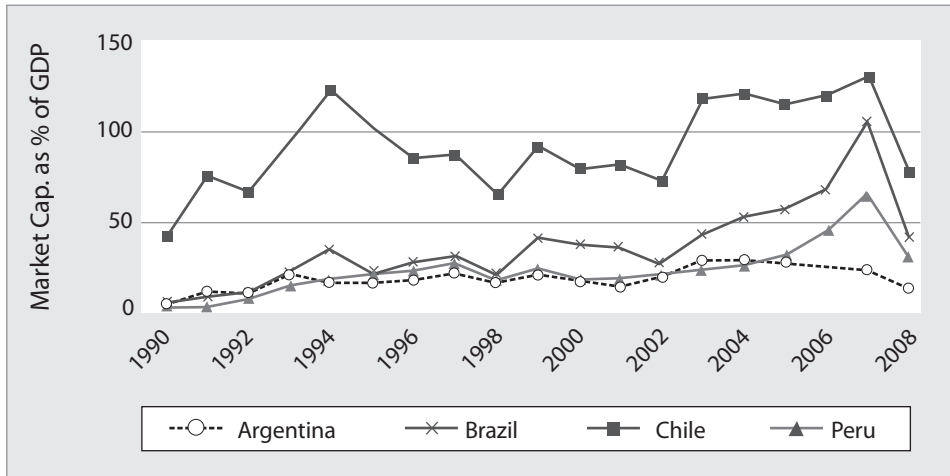
Stock Markets

Depth

To begin, it is convenient to characterize the size of each stock market in relation to the Gross Domestic Product (GDP) of its respective economy. This indicator is important in that it provides an idea about the depth per market. While a deep market guarantees that transactions are executed without affecting market prices, a shallow market implies that transactions play a more crucial role in determining market prices.

While the Chilean stock market has been the deepest throughout the period, the market of Argentina proves to be the least dynamic, standing as the shallowest in the region since 2005. Notable are the growths of both the Brazilian and Chilean markets, increasing significantly since 2003. However, the sharp declines in market depth resulting from the recessionary period beginning in late 2007 should not go unnoticed, most acute in the case of Brazil (Figure 1).

FIGURE 1 STOCK MARKET CAPITALIZATION IN SELECTED SOUTH AMERICAN COUNTRIES

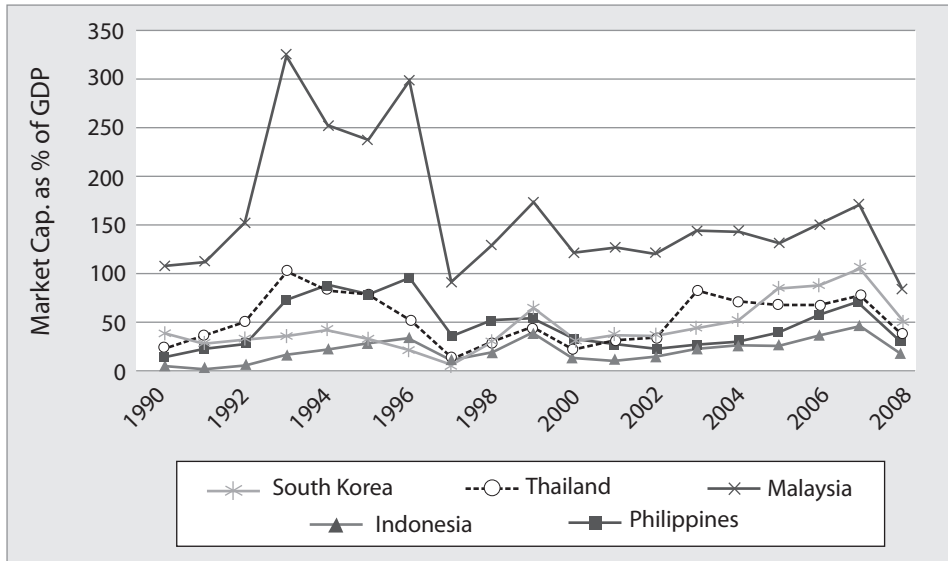


SOURCE: WFE and IMF.

A comparison of depth in the four South American markets in relation to East Asian and developed markets provides insight in terms of the regional markets' comparative positions (Figures 2 and 3).

FIGURE 2

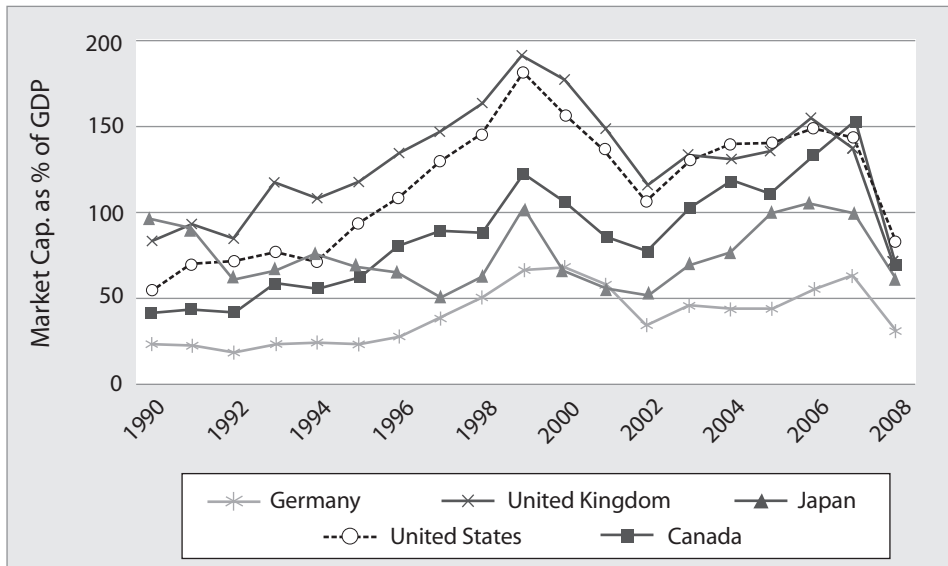
STOCK MARKET CAPITALIZATION IN SELECTED EAST ASIAN COUNTRIES



SOURCE: WFE and IMF.

FIGURE 3

STOCK MARKET CAPITALIZATION IN SELECTED DEVELOPED COUNTRIES



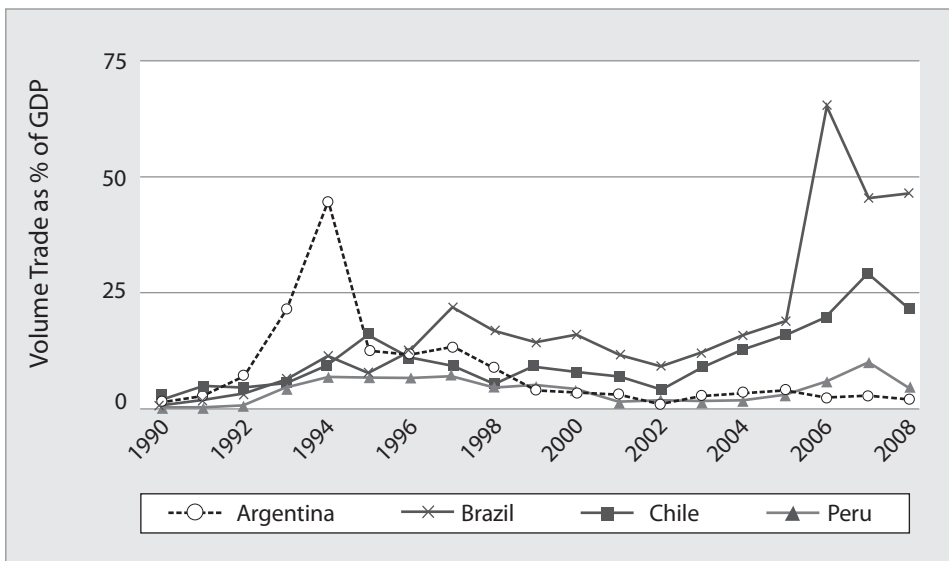
SOURCE: WFE and IMF.

Although the Peruvian market depth appears comparable to levels seen in East Asian markets, Chile and Brazil fully surpass the depths of these markets and show results closer to those of developed markets. East Asian and developed markets both demonstrate a substantial decline in market levels since 2007, while South American market performance during the crisis appears most similar to the latter. It is interesting to notice that the decline in market capitalization in Argentina during the crisis is proportionally least relative to the rest of the countries. This could be explained, in part, by its relative isolation from international capital markets. Additionally, it is the only market exhibiting a declining trend in market capitalization since 2003.

Liquidity

Another relevant variable of markets is their liquidity. Low market liquidity translates into higher risk due to the possibility of decreases in stock value resulting from large differences between bid and ask prices, as well as time required for the settlement of each operation. Low liquidity implies few buyers and sellers trading in the market, while highly liquid markets are characterized by many buyers and sellers, and therefore probability that current transactions will be executed at prices near those of most previous ones. One metric used as evidence of market liquidity is the volume of stocks traded in relation to the size of the economy.

FIGURE 4 STOCK MARKET LIQUIDITY IN SELECTED SOUTH AMERICAN COUNTRIES

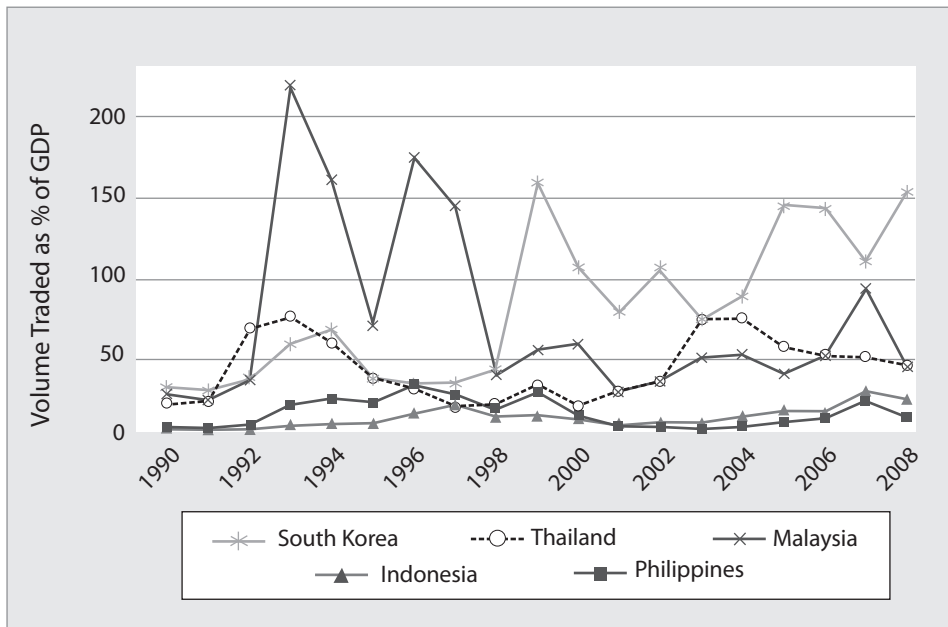


SOURCE: WFE and IMF.

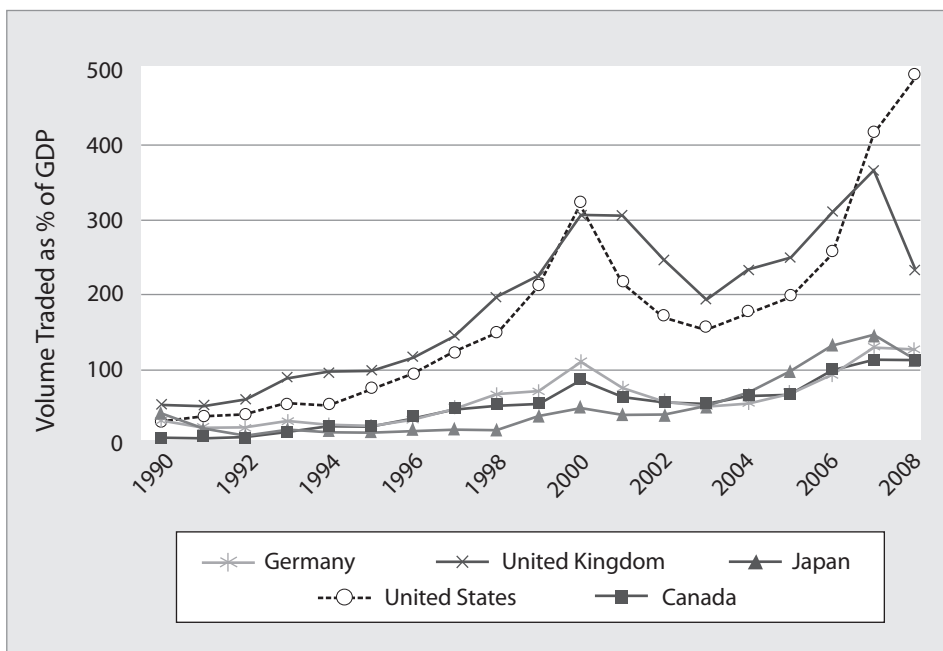
In the past 3 years, the strongest liquidity performance for the selected South American markets can be seen in Brazil. An interesting performance is that of the Argentine market, which was the most liquid in the mid 1990s. However, it became the market with the weakest volume traded in relation to GDP in 2005 (Figure 4).

An interesting comparison can be made between each of the South American markets with those observed in East Asia and developed countries. With exception to the South Korean market, the liquidity of Chilean and Brazilian markets reaches levels seen in East Asian markets beginning in 2003. Nevertheless, developed markets present much higher liquidity than those of South America and East Asian markets. Furthermore, liquidity seems to be relatively more volatile in East Asia than in South American markets (Figures 4, 5 and 6).

FIGURE 5 STOCK MARKET LIQUIDITY IN SELECTED EAST ASIAN COUNTRIES



Source: WFE and IMF.

FIGURE 6 STOCK MARKET LIQUIDITY IN SELECTED DEVELOPED COUNTRIES

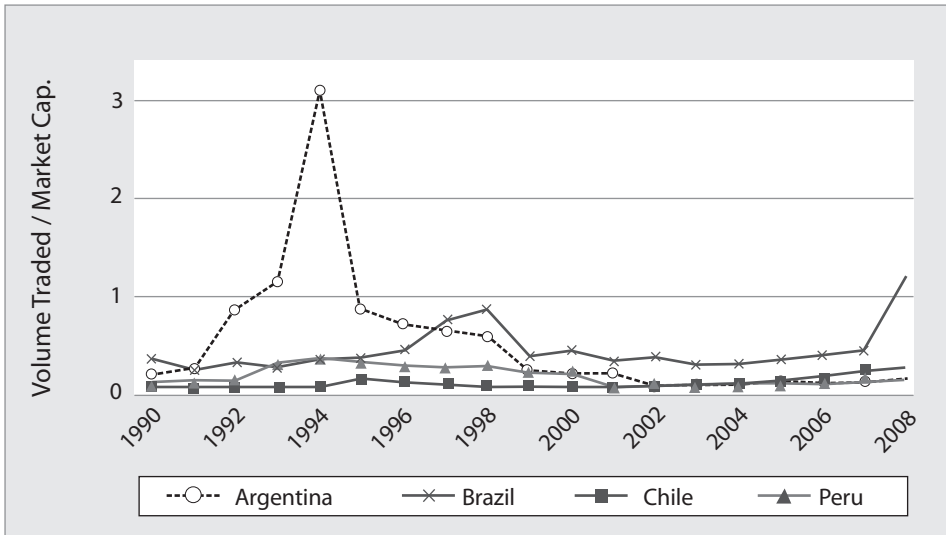
SOURCE: WFE and IMF.

Another measure of market liquidity is the turnover ratio. This indicator shows how many times the stock has rotated with respect to its value at a period in time. It is calculated as the ratio of volume traded annually to market capitalization.

During the 2000s, Argentina, Chile and Peru all have small and stable turnover ratio levels, whereas Brazil shows an increasing tendency, most evident since 2007. Again, Argentina had the highest liquidity in the region in the mid 1990s (Figure 7).

FIGURE 7

TURNOVER RATIO IN SELECTED SOUTH AMERICAN MARKETS

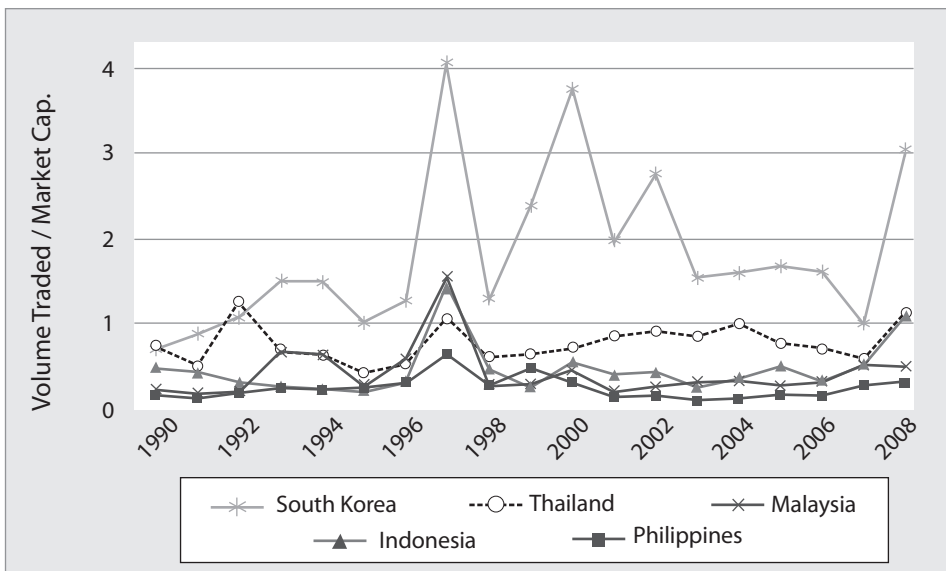


SOURCE: WFE and IMF.

In relation to East Asian markets, recent Brazilian figures exhibit similar values to those of Indonesia and Thailand (Figure 8).

FIGURE 8

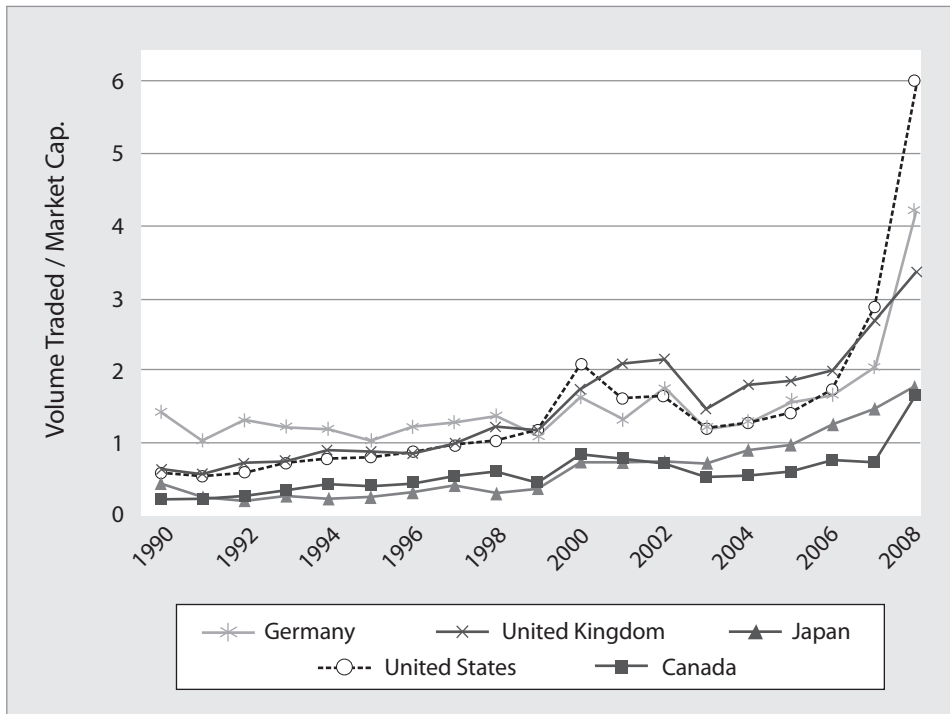
TURNOVER RATIO IN SELECTED EAST ASIAN MARKETS



SOURCE: WFE and IMF.

Contrastingly, the turnover ratios in developed markets greatly surpass those of the South American markets. Although Brazil appears to be nearing Canadian market levels (Figure 9).

FIGURE 9 TURNOVER RATIO IN SELECTED DEVELOPED MARKETS



SOURCE: WFE and IMF.

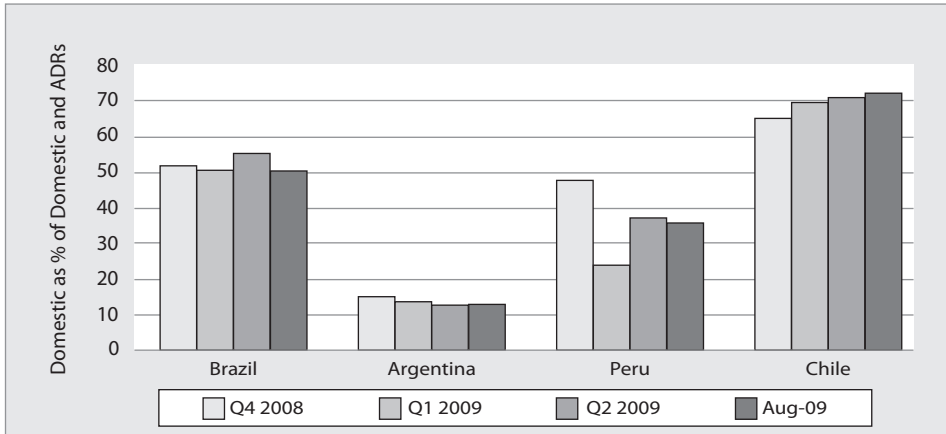
Cross Border Transactions

Many of the companies that quote their stocks in South American markets are also listed in other international markets such as the New York Stock Exchange, Nasdaq and American Stock Exchange. Shares bought in the local market can be negotiated in North American markets through American Depositary Receipts (ADRs), and vice versa. These foreign markets provide greater liquidity for stocks of South American companies.

As previously stressed by Olivieri and Ferraro (2007), it is interesting to observe the proportion of US dollar volume traded in domestic South American markets vs. the volume operated in ADRs.

Opposite to Chile and Brazil, the great majority of Argentine equities is channeled through North American markets rather than traded in domestic markets.

FIGURE 10 DOMESTIC STOCK VOLUME AS % OF TOTAL VOLUME FOR SELECTED SOUTH AMERICAN COUNTRIES (INCLUDES DOMESTIC AND US MARKETS)

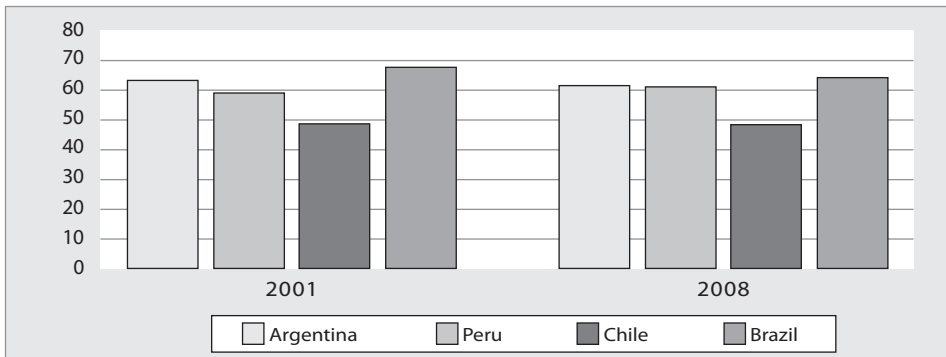


SOURCE: WFE and IMF.

Concentration

The following figure evidences the market concentration of the top 5% largest companies by market capitalization compared with total domestic market capitalization of the selected South American countries (Figure 11).

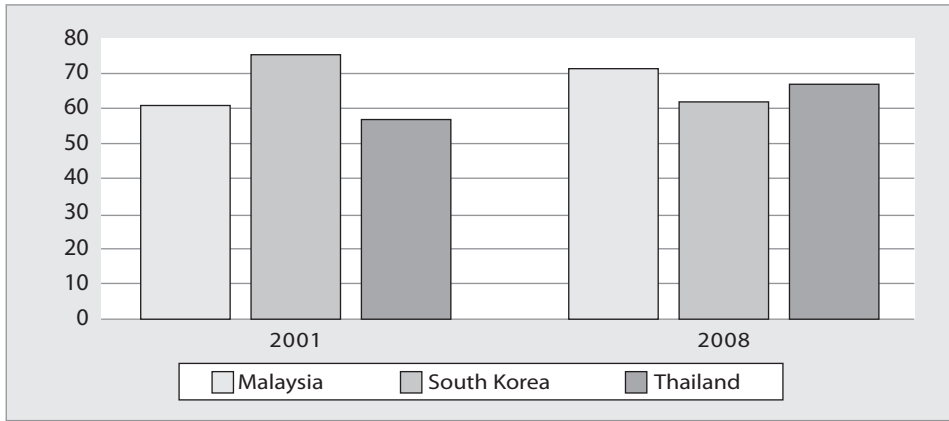
FIGURE 11 MARKET CONCENTRATION: 5% MOST CAPITALIZED COMPANIES RELATIVE TO DOMESTIC MARKET CAPITALIZATION IN SELECTED SOUTH AMERICAN COUNTRIES



SOURCE: WFE and IMF.

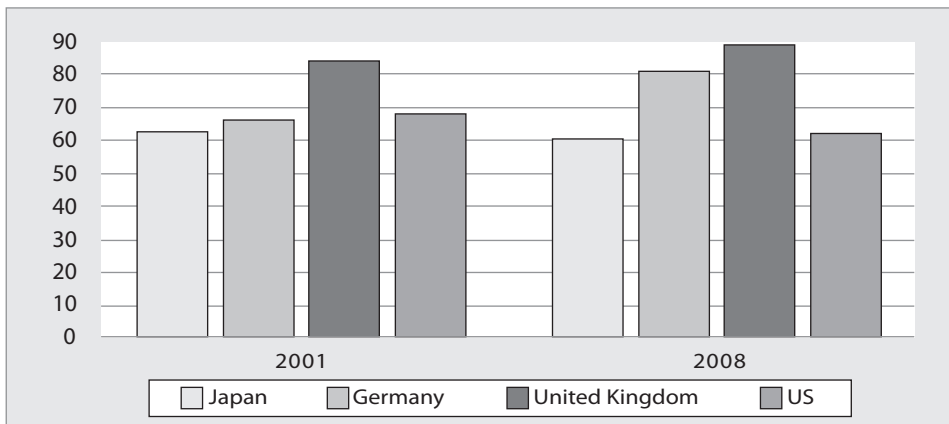
In terms of market value, Chile is the least concentrated market, followed by Argentina and Peru. A slight fall in terms of market concentration is noticeable between 2001 and 2008 in Argentina, Chile and Brazil, while in Peru concentration appears to increase slightly. As a whole, these countries all appear to be in the same market concentration range as East Asian and developed markets (Figures 12 and 13).

FIGURE 12 MARKET CONCENTRATION: 5% MOST CAPITALIZED COMPANIES RELATIVE TO DOMESTIC MARKET CAPITALIZATION IN SELECTED EAST ASIAN COUNTRIES



SOURCE: WFE.

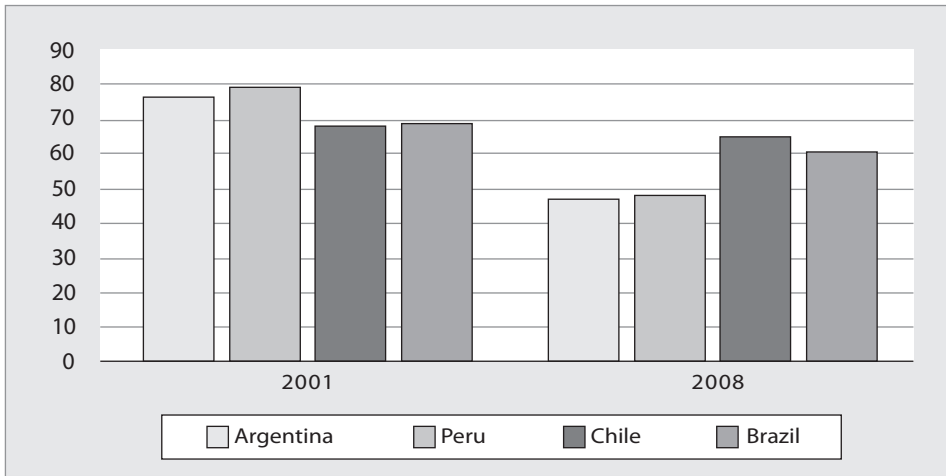
FIGURE 13 MARKET CONCENTRATION: 5% MOST CAPITALIZED COMPANIES RELATIVE TO DOMESTIC MARKET CAPITALIZATION IN SELECTED DEVELOPED COUNTRIES



SOURCE: WFE.

The figures below represent the market concentration of the top 5% most traded companies relative to total domestic volume. Evident is a tendency toward de-concentration in the South American markets during the 2000s, with Argentina and Peru as the least concentrated in the sample (Figure 14).

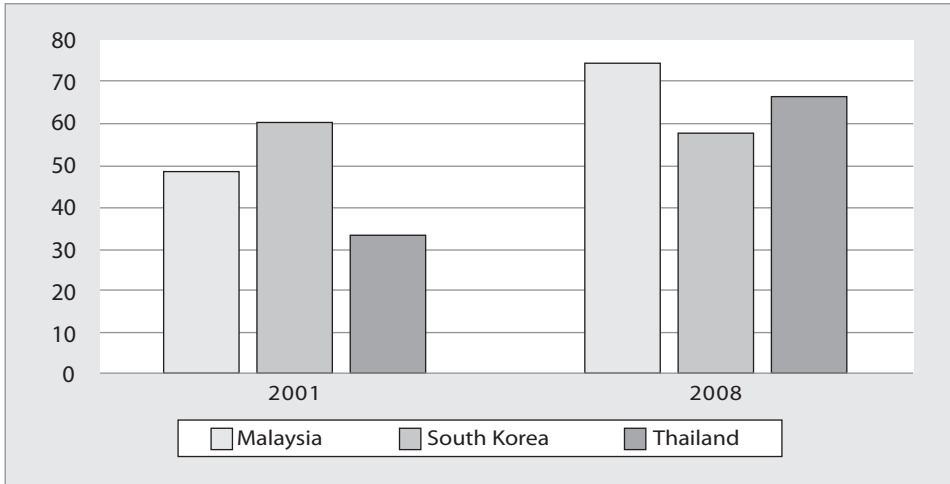
FIGURE 14 MARKET CONCENTRATION: 5% MOST TRADED COMPANIES RELATIVE TO DOMESTIC VOLUME TRADED IN SELECTED SOUTH AMERICAN COUNTRIES



SOURCE: WFE.

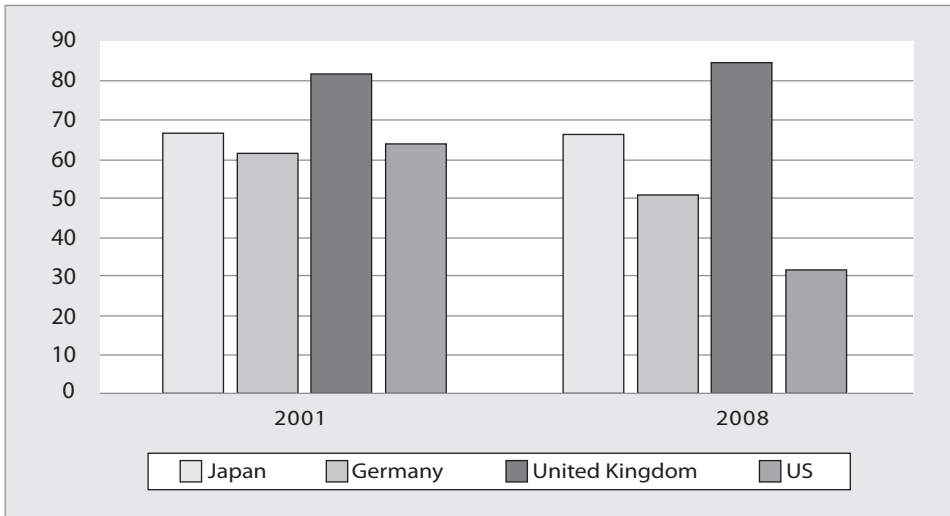
In relation to East Asian and developed markets, the volume concentration in the four South American markets lies within the volume concentration in all sample markets, excluding the United States which has the lowest concentration (Figures 15 and 16).

FIGURE 15 MARKET CONCENTRATION: 5% MOST TRADED COMPANIES RELATIVE TO DOMESTIC VOLUME TRADED IN SELECTED EAST ASIAN COUNTRIES



SOURCE: WFE.

FIGURE 16 MARKET CONCENTRATION: 5% MOST TRADED COMPANIES RELATIVE TO DOMESTIC VOLUME TRADED IN SELECTED DEVELOPED COUNTRIES



SOURCE: WFE.

Listed Companies

Table 1 illustrates the number of companies listed in each market as well as the registered listing and delisting, cumulative for each of the past 3 years. The Buenos Aires-Argentina Stock Exchange has the smallest number of companies listed within the group. Nevertheless, it has seen a net increase in company listings in the past 3 years. While the Santiago-Chile Stock Exchange is the second largest in the original South American subset, it has experienced a net loss of 8 listings in the past 3 years. The São Paulo-Brazil Stock Exchange shows a loss of 12 listings in the past year, yet proves to be the largest and most growing market in the region with net 49 companies added in the past 3 years. It must be noticed that relative to developed markets the number of listed companies observed in Latin American markets is much lower.

Table 1 LISTED COMPANIES IN LATIN AMERICAN STOCK EXCHANGES

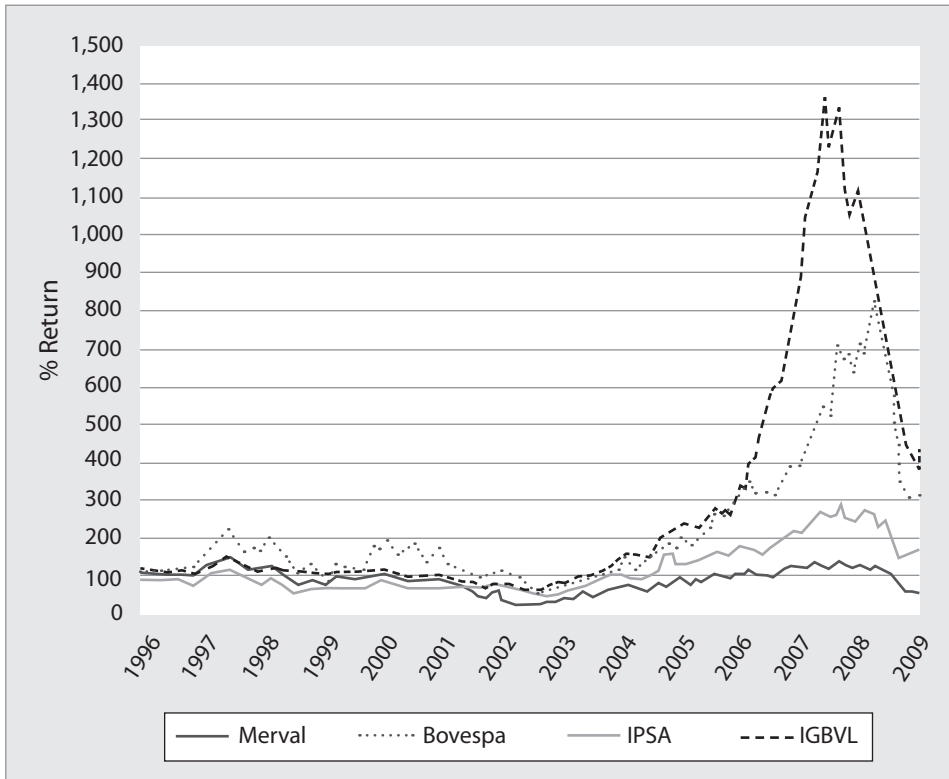
| | Number of Listed Companies | | | Net Listing and Delisting | | |
|----------------|----------------------------|----------|---------|---------------------------|--------------|--------------|
| | Total | Domestic | Foreign | Last Year | Last 2 Years | Last 3 Years |
| | 2008 | | | | | |
| Buenos Aires | 112 | 107 | 5 | 1 | 6 | 8 |
| São Paulo | 392 | 383 | 9 | -12 | 42 | 49 |
| Santiago | 238 | 235 | 3 | -3 | -8 | -8 |
| Lima | 244 | 201 | 43 | 18 | 22 | 19 |
| Mexico | 373 | 125 | 248 | 6 | 37 | 46 |
| Colombia | 89 | 89 | 0 | -1 | -4 | -7 |
| NYSE | 3,011 | 2,596 | 415 | -112 | -206 | -228 |
| Toronto | 3,841 | 3,755 | 86 | 63 | 222 | 393 |
| Deutsche Börse | 832 | 742 | 90 | 125 | 153 | 188 |
| London | 3,096 | 2,415 | 681 | -220 | -178 | -30 |
| Euronext | 1,002 | 1,002 | 0 | -30 | 16 | 14 |

SOURCE: WFE.

Returns

Figure 17 reflects the market price performance for the four South American countries under analysis, normalized at 100% of index value in January 1996. All South American indexes demonstrate upward trends early in 2003, declines in mid 2008 (after the Lehman debacle) and noticeable upturns in 2009 as a result of the renewal of risk appetite abroad and changes of investment flows into emerging economies. In particular, the Brazilian Bovespa and the Peruvian IGBVL indexes reflect comparatively noticeable variances. While the sharp rise and fall of the Peruvian index is in part explained by the dominant role of mining companies in the market.

FIGURE 17 STOCK MARKET RETURNS IN SELECTED SOUTH AMERICAN COUNTRIES (US\$)

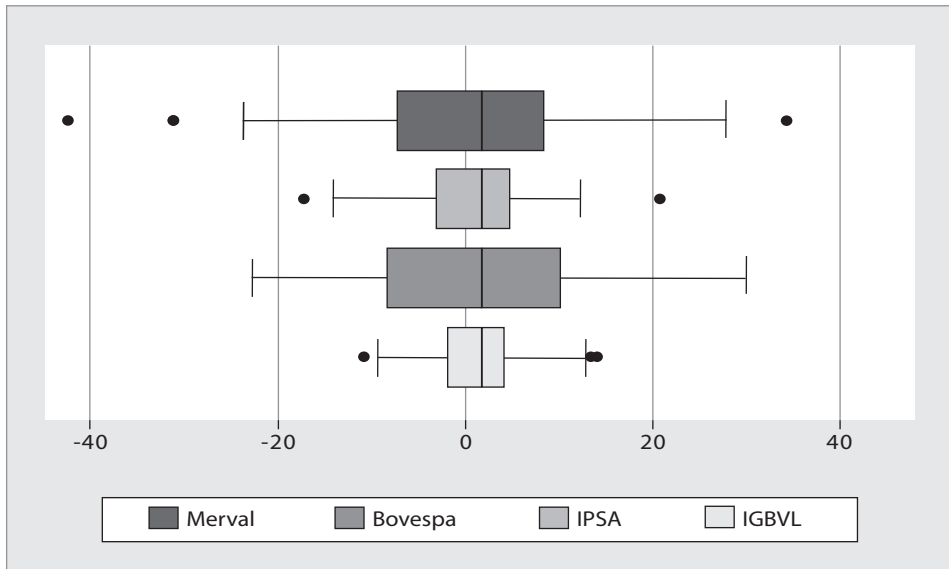


SOURCE: Own elaboration, based on Central Bank of Peru, Central Bank of Chile, Oanda and Yahoo! Finance.

Volatility

Another important market variable to recognize is volatility. The following boxplots show the dispersion of monthly returns in each market under analysis, divided into two periods (Figures 18 and 19)³.

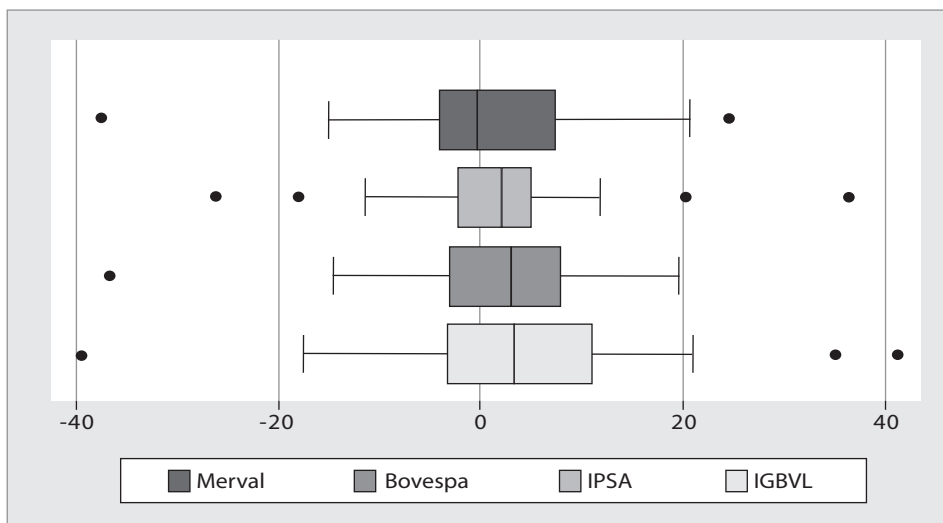
FIGURE 18 DISPERSION OF MONTHLY RETURNS IN SELECTED SOUTH AMERICAN COUNTRIES (1999-2003)



SOURCE: Own elaboration, based on Central Bank of Peru, Central Bank of Chile, Oanda and Yahoo! Finance.

3 Boxplots represent the dispersion in market gains and losses, calculated by the Month on Month (MoM) percent change in the stock market price levels. The shaded region represents the second and third quartile range of return (middle 50%), the vertical line marking the median of the entire data set. The whiskers and outlying points represent moderate and extreme deviations, respectively. Volatility is measured by the range determined by the whiskers.

FIGURE 19 DISPERSION OF MONTHLY RETURNS IN SELECTED SOUTH AMERICAN COUNTRIES (2004-Aug. 2009)



SOURCE: Own elaboration, based on Central Bank of Peru, Central Bank of Chile, Oanda and Yahoo! Finance.

Independent of any assumption of return distribution, during the period 1999–2003 the Argentine stock market was the most volatile in the region followed by the Brazilian market. The Chilean and Peruvian markets exhibited the smallest return volatility in the sample⁴.

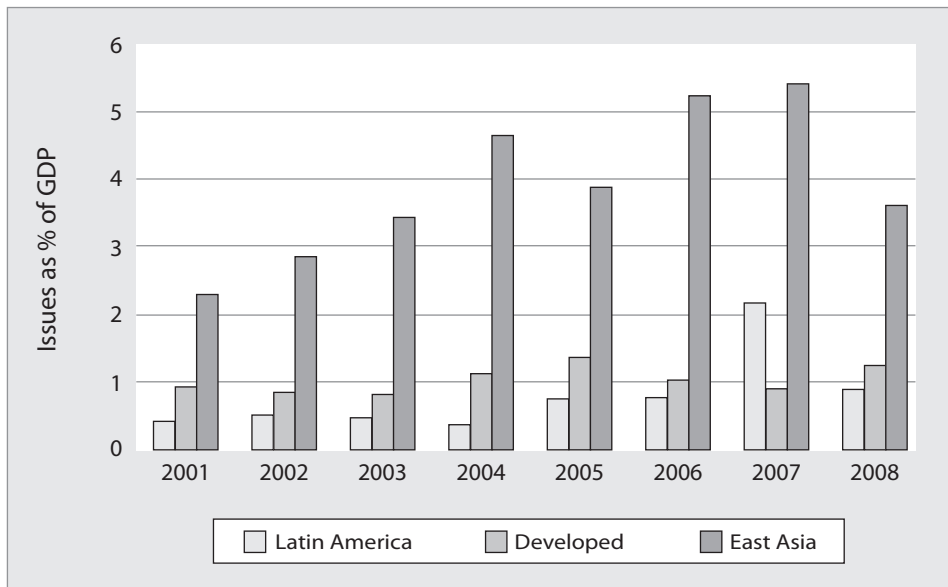
However, the volatility of most South American markets has changed significantly since 2004. The Peruvian IGBVL index evolved from being one of the least volatile in the region during the first period to the most volatile in the second period. Brazil and Argentina held the second position regarding volatility, while the Chilean IPSA performance remained consistent with the previous period, making it the least volatile of the sample. It is important to recognize the negative outliers of each market in Figure 19. In October 2008, the Merval, Bovespa and IGBVL each lost nearly 40% of the previous month's value, while Chile's IPSA lost just over 26%. Equally interesting are the positive outliers resulting from market gains in May and June of 2009. While the Merval, Bovespa and IPSA exhibit MoM gains of around 20%, the IGBVL shows a gain of 35%.

⁴ For details see Bekaert and Harvey (1997); Hull (2002); Wong Dávila (2003); Ross, Westerfield and Jaffe (2003).

Stock Issues

The following is an analysis of the primary stock markets. Stock issues include Initial Public Offerings (IPOs) from new issuers and existing issuers. While the value of stocks issued in Latin American markets (including Colombia and Mexico) in relation to the size of their economies surpassed levels in developed countries for the first time in 2007, previous performance is observed again in 2008. Nevertheless, the value of stock issued relative to GDP in East Asian markets is much larger than both Latin American and developed markets throughout the period (Figure 20).

FIGURE 20 STOCK ISSUES OVER REGIONS

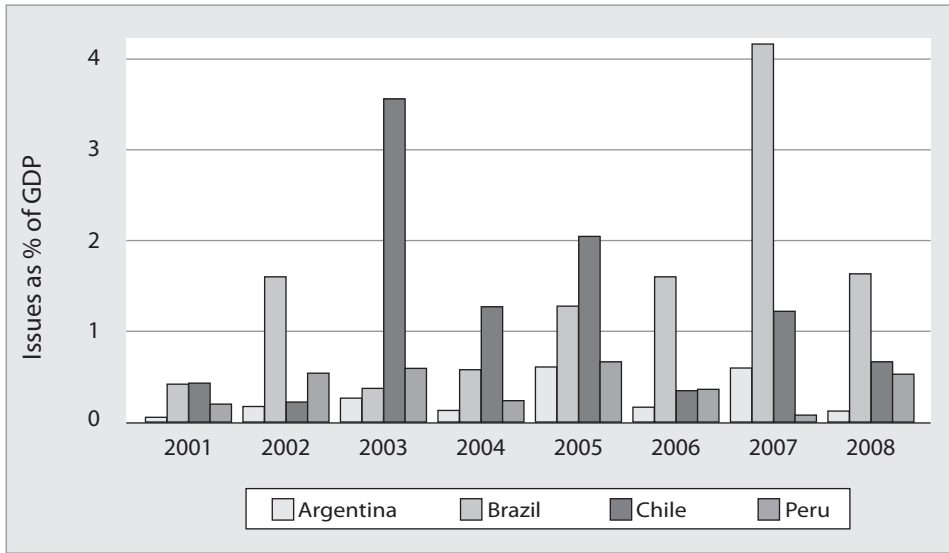


SOURCE: WFE, FIAB and IMF.

Regarding the South American markets under analysis, the country with the greatest value of stock issues in each market relative to GDP is mixed throughout the period. Beginning in 2003, Brazil shows notable growth in offerings, gradually surpassing Chile and establishing itself as the strongest in the region. With the exception of 2007, Argentina proves the least active market of the sample for stock issuance (Figure 21).

FIGURE 21

STOCK ISSUES IN SELECTED SOUTH AMERICAN COUNTRIES



SOURCE: WFE, FIAB and IMF.

Bond Markets

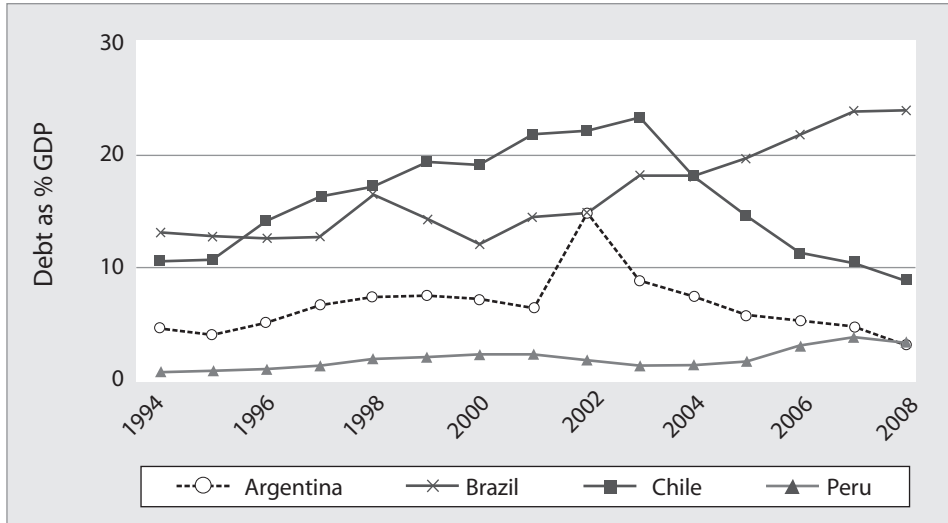
Depth in Corporate and Financial Institutions Debt Securities Markets

This section refers to debt securities markets, specifically concentrating on corporate and financial institution debt securities. In order to show the depth of each market, the value of outstanding corporate and financial debt securities is related to the size of its economy. Figures 22, 23 and 24 evidence the market depth of corporate and financial institution debt securities for each South American country under analysis, as well as for selected East Asian and developed markets, respectively⁵.

5 Debt securities include long-term bonds, notes, commercial paper and short-term money market instruments. Corporate and financial institution debt securities are calculated as international debt securities, less government issues, plus domestic debt securities from financial and corporate issuers. International debt securities comprise of all foreign currency issues by residents and non-residents in a given country and all domestic currency issues launched in the domestic market by non-residents. In addition, domestic currency issues launched in the domestic market by residents are also considered as international issues if they are specifically targeted at non-resident investors. Domestic debt securities are defined as those that have been issued by residents in domestic currency and targeted at resident investors.

FIGURE 22

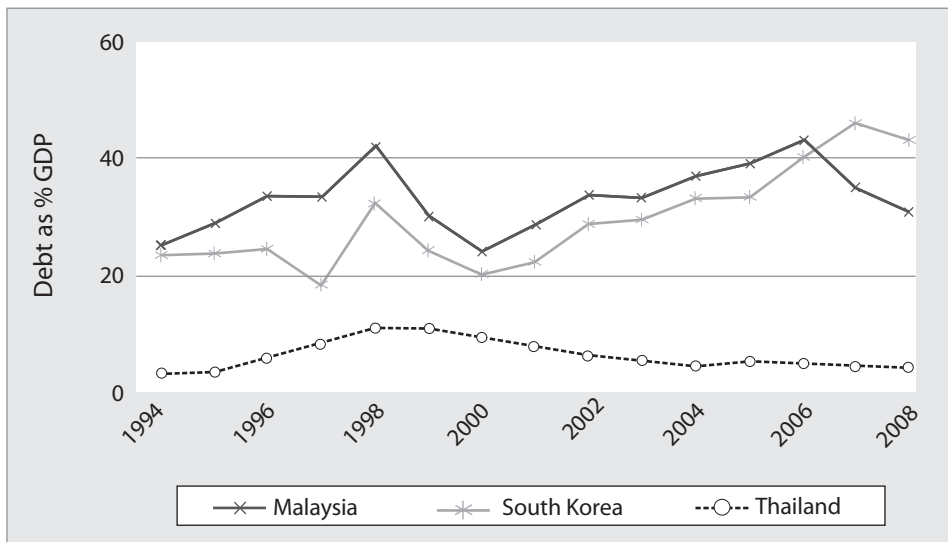
OUTSTANDING CORPORATE AND FINANCIAL INSTITUTION DEBT SECURITIES
IN SELECTED SOUTH AMERICAN COUNTRIES



SOURCE: BIS and IMF.

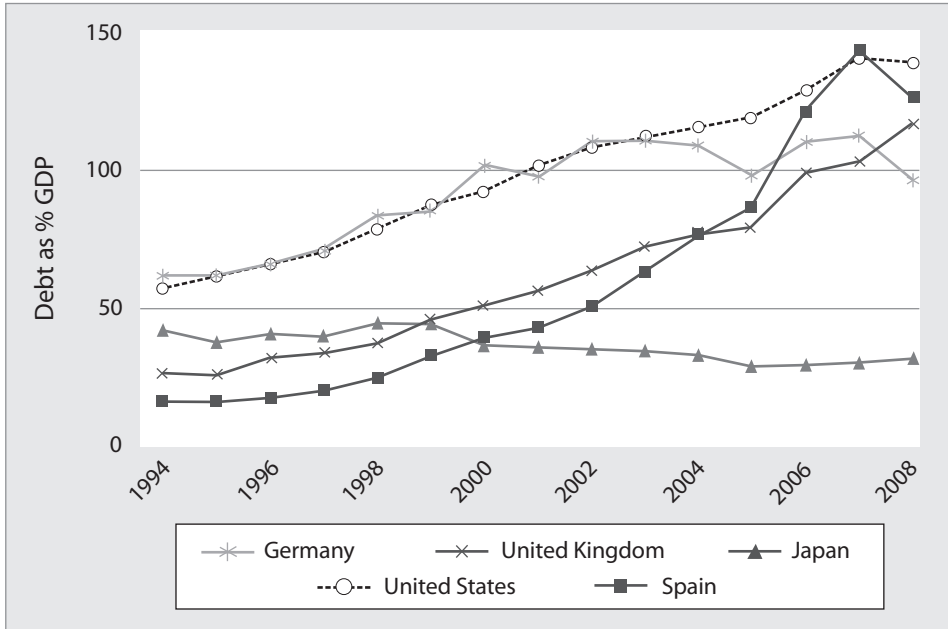
FIGURE 23

OUTSTANDING CORPORATE AND FINANCIAL INSTITUTION DEBT SECURITIES
IN SELECTED EAST ASIAN COUNTRIES



SOURCE: BIS and IMF.

FIGURE 24 OUTSTANDING CORPORATE AND FINANCIAL INSTITUTION DEBT SECURITIES IN SELECTED DEVELOPED COUNTRIES



SOURCE: BIS and IMF.

For the South America markets, Brazil shows the most dynamic corporate and financial institution debt securities market, exhibiting continuous deepening since 2000 and accelerating significantly since 2005⁶. In relation to developed markets, Brazil's market depth reaches that of Japan and is comparable to the average depth of the selected East Asian markets. The Peruvian market for corporate and financial institution debt securities has also shown a slightly positive trend throughout the period. However, Argentina and Chile's market depth started declining in 2002 and 2003.

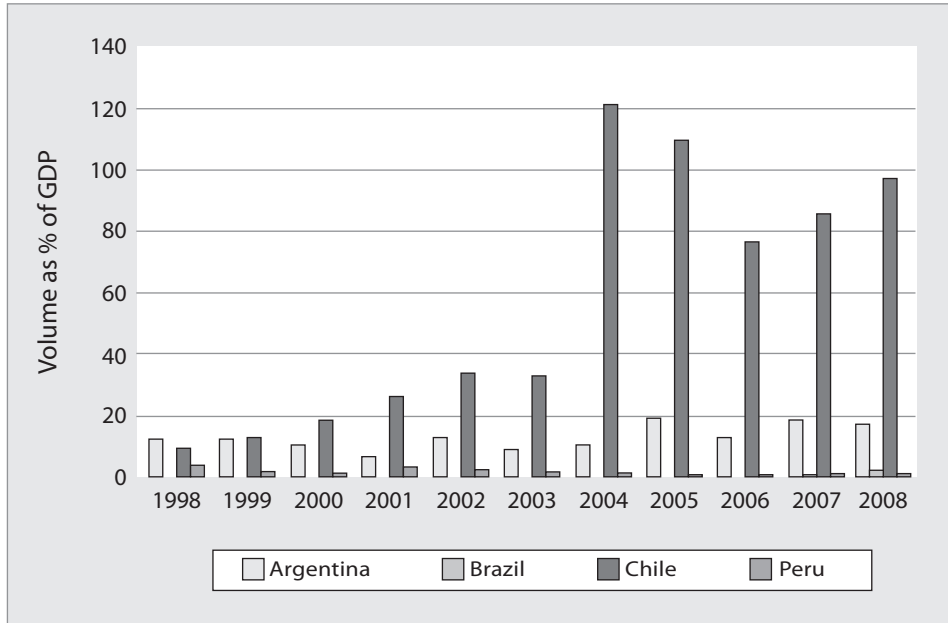
Bond Market Liquidity

Observing the total volume of public and private sector bonds traded as percentage of GDP, the volume traded in Chile and Argentina stands out amongst the other selected South American markets throughout the period (Figure 25).

6 For more details see De la Torre and Schmukler (2004); Erb, Harvey and Viskantas (2000).

FIGURE 25

**BOND MARKETS VOLUME TRADED IN SELECTED SOUTH AMERICAN COUNTRIES
(PUBLIC AND CORPORATE BONDS, % OF GDP)**



SOURCE: WFE, SND and IMF.

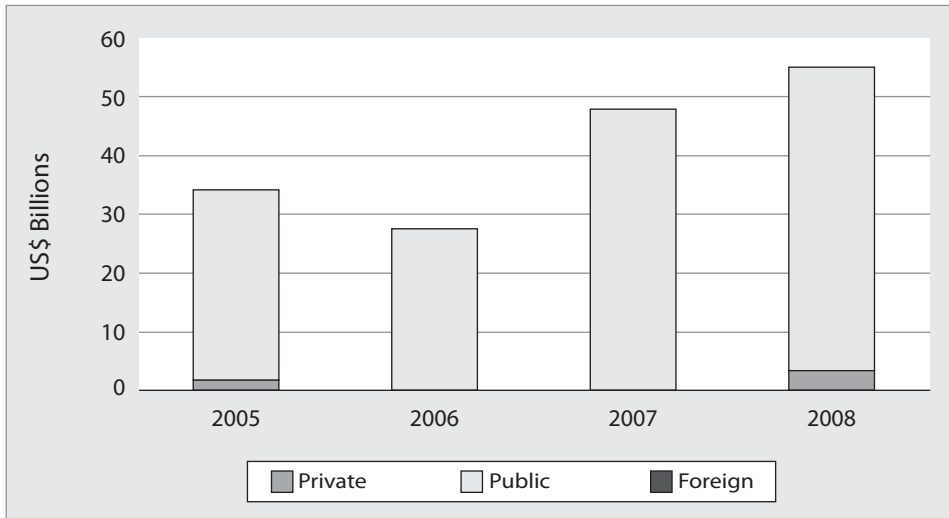
Figures 26, 27 and 28 present the nominal value of bonds traded by type of bond instrument within each South American country⁷. In the case of Brazil, data corresponds only to the volume traded in the Bovespa FIX⁸. However, Chile is not presented because it does not disaggregate bond data.

7 Instruments include public, private and foreign bonds. Foreign bonds are defined as bonds listed on the exchanges issued by non-resident institutions, i.e., foreign governments, banks, financial institutions, supranational institutions, Eurobonds.

8 In Brazil, bonds are traded on the National Debentures System (SND, Sistema Nacional de Debêntures) and the Bovespa FIX. The SND is a Brazilian electronic secondary market for debentures created in 1988 and maintained by the National Association of Financial Institutions (ANDIMA). A smaller portion trades on the Bovespa FIX, an integrated framework for the trading, settlement and safekeeping of corporate bonds created in 2001 by the São Paulo Stock Exchange (Bovespa). Although in Brazil the majority of bonds trade on the SND (volume of US\$33.2 billion in 2008), unfortunately the SND does not disaggregate trading data. For this reason, the data presented corresponds only to the volume trading in the Bovespa FIX (representing about 2% of total volume traded domestically), hoping to provide a representative sample of the entire domestic market composition.

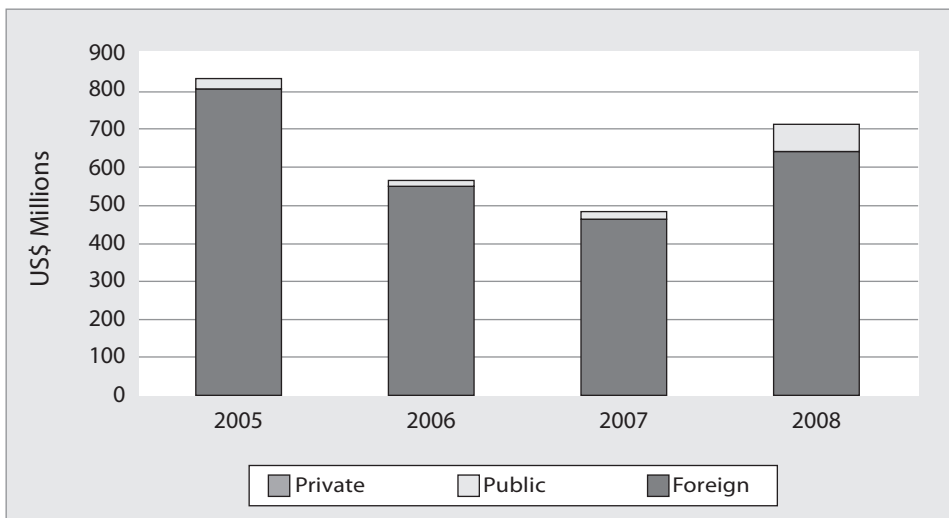
While Argentine markets evidence a high share of government bonds traded relative to other debt securities, Peru and Brazil show larger participation in private bonds traded.

FIGURE 26 TOTAL VALUE OF BONDS TRADED: ARGENTINA



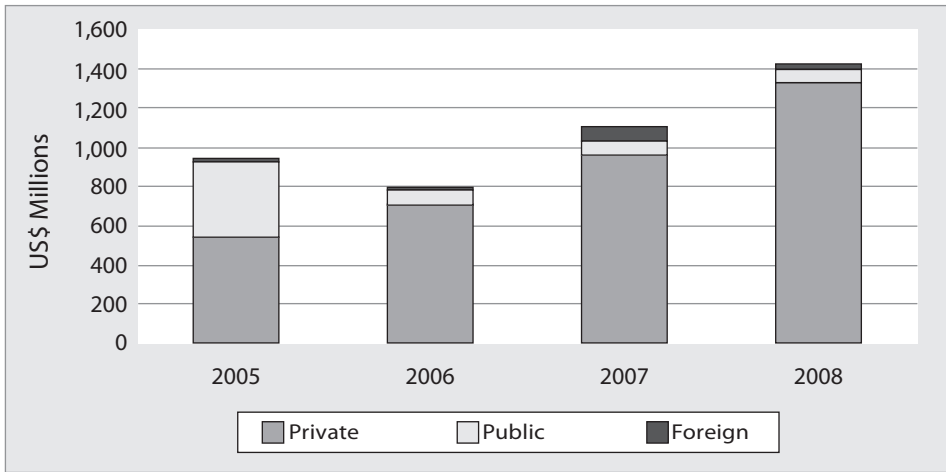
SOURCE: WFE.

FIGURE 27 TOTAL VALUE OF BONDS TRADED: BRAZIL



SOURCE: WFE.

FIGURE 28 TOTAL VALUE OF BONDS TRADED: PERU



SOURCE: WFE.

Bond Issues

Table 2 shows the number of bond issues as well as the evolution of issues in the last 3 years. The Chilean bond market is the highest performer in Latin America in terms of number of private issues, followed by Argentina and Colombia. Similar to stock listings observed in section Stock Markets, developed private bond markets separate themselves clearly from the four South American markets analyzed here.

Table 2 BOND ISSUES IN SELECTED LATIN AMERICAN AND DEVELOPED BOND MARKETS

| | Number of Domestic | | | Net Listing and Delisting | | |
|----------------|--------------------|--------|--------|---------------------------|--------------|--------------|
| | Private | Bond | Issues | Last Year | Last 2 Years | Last 3 Years |
| | 2008 | | | | | |
| Buenos Aires | | 1,291 | | 29 | 214 | 439 |
| São Paulo | | 306 | | 6 | 115 | 167 |
| Santiago | | 5,435 | | 109 | -98 | 372 |
| Lima | | 481 | | 46 | 116 | 167 |
| Mexico | | 515 | | -287 | -197 | 228 |
| Colombia | | 520 | | 33 | 57 | 85 |
| Deutsche Börse | | 25,045 | | -986 | 6,658 | 14,197 |
| Korea | | 9,303 | | 704 | 1,076 | 883 |
| London | | 15,519 | | 820 | 2,899 | 4,510 |

SOURCE: WFE.

Conclusions

This chapter documented the relevant features of stock and bond markets in Argentina, Peru, Chile and Brazil, characterizing recent development in these markets and comparing them on an international level. While the stock market of Argentina represents the shallowest market in the region since 2005, Chile has been the deepest for over a decade. Both the Brazilian and Peruvian stock markets present notable growth relative to GDP throughout the 2002-2007 period, yet all markets reflect a sharp contraction in early 2008 resulting from the global economic crisis. With respect to volume traded, the increase of Brazilian market liquidity in recent years is admirable. Contrastingly, the Argentine market demonstrates the smallest traded volume in relation to the size of its economy, as its companies quote its shares mainly through North American markets rather than domestically.

In terms of market value, Chile is the least concentrated of the South American countries, followed by Peru, Argentina and Brazil, respectively. Nevertheless, with respect to volume traded, there appears to be a trend of de-concentration in these markets during the 2000s, Argentina and Peru standing as the least concentrated of the sample in 2008.

Interesting results can be found in the returns and volatility of the selected South American markets. While return growth is most noticeable since 2003 in the Brazilian and Peruvian markets, declines are evident in all markets in mid 2008. However, these losses appear to recuperate in 2009 as a result of increasing investment flows into emerging economies and greater appetite for risk. Volatility of most South American markets has changed significantly in the past 5 years. The Peruvian IGBVL index evolved from being one of the least volatile in the region from 1999 to 2003 to the most volatile from 2004 to August 2009. Brazil and Argentina held the second position regarding volatility from 2004 to August 2009, while the Chilean IPSA performance remained consistent in both periods, making it the least volatile of the sample.

Regarding value of stock issuance in the selected South American markets, Brazil shows notable growth, gradually surpassing Chile and establishing itself as the strongest in the region. With the exception of 2007, Argentina proves the least active market of the sample for stock issuance. Lastly, the Brazilian stock exchange presents the largest number of listed companies in the region, showing the highest growth in issuers from 2006 to 2008.

In comparison to East Asian and developed markets, stock markets in the selected South American countries demonstrate interesting results with regard to market depth and liquidity. While the Peruvian market depth is similar to levels observed in East Asian countries, Chile and Brazil surpass these levels and show results nearing those of developed countries. Nevertheless, all countries demonstrate a substantial decline in market depth beginning at the onset of the global financial crisis, with results in South American markets most similar to those of developed ones. Comparing market liquidity, both Brazilian and Chilean markets reach levels seen in East Asian markets, excluding the South Korean market. However, developed markets demonstrate significantly higher and less volatile levels of liquidity than South American and East Asian markets.

With regard to market concentration by value, all South American markets appear to be in the same range as East Asian and developed ones. The same is true of market concentration by volume traded, with the exception of the United States.

In stock issues, the value of stock issued relative to GDP in East Asian markets is much larger than both Latin American and developed markets throughout the 2000s.

In bond markets, Brazil dominates as the largest and deepest market in the South American region for corporate and financial institution debt securities, surpassing Chile in 2004.

With regard to bond market composition, Argentina evidences a markedly high share of government bonds, while Peru and Brazil show a greater share of private bonds in relation to public and foreign bonds. Peru stands as the only market with a notable presence of foreign bonds.

Comparing South American markets for corporate and financial institution debt securities to East Asian and developed country markets, Brazil's market depth reaches that of Japan and is comparable to the average depth of East Asian markets. Regarding the number of bond issues in each region, results are similar to those seen in stock issuance. In relation to countries in the South American region, developed countries exhibit a significantly higher number of private bond issues.

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Comparative Policies on Foreign Exchange and Capital Mobility

MARÍA LUISA STREB

3

CHAPTER

Comparative Policies on Foreign Exchange and Capital Mobility

MARÍA LUISA STREB¹

The issues addressed in this chapter are the asymmetries in the foreign exchange framework between Argentina, Brazil, Chile and Peru, focusing on the foreign currency and foreign capital mobility policies. Financial liberalization in the capital market is expected to avoid undesired arbitrages, boost international and regional capital mobility and promote investment. Inflows may help to smooth consumption or to accumulate capital encouraging growth (Greenwood and Jovanic, 1990; Roubini and Sala i Martin, 1992). Additionally, inflows strengthen the institutional performance through technology transfer and the use of corporate government practices. Nevertheless, financial liberalization, to be successful, requires a stable macroeconomic policy environment and prudential regulations supported by efficient supervision of financial intermediaries.

There is extensive literature regarding possible gains and risks for recipients of international capital flows. While capital controls generate distortions, an overabundance of capital mobility has been in part responsible for financial crisis in emerging markets. Some authors state that *“as long as capital flows to emerging markets remain volatile and potentially disruptive, the discussion of controls in academic and policy circles will remain alive...”* (Magud et al., 2007, page 22).

¹ The author is grateful to Alberto R. Musalem (CEF) for his helpful comments and to Silvina Vatnick (CEF) for her support.

Although the removal of controls increases capital mobility and therefore may foster investment, there are some facts to be taken into account. Prasad *et al.* (2006) mentions the Lucas paradox: capital does not go from rich to poor countries in the amount the neoclassical model would predict². Furthermore, in recent years it has been flowing in the opposite direction. These authors affirm that emerging markets do not have the same absorptive capacity for foreign capital as developed countries do. Additionally, the former foreign capital flow produces overvaluation of the local currency, damaging their competitiveness. Carvalho *et al.* (2006) add that in less developed markets capital controls smooth exchange appreciation and allow the central bank certain dominion over its monetary policy. Additionally, capital controls provide insulation of reserves and local prices from transitory shocks in the capital account. On the other hand, more developed financial markets can avoid the use of capital controls since they have substitute assets that are used to engineer financial transactions preventing the costs incurred by the capital controls.

The design of a well-functioning system of capital controls is not an easy task. If some transactions are liberalized, some controls may be averted by disguising controlled transactions as uncontrolled ones³. Although the aim of the capital control is to contain short-term capital inflows the impact foreign portfolio investment can have on the financial market is correlated with financial liberalization. That is, the possibility residents have to purchase assets and liabilities in foreign currency and the access non-residents have in local financial markets⁴.

2 The marginal product of a unit of capital is higher in labor abundant countries, as less developed countries are.

3 The main disadvantages of outright prohibitions are that they may prevent sound as well as risky transactions. The use of administrative discretion, e.g., licensing system for capital flows, can soothe this matter but at a higher cost. Price-based controls, such as unremunerated reserve requirements on inflows used by Chile in the 90s and currently by Argentina, are less distorting but more difficult to administer than blanket prohibitions or quantitative restrictions.

4 In Brazil and Argentina the degree of financial liberalization changed after the financial crisis in each country, 1999 and 2001 respectively. While in the latter the financial liberalization was complete before the crisis, capital controls were introduced afterwards. In Brazil the process was reverse. Peru carried out liberalization policies from the nineties onwards. While Chile applied unremunerated reserve requirements since 1991 together with an exchange-rate band and revoked these measures by the end of the century (Baldini, 2001; Cardoso and Goldfajn, 1997; De Paula, 2007; Frenkel and Rapetti, 2007; Goldfajn and Minella, 2005; Larrain and Lazen (2008); Magalhaes *et al.*, 2007; Morris, 2008; Redrado *et al.*, 2006; Streb, 2008).

Nevertheless, there is consensus among some economists that financial liberalization will lead to destabilizing effects since it may foster over lending due to the restricted monitoring capacity of regulatory agencies, the deficiency of financial institutions to distinguish solid projects from unfounded ones during investment booms and the existence of explicit or implicit insurance against financing failures.

Loayza and Ranciere (2005) state from an empirical perspective that financial liberalization may generate instability in the short run, but in the long run it has a positive influence on investment and growth. Financial liberalization is not only linked with financial deepening but with financial fragility as well, displayed through systemic banking crisis, cycles of ups and downs and financial volatility. These factors explain the negative short run effect of intermediation on growth. Other authors (Rajan, 1994; Dell’Ariccia and Marquez, 2004) also support the positive relation between growth and financial openness in the long run and the negative relation in the short run. The different explanations given regarding the channels through which this may happen have in common the fact that they link the negative short run impact of financial intermediation to the financial volatility and likelihood of banking crisis.

The path to financial development is certainly not straightforward since economic growth can experience financial fragility, intrinsic to the process of development or due to inadequate policies that hampers economic growth until maturity is attained. But as financial development promotes a deepening of markets, it mobilizes a higher level of savings allocating them efficiently to investments, and allowing risk diversification; in the long run it gives rise to higher economic growth.

Larraín and Lazen (2008) recognize that although Chile suffered a major recession in 1982 after liberalizing its capital account in the seventies, the contrary has happened during the recent integration of Chile to world financial markets. They assert that access to financial market is expected to bring the “golden dream” of consumption smoothing, isolating domestic consumption from output shocks. Their findings corroborate this statement. In fact, they show how Chilean consumption compared to output has turned out to be a more stable process since 2001.

An alternative approach to managing risks associated with capital flows is to restrict vulnerabilities of the economy to the risks related with those flows in lieu to controls. Prudential policies applied to financial institutions can help achieve this purpose by containing excessive risk-taking behavior on the part of financial institutions. These

institutions are crucial to international capital transactions, since they receive foreign currency deposits, make foreign currency loans and investments and intermediate in cross border transactions. Regulation in security markets plays a crucial role as well since it aims not only to reduce systemic risk, but also to protect investors and guarantee efficient and transparent markets. These markets are becoming an important source of financing of larger corporate players in developing countries. Public and private pension funds and collective investment schemes are also turning out to be increasingly significant in these countries.

The chapter is structured as follows. The first section focuses on the exchange rate regimes and foreign exchange regulations on capital flows in the selected countries. The second section covers transactional costs when issuing securities. The final section deals with the recommendations.

Regulations in Argentina, Brazil, Chile, and Peru

In Argentina, the foreign exchange regulations are controlled by the Central Bank of Argentina/*Banco Central de la República Argentina* (BCRA). In Brazil, the National Monetary Council/*Conselho Monetário Nacional* (CMN) is responsible of formulating the general guidelines of the foreign exchange policy. In Chile and Peru the foreign exchange policy is in the domain of the Central Bank of Chile/*Banco Central de Chile* (BCC), and the Central Bank of Peru/*Banco Central de Reserva del Perú* (BCRP), respectively.

Exchange Rate Regimes

Argentina has a managed floating regime due to the frequent interventions of the BCRA in the foreign exchange market. Foreign exchange transactions must be carried out through authorized entities, e.g., banks, exchange agencies, financial companies, which are subject to specific regulations.

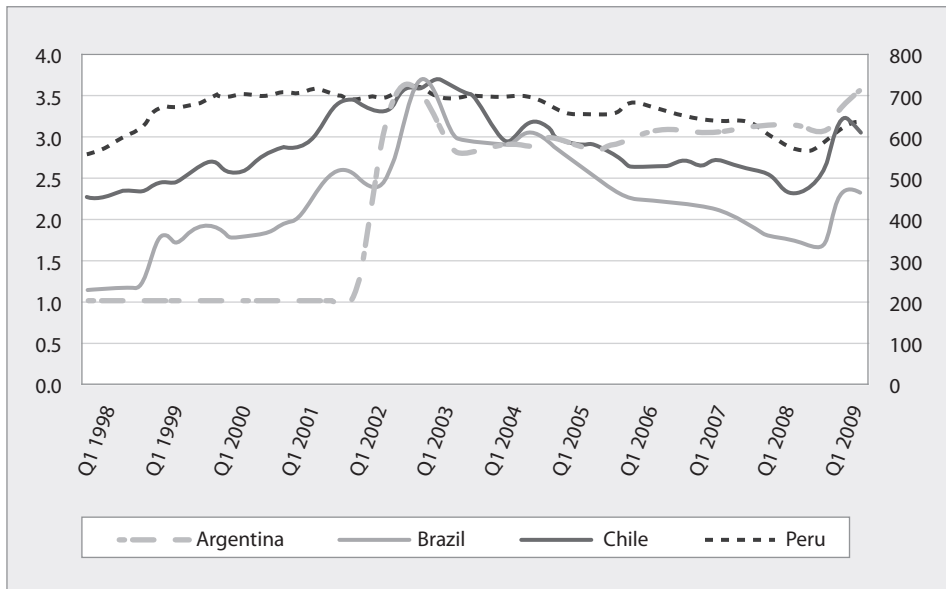
Brazil's foreign exchange regime is a dirty floating one, since the Central Bank of Brazil/*Banco Central do Brasil* (BCB) eventually intervenes in the foreign exchange market in periods of capital flows volatility and more recently its intervention fulfills a policy of managing its international reserves. Transactions in the foreign exchange markets are accomplished by banks, brokers and tourist agencies allowed to operate in foreign exchange.

Chile has an independently floating foreign exchange regime, BCC interventions are uncommon.

Peru has a managed floating regime although there is no commitment to determine the exchange rate. The BCRP has intervened in the foreign exchange market to smooth fluctuations in the foreign exchange rate, sometimes with bonds indexed to the exchange rate (IMF, 2008).

Figure 29 shows the evolution of the nominal US dollar exchange rates of the countries since 1998. In all countries there is a single foreign exchange market.

FIGURE 29 NOMINAL US DOLLAR EXCHANGE RATES (LOCAL CURRENCY PER DOLLAR, PERIOD AVERAGE)



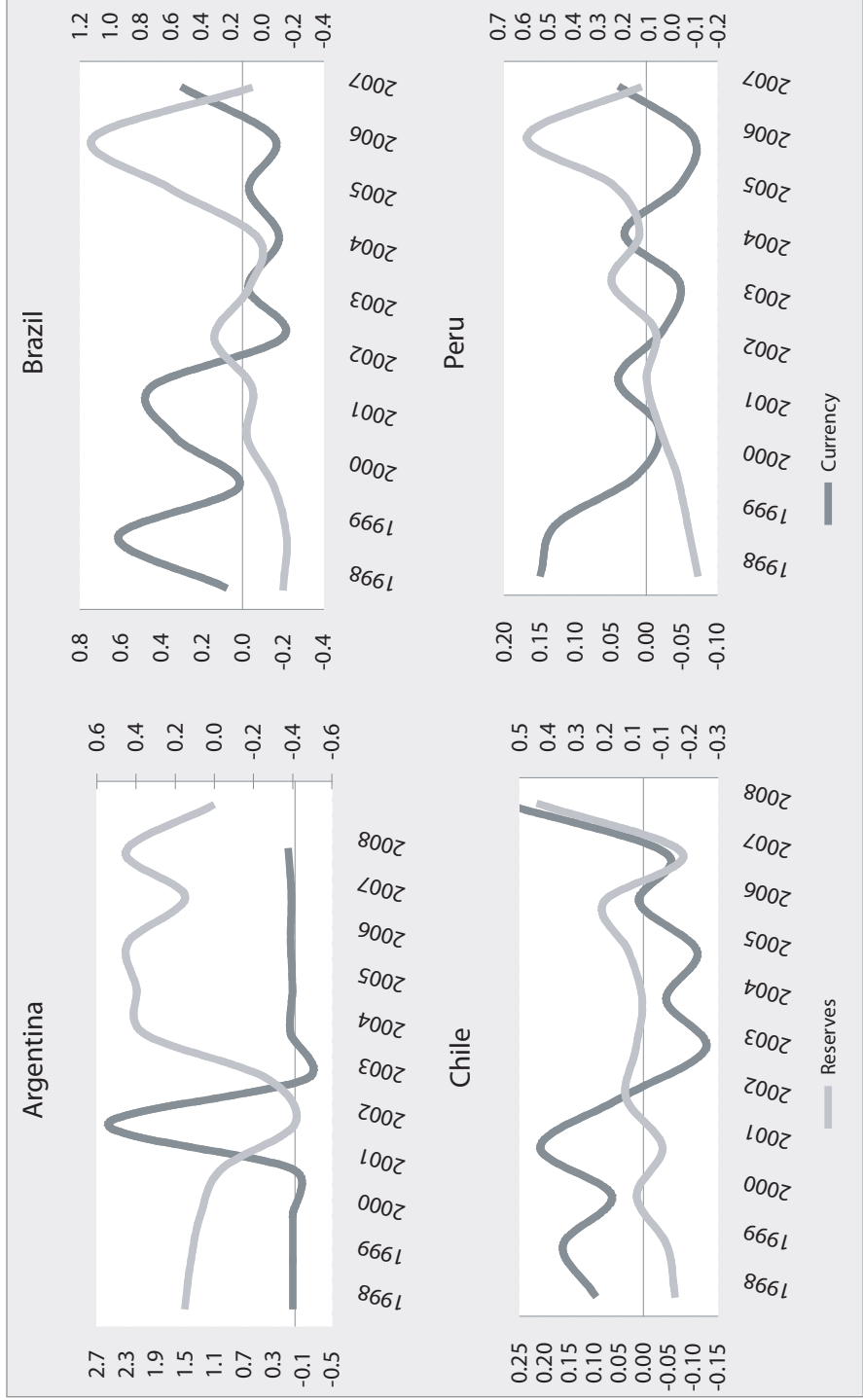
NOTE: Chile right axis, rest of the countries left axis.

SOURCE: IFS.

The interventions of BCRA, BCB and BCRP have delimited the US dollar exchange rates volatility, notably in Argentina since 2004 (Figure 30).

During 2008, given the uncertainty in the international market, all four countries intervened in the foreign exchange market, including Chile. In fact, in April the BCC announced a program to buy dollars so as to (i) stop the appreciation of the Chilean peso (considered beyond its fundamentals) and (ii) accumulate international reserves. The program was suspended in September after the fall of Lehman Brothers that led to the depreciation of the currencies with respect to the dollar. Nevertheless, the mere announcement of the program caused a 5% depreciation of the Chilean

FIGURE 30 ANNUAL VARIATION RATES IN US\$ EXCHANGE RATES AND INTERNATIONAL RESERVES
(LOCAL CURRENCY PER DOLLAR AND INTERNATIONAL RESERVES MEASURED IN US DOLLARS)



NOTE: International Reserves right axis, US\$ Exchange Rate left axis.
SOURCE: IFS.

peso. As a result of the program, the reserves increased more than 30% reaching a total of US\$24 billion (3.5 times the monetary base) at the end of September⁵. With the deepening of the crisis, the BCC implemented a swap program with commercial banks to guarantee liquidity through the international reserves. On the other hand, a sovereign fund administrated by the Chilean Treasury announced an auction at the beginning of 2009 in order to sell dollars to finance social programs.

As mentioned previously, the rest of the countries had already implemented a reserve accumulation policy. By the time Lehman Brothers collapsed, Peru had accumulated US\$34 billion (5 times its monetary base), Argentina US\$47 billion and Brazil US\$206 billion (1.4 and 3.5 times their respective monetary base). The policies implemented by the Central Banks in order to guarantee liquidity in dollars and local currency after the outbreak of the financial crisis included repos and/or swaps, reduction of time deposits reserve requirements, besides sales of dollars in spot markets.

Two issues are worth highlighting in the case of Brazil. One was the possibility given to the banks of using their reserve requirements for lending purposes or for buying other banks assets. As a result many banks merged. Another was the fact that the BCB was selected by the US Federal Reserve, together with the Central Banks of Mexico, Singapore and Korea, to receive a liquidity swap facility in order to alleviate the spread of difficulties in obtaining US dollar funding⁶.

Argentina's situation was more complex. Besides the international uncertainty caused by the financial crisis, there was a local one due to the lack of confidence in the system. The need of financing drove the government to sanction a law to nationalize the private pension funds in November 2008. The disappearance of the main institutional investor in Argentina had a negative impact in the capital market and partially explains the capital flight in 2008 that reached US\$23 billion, superior to the one occurred during 2001-2002 crisis⁷. Nevertheless, its impact on the foreign exchange market and international reserves was reduced thanks to the high international prices of commodities and the severe contraction in imports; hence the trade surplus provided the inflow of dollars.

5 In order to prevent unwanted effects over the money supply, the BCC set up a sterilization program, removing Chilean pesos through debt issues.

6 This measure had no precedent, since until then these swaps were given to central banks of developed countries.

7 Other negative shocks that may have contributed to the capital flight are the conflict between the government and the agriculture sector, the governmental intervention in the National Institute of Statistics and Censuses and the ambiguity regarding the restructuring of the national debt.

Impact of Foreign Exchange Regulations on Capital Flows⁸

FOREIGN TRADE PAYMENTS AND TRADE OF FOREIGN CURRENCY⁹

In Argentina there are repatriation requirements for exports, but not in the rest of the countries. In Argentina, exporters of goods and services are required to settle foreign exchange receipts from exports in the Single Free Exchange Market/*Mercado Único Libre de Cambio* (MULC) within a term that depends on what is exported. In Brazil, until March 2008, 70% of the proceeds from the export of goods and services was subject to surrender requirements within 365 days of the shipment date, but since then this request does not apply anymore (RMMCI, 2008).

Additionally, there are financing requirements for imports in Argentina and Brazil. Although in Argentina, advance payment for import of goods is allowed, there must be proof that the goods have entered within a certain period of time¹⁰.

In Brazil, external financing of imports for periods exceeding a year must be registered in the BCB's electronic system, the Financial Operations Registry. The BCB must be informed of prepayments of import financing at least 30 days in advance.

In Argentina, exports of foreign currency (or goods import payments) exceeding US\$10,000 are subject to the BCRA's approval. These can only be made through entities supervised by the Superintendency of Financial and Foreign Exchange Entities. Imports of domestic currency (or foreign exchange sales to non-residents) through outward transfers of foreign currency that surpass US\$5,000 per month require the BCRA's consent.

In Brazil, transfers on trade related payments for invisible transactions are ruled. The National Council on Private Insurance sets regulations on insurance and reinsurance transactions in foreign currency. For investment related payments, non-resident investments must be registered electronically at the BCB.

In Chile and Peru there are no restrictions on foreign trade payments or trade of foreign currencies.

8 For a specific review of regulations in Argentina and Brazil see the Annex of Streb (2008), for Chile look at Larraín and Lazen (2008), and for Peru consult Morris (2008).

9 IMF (2008).

10 The period of time is a year for the advance payment or 90 days for the spot payment.

CAPITAL TRANSACTIONS

In Argentina, the capital account was liberalized during the nineties. Nevertheless, after the 2001-2002 crisis restrictions were introduced. Since then, foreign currency transactions and transfers to and from the local market must be put through the MULC. For capital inflows 30% of the total sum is retained in a 365 day-interest-free deposit with local financial institutions for the following operations: (i) financial and non-financial private sector financial liabilities, except flows directed to finance public and private primary offering of stock or bonds listed and traded in self regulated markets, foreign trade transactions or foreign direct investment; (ii) primary issues of shares of resident companies that are neither listed nor traded in regulated markets; (iii) specific non-resident portfolio investments; (iv) external assets sales by private sector residents, for the surplus exceeding the equivalent to US\$2,000,000 per calendar month; and (v) inflows to the local foreign exchange market allocated to subscribe primary issues of securities, debt instruments, and certain share certificates issued by a trust fund trustee.

In relation to restrictions on outflows of funds, residents outside the financial sector may purchase foreign exchange up to US\$2,000,000 per month through the MULC, while portfolio investment repatriation superior to US\$500,000 per month must be approved by the BCRA (BCRA, 2009).

The financial liberalization in Brazil has been gradually implemented for the last decade and a half. Currently, non-resident capital transactions must be registered electronically with the BCB. A 2% tax applies to remittances due to obligations of credit card companies related to their clients' purchases and a 5% exchange tax to inflows associated to external loans with a minimum maturity of up to 90 days (IMF, 2008). Finally, in October 2009, a 2% tax on portfolio capital inflows was put into effect.

In Chile, the exchange controls imposed in the late eighties and early nineties have been revoked as well as the minimum stay period for foreign investments. While in Peru, the capital account of the balance of payments has been liberalized since the nineties. Nevertheless, some restrictions on capital transactions may apply in both countries as suggested in Table 3.

Table 3 shows the current scores of Investment Freedom and Financial Freedom for the four countries according to the Heritage Foundation. While the first is a quality measure of free capital flow, mainly foreign, the Financial Freedom is an assessment of financial institutions security and independence from government control. Chile has the highest scores, followed by Peru. Regarding Investment Freedom, Brazil and Argentina are even. Argentina has the lowest score for Financial Freedom.

Table 3 INVESTMENT FREEDOM AND FINANCIAL FREEDOM (*)

| | Argentina | Brazil | Chile | Peru |
|--------------------|-----------|--------|-------|------|
| Investment Freedom | 50 | 50 | 80 | 60 |
| Financial Freedom | 40 | 50 | 70 | 60 |

(*) The maximum score is 100.

SOURCE: Heritage Foundation (2009).

Capital Flows and Capital Market Instruments

In Argentina and Brazil, specific regulations must be observed in the securities market.

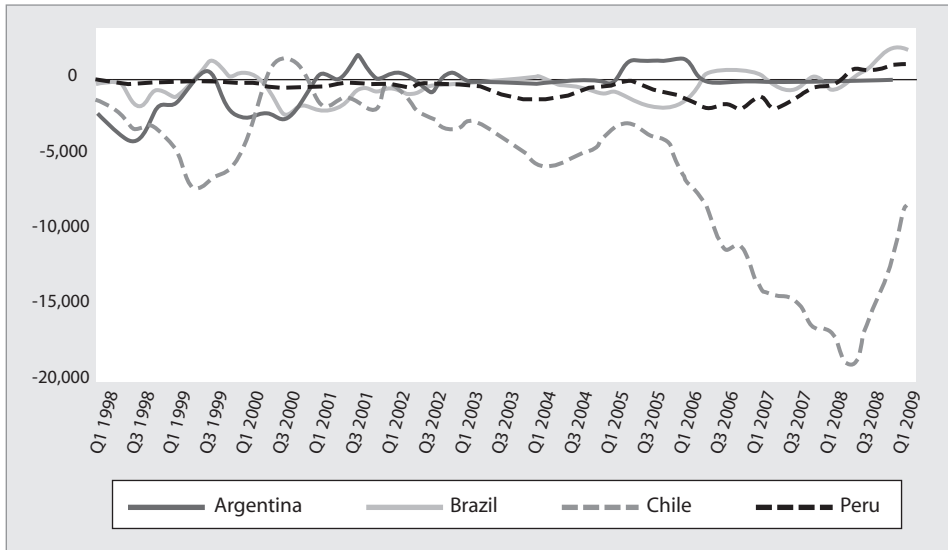
In Argentina: (i) a 30% unremunerated deposit requirement of 365 days affects the purchase of shares and bonds in the local market by non-residents; (ii) controls apply to shares and bonds purchased abroad by residents; and (iii) foreign exchange proceeds of bonds issued abroad by residents should be surrendered within 365 days and a minimum maturity of 1 year is requested. On the other hand, primary issues of debt securities that are publicly offered and listed on self-regulated markets are excluded from the minimum maturity requirement (BCRA, 2009).

In Brazil: (i) restrictions apply in the purchase of shares by non-residents in the domestic market in some economic activities; (ii) non-residents may issue locally traded bonds only through private placements; and (iii) specific regulations apply to the transfer of funds for the purchase of shares and bonds by residents abroad (IMF, 2008). Since mid-October 2009, the Brazilian government imposed a 2% tax on foreign purchases of fixed-income securities and stocks in an attempt to slow the appreciation of Brazil's currency¹¹.

In Peru and Chile there are no restrictions. This may help explain the better performance of Chile's and Peru's portfolio flows. Indeed, the Chilean portfolio investment abroad reached a peak of US\$18.6 billion a year by mid 2008 (Figure 31).

11 For the same reason, in March 2008 a 1.5% tax on fixed income flows was imposed but was lifted a few months later.

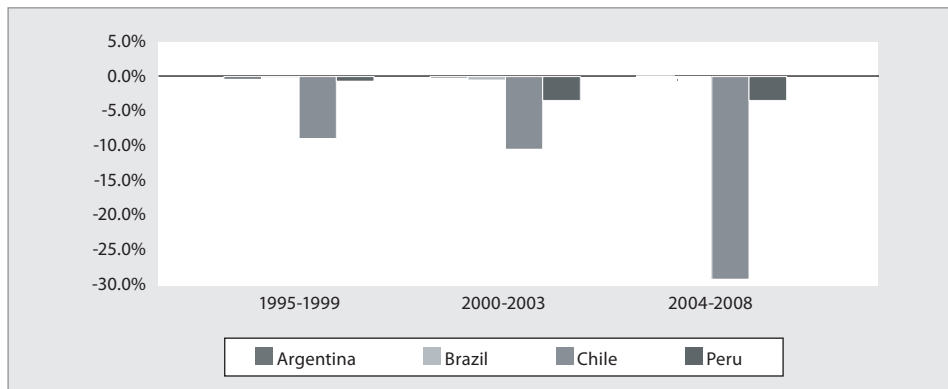
FIGURE 31 PORTFOLIO ASSETS (ANNUALIZED FLOWS IN MILLION US\$)



NOTE: Increase (+), Decrease (-).
SOURCE: IFS.

The incidence of portfolio assets in each country's Gross Domestic Product (GDP) for the four countries is shown in Figure 32. Chile stands out above the rest. Peru follows from a distance.

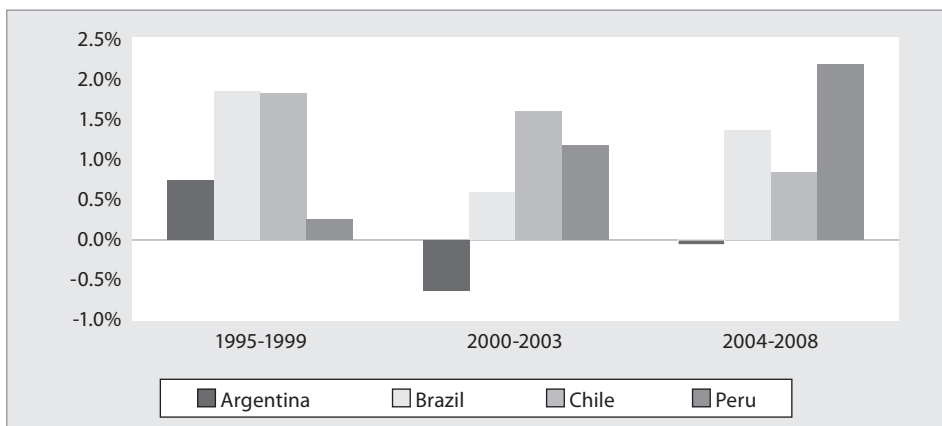
FIGURE 32 PORTFOLIO ASSETS AS A % GDP (ANNUALIZED FLOWS)



NOTE: Increase (+), Decrease (-).
SOURCE: IFS.

Figure 33 shows the portfolio liabilities as a percentage of GDP where Peru's indicator bulges during 2004-2008.

FIGURE 33 PORTFOLIO LIABILITIES AS A % GDP (ANNUALIZED FLOWS)



NOTE: Increase (+), Decrease (-).

SOURCE: IFS.

According to Larraín and Lazen (2008), in 1990 the Compañía de Teléfonos de Chile (CTC) was the first Latin American company to issue an ADR (American Depositary Receipt) opening the doors to other Chilean companies to list in the NYSE or NASDAQ. The following year CTC also placed the first foreign bond issued by a local company. These authors state that the factor that encouraged the capacity of foreign financing by local companies was the sovereign risk rating of Chile, which was given the investment grade by the rating agency Moody's in 1992 and by the rest of the rating agencies the following year. Grandes, Panigo and Pasquini (2007) show that for Latin America, on average, 40% of the variation of the cost of capital is explained by sovereign risk; and they are positively related¹².

The sovereign credit rating of the countries in the sample by mid 2009 is shown in Table 4, where the political and economical risk level of the investment environment of each country is assigned. Chile is the best placed country according to Moody's, Standard & Poor's (S&P) and Fitch rating agencies. During the first half of 2008, S&P and Fitch upgraded Brazil and Peru to the category of Investment Grade (IG).

¹² Also consult CEF (2007).

Table 4 SOVEREIGN RISK RATINGS (AS QUALITATIVE ASSESSMENTS OF THE PROBABILITY OF DEFAULT BY CENTRAL GOVERNMENTS)

| Rating Agency | Argentina | Brazil | Chile | Peru |
|---------------|-----------|--------|-------|------|
| Moody's (1) | B3 | Ba1 | A1 | Ba1 |
| S&P (2) | B- | BBB- | A+ | BBB- |
| Fitch (2) | B- | BBB- | A | BBB- |

(1) Rating system: AAA, Aa1, Aa2, Aa3, A1, A2, A3, Baa1, Baa2, Baa3, Ba1, Ba2, Ba3, B1, B2, B3, Caa1, Caa2, Caa3, Ca, C. IG is considered if the credit rating is Baa3 or higher.

(2) Rating system: AAA, AA, A, BBB, BB, B, CCC, CC, D. IG is considered if the credit rating is BBB- or higher.

Source: Bloomberg.

On one hand, Larraín and Lazen (2008) state that Chile indeed *"enjoys several strong characteristics such as sound macroeconomic policies, solid institutions including supervisory agencies, low corruption and crime rates, good connections with the rest of the world, skilled human resources, and strong local institutional investors"*¹³. Nevertheless, these authors recall that a certain lack of competition in the financial sectors and a high dependence on the sector's development of legislative and normative advances¹⁴ have made Santiago lose the leadership in financial development.

Derivatives

While in Chile and Peru there are no restrictions on derivatives operations, in Argentina and Brazil regulations have been implemented.

In Argentina, operations related to the future of regulated markets and forward transactions have no restrictions on private financial and non financial sector arrangements within the country if settled locally by netting in domestic currency. Additionally, futures, forward options, and other derivatives transactions that have no limits are: (i) purchases of options to hedge variable-yield term deposits; (ii) foreign exchange hedging contracts by financial institutions to cover their own long-term positions in the general foreign exchange position; (iii) foreign exchange and interest rate hedging contracts by financial institutions and the non-financial

¹³ Larraín and Lazen (2008), page 12.

¹⁴ Larraín and Lazen (2008) highlight the reforms introduced by other countries, such as the demutualization of the São Paulo Stock Exchange and the Self-Regulatory Authority of the Colombian Securities Market, and point out the contrast with the delays to implement changes in the Chilean capital market regulation.

private sector to cover foreign liabilities; (iv) commodity price hedging contracts by local exporters and/or importers providing coverage for Argentine foreign trade operations; (v) external financing transactions in the form of repos with a minimum maturity of 365 days; and (vi) hedge contracts between foreign currencies by exporters to cover the risk of shipments pending payment. These transactions must be carried out with the rest of the world through institutionalized markets in world financial centers or foreign banks that meet certain requirements and other authorized financial institutions. The rest of the transactions require the approval of the BCRA (BCRA, 2009).

The derivatives operations not listed above, according to Fernández (2008), are implicitly affected by the unremunerated reserve requirement, e.g., commodity price hedging contracts that do not cover Argentine foreign trade operations or foreign exchange hedging contracts providing coverage for Argentine foreign trade operations. This “regulatory hollow”, suggests Fernández, pushes these operations to be settled abroad, therefore, shrinking their development in Argentina.

In Brazil, the banks are allowed to operate within statutory limits of the foreign exchange position and the transactions should be settled in no more than 720 or 750 days, if it is, respectively, an interbank or an export transaction¹⁵. Non-residents have access to derivative markets if registered locally (IMF, 2008).

Foreign Direct Investment

No controls apply on Foreign Direct Investment (FDI) in Argentina, Chile, and Peru for outward FDI. In Brazil, the transfer of funds made by institutions abroad, which are allowed to operate by the BCB, as well as other funds must comply with specific regulations related to prudential regulations. In 2006, the FDI outflows in Brazil reached a peak of US\$28.2 billion, overtaking the FDI inflows for the first time¹⁶. As a percentage of the GDP, Chile stands out above the other countries in the sample (Table 5).

15 For other transactions the period is 360 days.

16 The main acquisitions are the purchases of the Canadian mining companies Inco Ltd. and Canico Resource Corp. by the Companhia Vale do Rio Doce (CVRD) and the Bank of Boston by Banco Itaú (ECLAC, 2006, page 48). The former was not completed until 2007, although most of the payments were made during 2006.

Table 5 FOREIGN DIRECT INVESTMENT, NET OUTFLOWS
(ANNUAL AVERAGE IN MILLIONS OF DOLLARS)

| | 1995-1999 | 2000-2003 | 2004-2008 |
|-----------|-----------|-----------|-----------|
| Argentina | -1,305.6 | -288.0 | -1,420.6 |
| as % GDP | -0.5 | -0.1 | -0.7 |
| Brazil | -957.9 | -884.0 | -11,854.8 |
| as % GDP | -0.5 | -0.6 | -4.5 |
| Chile | -889.0 | -1,983.8 | -2,908.7 |
| as % GDP | -4.5 | -11.2 | -8.8 |
| Peru | -43.3 | -43.8 | -1.5 |
| as % GDP | -0.3 | -0.3 | -0.0 |

NOTE: Increase (+), Decrease (-).

SOURCE: IFS.

The four countries have limitations on inward FDI in few economic activities¹⁷. Brazil is the country that receives the largest amounts of FDI. In 2007, this country reached very high levels, due to investments in a wide variety of sectors but not a single transaction as in previous years (ECLAC, 2007). In 2008, the flows to this country were even higher, in fact, the highest of the region, reaching US\$45 billion (ECLAC, 2008). Nevertheless, in relation to the percentage of the GDP, Chile leads the other countries in the sample (Table 6).

17 In Argentina, these activities include shipbuilding, fishing, border-area real estate, nuclear power generation, air transportation and uranium mining (US DoS, 2008). In Brazil, they are fishing, rural property, nuclear energy, aviation and aerospace, health services, media, mail and telegraph (Heritage Foundation, 2009). In Chile, restrictions apply in areas that include coastal trade, air transport and the mass media. In the case of fishing, restrictions are subject to the rules of international reciprocity (Larraín and Lazen, 2008). In Peru, prior approval is needed to invest in banking and defense-related industries. Domestic ownership is required to invest in broadcast media, national air and water transportation or to purchase land (Heritage Foundation, 2009).

Table 6 FOREIGN DIRECT INVESTMENT, NET INFLOWS
(ANNUAL AVERAGE IN MILLIONS OF DOLLARS)

| | 1995-1999 | 2000-2003 | 2004-2008 |
|-----------|-----------|-----------|-----------|
| Argentina | 6,716.5 | 5,425.8 | 5,735.1 |
| as % GDP | 2.4 | 2.6 | 2.7 |
| Brazil | 13,116.2 | 21,996.4 | 23,315.3 |
| as % GDP | 6.7 | 15.5 | 8.9 |
| Chile | 3,155.7 | 4,315.7 | 9,309.1 |
| as % GDP | 16.0 | 24.4 | 28.3 |
| Peru | 1,158.7 | 1,412.4 | 3,521.3 |
| as % GDP | 8.4 | 10.2 | 15.6 |

NOTE: Increase (+), Decrease (-).

SOURCE: IFS.

Entrance/Exit Barriers

The legal framework regarding the capital market in the four countries is applied to local as well as foreign companies.

In Argentina, liberalization of the banking system to foreign institutions was promoted by the financial reform of 1977. Through Decree 1853 of 1993, foreign companies may invest in the country without registration or prior government approval as resident investors and face the same tax liabilities as local firms. Under the Argentine Securities and Exchange Commission/*Comisión Nacional de Valores* (CNV) regulations, foreign and local issuers meet the same requirements to make a public offering of securities¹⁸.

In Brazil, in 2000 new rules considerably liberalized equities and put foreign investors on the same level as Brazilians. Still, foreign investment in the banking

¹⁸ Both must have a permanent representative office and domicile in Argentina. Non-resident issuers must clarify whether the securities are being offered in their own country and list the information requirements to which they are submitted. Issuers of public offerings of securities domestically and abroad should display the same information to the CNV as requested by the entities authorizing the public offering and offshore listing.

sector is approved on a case by case basis¹⁹ (Magalhaes *et al.*, 2007). In 1996, the insurance sector was opened to foreign investment and, in 2007; reinsurance was opened after many years of government-owned monopoly²⁰.

In Chile, a foreign company must be legally incorporated in the country and is considered a Chilean company for legal and tax purposes. A series of reforms including capitalization requirements and shareholder obligations have widened the range of financial services (Larraín and Lazen, 2008).

Peru is open to foreign banks and insurance companies; nevertheless investment in banking requires prior approval. The entrance and exit barriers in the security market are the ones that exist in any well regulated developed market and foreign and local investors are subject to the same regulations when purchasing or selling financial instruments (Morris, 2008).

FINANCIAL SECTOR

This section discusses the foreign exchange regulations that have incidence on financial transactions²¹.

Commercial Banks

Some of the foreign exchange regulations that affect commercial banks are more restrictive to capital inflows than others that have a prudential nature. While the former can be found in the regulations of Argentina and Brazil, the latter prevails in Chile and Peru.

In Argentina: (i) in the domestic market banks may open time deposit accounts in dollars and euros, other foreign currencies require the BCRA approval; (ii) accounts in domestic currency held abroad are not convertible into foreign currency; (iii) when borrowing abroad, the regulations of the non financial sector apply; (iv) if lending to non-residents, funds must be used in the country to finance investment, production, commercialization, consumption or exports; (v) lending

19 According to Magalhaes *et al.* (2007), the Constitution of 1988 implicitly forbids the access of foreign capital to the banking system since the related regulatory norm has not yet been voted on. In the mean time, through Article 52 of the Temporary Constitutional Orders/*Disposiciones Constitucionales Transitorias*, foreign capital has access to the local market under certain circumstances –international agreements, reciprocity principle, national interest– and with the consent of the president of the Republic.

20 Law 126/2007.

21 IMF (2008).

locally in foreign exchange applies to certain operations²²; (vi) there are limits to the purchase of locally issued securities denominated in foreign exchange²³; (vii) differential treatment of deposit accounts in foreign currency, e.g., reserve requirements²⁴; (viii) transactions abroad by banks are restricted; and (ix) there are limits in the open exchange position.

In Brazil: (i) foreign exchange accounts held domestically are held by certain groups²⁵; (ii) lending to non-residents is not permitted; (iii) financial institutions are prohibited from lending locally in foreign exchange; (iv) purchase of locally issued securities denominated in foreign exchange are not allowed; (v) regulations apply to investment abroad by banks or in banks by non-residents; and (vi) there are limits in the open exchange position.

In Chile: (i) accounts held domestically or abroad are permitted; (ii) when borrowing abroad, loans with up to one-year maturity are subject to a 3.6% reserve requirement; (iii) banks may maintain accounts abroad, but not non-bank financial institutions; (iv) lending to non-residents is subject to prudential provisions determined by the BCC; (v) lending locally in foreign exchange is constrained to a limit on market risk exposure (interest rate and currency); (vi) differential treatment of deposit accounts in foreign currency: liquid asset requirements²⁶, interest rate controls²⁷ and credit controls; (vii) prudential regulations apply to investments abroad by banks. Regarding investment in banks by non-residents, banks may issue CDs and bonds offshore; and (viii) there are limits in the open exchange position.

22 These operations include: (i) pre financing and financing of exports; (ii) financing of investment projects or manufacturers to be exported; (iii) financing to commercial borrowers importing capital goods; (iv) debt securities or financial trust participation certificates; (v) loans made from one financial entity to another; and (vi) foreign currency debt securities or financial trust participation certificates whose underlying assets are securities in order to finance export transactions.

23 There is a maximum amount a bank may hold from an issuer and purchases of securities against delivery of assets and require the BCRA permission.

24 Demand deposits are subject to a cash requirement of 19% in Argentine pesos or 30% in a foreign currency and a differential requirement applies for fixed-term deposits.

25 Certain group of residents (authorized exchange dealers, tourist agencies not allowed to deal in foreign exchange and companies that administrate credit cards, companies responsible for the execution of projects in the energy sector, insurance and reinsurance companies, reinsurance brokers), and non-residents (embassies, international organizations, reinsurance companies, foreign transportations companies, foreign citizens in transit and Brazilians living abroad).

26 Foreign currency deposits and reserves must be held in US dollars.

27 Foreign and domestic currency loans have statutory ceilings on interest rates.

In Peru: (i) no regulation restraints regarding accounts held locally or abroad; (ii) banks may maintain accounts abroad but the capital income on investment abroad is subject to income tax, while domestic investments are exempt; (iii) lending to non-residents, the same as lending to residents, is subject to prudential limits; (iv) differential treatment of deposit accounts in foreign currency: reserve requirements²⁸ and liquid asset requirements²⁹; and (v) there are limits in the open exchange position.

Institutional Investors

Foreign exchange regulations that have an impact on insurance companies are far from homogeneous to be able to categorize according to its less or more restrictive nature.

In Argentina, the maximum limit on investing reserves on securities issued by non-residents is the greatest at 50% of the capital requirement or of net commitments. The same applies to the maximum limit on an investment portfolio held abroad, which determines the minimum limits on investments held locally. Regarding currency-matching regulations on assets/liabilities composition, insurers with liabilities derived from insurance and reinsurance contracts payable in foreign currency must set up technical reserves.

In Brazil, regulation applies to the maximum limit on an investment portfolio held abroad, which is 10% of the technical reserves in offshore investment fund shares.

In Chile, the maximum limit on an investment portfolio held abroad is 20% of the insurance companies' technical reserves and risk assets. There are also currency-matching regulations on assets/liabilities composition.

In Peru, the maximum limit on securities issued by non-residents and on investment portfolios held abroad must not exceed 40% of technical liabilities.

Regarding the provisions related to pension funds, the asymmetries between the countries increased after the November 2008 elimination of the privately managed mandatory defined contribution capitalization regime and the transference of plan members and their respective pension funds to the pay-as-you-go regime

28 Morris (2008) mentions measures taken by the BCRP in order to reduce the pressure over the foreign exchange market, which focus on the increase of minimum and marginal mandatory bank reserves for deposits in local and foreign currency and those abroad.

29 A liquid asset requirement as a percentage of short-term liabilities, 8% in local currency, and 20% in foreign currency, is demanded.

in Argentina. Until then they were mainly related to differences in the limit of allowance of investment abroad, with Chile being the most liberalized, followed by Peru.

In Argentina, the maximum limit on investment portfolios held abroad was 10% of the resources of the fund before the elimination of the mandatory private funded regime. By the end of 2007, this limit had become extensive to investments in MERCOSUR³⁰ countries. Since 2009, the reserves of the pay-as-you-go regime managed by the National Administration of Social Security Agency (ANSES) are not allowed to be invested abroad.

In Brazil, the maximum limit on investment portfolios held abroad is 50% of the reserves in shares of open companies, bonds for subscriptions to shares issued by open companies, publicly issued convertible debentures, and certificates of deposit for shares issued by companies in MERCOSUR.

In Chile, in relation to the maximum limit on investment portfolios held abroad, the amount of the investment in the five types of funds managed by the same pension fund manager in foreign securities plus the amount of their investments made abroad through mutual fund and national investment shares until now could not go beyond 45% of the value of the sum of the funds.

In Peru, private pension funds may be invested up to 20% in foreign securities. Nevertheless, the BCRP may set a lower operational limit. This limit was in December 2005 10.5% and has been gradually increased from 12 to 13.5%. More recently the limit rose from 16 to 20% as stated by Morris (2008).

Transaction Costs

A company faces different types of costs when deciding to issue debt or equity securities. As found in Zervos (2004) these costs are due to:

- Investment bank fees for structuring, placement and underwriting, based on issue size.
- Lawyer fees: Either local or international.
- Regulator and stock exchange fees, as a percentage of the issue size and issue type.
- Rating agency fees.
- Fees due to credit enhancement.

30 Southern Common Market/*Mercado Común del Sur*.

- Marketing and publishing expenses.
- Road show fees: Local or international.

Regarding the costs of operating or issuing securities in the capital market, in Argentina³¹, Brazil and Chile³², issuing equity in the domestic market is cheaper than in international markets given the need of the firms to comply with foreign regulatory standards in addition to the local ones in the latter. According to Zervos (2004), higher legal tariffs and “other” fees, which include auditor fees and listing fees, paid to the NYSE explain the difference in costs (Table 7) for Brazil and Chile.

The results of comparing costs between domestic debt and international debt are not so straightforward. In Argentina, the fees in the bond market are highly competitive in the local market and therefore its impact is not very different from the fees paid in international debt issues. The same applies to Brazil. The higher rating fees and legal costs of entering the international markets are compensated by the lower investment banking costs. These costs have a greater incidence in the domestic fees given the smaller amount of the issues. The fees in Argentina and Brazil, according to the interviews, do not differ very much between each other and therefore do not determine the localization of the issue. A holding that has the possibility of issuing in Argentina or Brazil will not take the fees into account while deciding; rather it will seek the highest expected return. The implementation of corporate governance practices may also be a factor to be pondered when investing. According to Rachman (2009) the broad use of these practices in Brazil explains part of the good performance of the Bovespa in recent years. But on the other hand, an issue to be considered is the fact that domestic institutional investors in emerging markets invest mainly in their own countries, notwithstanding rapidly growing assets under management in other countries. As described in IMF (2007a), since initiating investment abroad forces the investor to become familiar with the regulatory environment of the new market but also comply with it and maybe requires the fulfillment of a licensing process, domestic institutional investors in emerging countries usually invest primarily in their own national boundaries.

31 Statement based on interviews with investment bankers, local banks and rating agencies.

32 Zervos (2004) calculates the components of issuing costs for corporate debt and equity in the local market and abroad for Brazil, Chile and Mexico. All bond deals are plain vanilla and equity issues are for common share as part of an initial public offering for a firm with a minimum of a BBB rating deciding to access capital markets with a US\$100 million issue.

While non-residents may deposit their Argentine securities in Euroclear³³ –an exception applies to new series of BCRA's securities–, in Brazil, Chile and Peru foreign investors must open local custodial accounts (Chang *et al.*, 2007).

In Chile, due to the 1.6% issuance tax in the local market, it is cheaper to issue bonds abroad (Table 7). As Zervos (2004) mentions, although it is cheaper to issue equity than debt domestically, corporations rely more on fixed income when accessing markets.

According to Morris (2008) findings, in Peru the cost to issue debt domestically is substantially lower. While in Brazil, Investment Banking represents more than 90% of the total cost, in Peru the incidence is much lower (25%) for a big issue. Nevertheless, this has not helped the development of corporate debt issuance in Peru. Although fees seem to be relatively low compared to other countries, Morris highlights the need to reduce them and make the information related to fees in the Stock Exchange Agents more transparent in Peru, particularly to improve access of small and medium size firms.

Table 7 CATEGORY FEES AS A PERCENT OF TOTAL ISSUANCE COSTS (BRAZIL AND CHILE)

| | Equity | | | Debt | | |
|--|----------|-------|---------------|----------|-------|---------------|
| | Domestic | | International | Domestic | | International |
| | Brazil | Chile | | Brazil | Chile | |
| Investment Banking | 91.2 | 92.4 | 70.5 | 86.9 | 36.6 | 56.2 |
| Legal | 0.3 | 3.1 | 11.1 | 1.1 | 1.8 | 24.7 |
| Regulatory | 0.6 | 0.4 | 0.3 | 1.2 | 0.2 | 0.6 |
| Tax | | | | | 58.8 | |
| Publication | 1.3 | 1.2 | 0.6 | 3.8 | 0.3 | 0.9 |
| Rating | 2.8 | 2.5 | 0.0 | 5.8 | 0.4 | 13.5 |
| Other | 3.7 | 0.4 | 17.5 | 1.3 | 0.3 | 4.1 |
| Total Issuance Costs as % of US\$100 Million Issue | 2.2 | 1.6 | 5.0 | 2.4 | 2.7 | 2.2 |

SOURCE: Zervos (2004).

33 Euroclear has been used by some investors to elude the capital controls in Argentina. The investor sells the Argentine bonds operating in Euroclear instead of CAJVAL (Securities Depository/*Caja de Valores*), receiving US dollars from abroad. The opposite can be done to enter funds. Alternatively, instead of bonds, the operation can be made with the purchase or sale of Argentine shares that are quoted abroad through American Depositary Receipts or ADR (Argentine share certificate in US dollars). This mechanism is known as a cash settlement/*contado con liquidación*.

Below are the costs of issuing equities and bonds in the primary market in Argentina and Brazil during 2007 (Table 8). The data belongs to firms/banks with different credit range, therefore the deals are not necessarily the same³⁴ and the issue size and maturity of the deals are not uniform. These factors explain why these fees are not comparable with those shown in Zervos (2004)³⁵.

Table 8 COSTS OF ISSUING EQUITIES AND BONDS IN PRIMARY MARKET (1)
(ARGENTINA AND BRAZIL, 2007)

| Argentina | | | Brazil | | |
|------------------------|-------------------------|----------------|---------------------|-------------------------|------------|
| | Issue Size (US\$ mm) | Fee (%) (2) | | Issue Size (US\$ mm) | Fee (%) |
| Equity Issuance | | | | | |
| Emdersa | 61 | 4.1 | Group 1 | < 200 | 3.9 |
| Grupo Clarín | 527 | 2.8 | Group 2 (3) | 200 - 399 | 4.2 |
| Mercado Libre | 333 | 4.5 | Group 3 | 400 - 1,000 | 4.3 |
| Banco Patagonia | 290 | 3.4 | Group 4 | > 1,000 | 2.8 |
| Edenor S.A. | 379 | 3.5 | | | |
| Weighted Average | | 3.5 | | | 3.6 |
| Debt Issuance | | | | | |
| Banco Macro | 150 | 0.650 | GP Investments | 150 | 1.875 |
| Bco. Santander Río | 150 | 0.300 | Cosan | 400 | 0.875 |
| Transp. Gas del Sur | 500 | 0.325 | Minerva | 150 | 1.250 |
| Edesur S.A. | 54 | \$300k | ISA Cap. do Brasil | 200 | 0.460 |
| | | | ISA Cap.I do Brasil | 354 | 0.460 |
| | | | SulAmérica | 200 | 1.000 |
| | | | Republic of Brazil | 714 | 0.300 |
| | | | Fed. Rep. of Brazil | 361 | 0.300 |
| Weighted Average | | 0.4 | | | 0.6 |

(1) Mostly international.

(2) In percentage, except for Edesur where the fee is thousands of pesos.

(3) Group 2 concentrates 42 issuers, 70% of the sample.

SOURCE: Based on information given by J. P. Morgan.

34 Since the fee to be paid will be higher the riskier the deal.

35 For tariffs in Peru, look up to Morris (2008).

Summarizing,

- a holding that has the possibility of issuing in Argentina or Brazil seeks the highest expected return, fees are not decisive;
- domestic institutional investors in emerging countries prefer to invest primarily in their own national boundaries;
- in Chile corporations rely more on fixed income when accessing markets whereas in the local market issuing equity is cheaper than debt; and
- the low cost of issuing debt locally has not fostered the expansion of corporate debt issuance in Peru.

These issues put in doubt the importance of fees as decisive in the access to capital markets, at least for international issuance. It can be inferred that other factors, different than fees, are taken into account when deciding to issue debt or equity securities, the expected return was mentioned as one of them. Nevertheless, the transaction costs may be relevant for small issues, usually domestic. As seen, investment bank regulators and stock exchange fees are a function of the issue size. This fact restricts the access of small and medium firms to capital markets.

Recommendations

As said in the introduction, Prasad *et al.* (2006) observe that opening up to foreign capital will bring benefits only if the local financial and the tradable sectors are mature. Nevertheless, financial integration is needed in order to foster domestic financial development. This requires the removal of asymmetries in the foreign currency markets and capital controls. The mentioned authors propose to commit to integrate financial markets at a future date, as China did in the banking sector, giving time for the local financial system to develop. This may apply to the countries in the sample, given the many asymmetries between them.

Some analysts consider it impossible to have a managed exchange rate, monetary policy autonomy and open capital accounts. Magud *et al.* (2007) point out that if there is a desire to retain certain monetary policy flexibility, then something has to be postponed. Sacrificing capital mobility seems to be a better option than surrendering monetary policy autonomy. The mentioned authors make a distinction between the instruments to be used. They state that some measures are more market friendly, e.g., reserve requirements, than others, such as sudden quantitative requirements. They also add that while capital flows in emerging markets continue to be volatile and potentially damaging, academics and politicians will continue discussing the pros and cons of capital controls.

Direct and indirect controls and prudential norms are variants used by the countries to slow down the volatility of capital flows, the pressure over the foreign exchange rate and/or international reserves. Chile and Peru are the most liberalized of the sample.

Although, Brazil experienced a gradual process of liberalization during the nineties that was reinforced in the current century, the country still has important restrictions –e.g., financial institutions are not permitted to lend to non-residents nor locally in foreign exchange, foreign investment in the banking sector is approved on a case by case basis– showing certain resistance to financial integration.

In Argentina, the liberalization of its capital account in the nineties was much more profound than in Brazil. Nevertheless, currently Argentina is the country in the sample with more capital controls and interventions in the foreign exchange market. Some economists may state that financial liberalization processes do not necessarily benefit emerging countries (Kose *et al.*, 2006; IMF, 2007c) or may lead to crisis. Actually, the two financial liberalizations in Argentina, the first during the second half of the seventies and the second in the nineties, ended up in the crisis of 1982 and 2001, respectively (Albrieu, 2008). Regarding this issue Loayza and Ranciere (2005) argue that although financial liberalization may cause instability in the short run, in the long run a boost in growth is expected. However, they admit that the overall effect of financial liberalization on the economic activity is a combination of both impacts, where the relative incidence of financial deepening and fragility will depend on the stage of financial development of each country. The route to financial development is not necessarily smooth.

Larraín and Lazen (2008) describe the Chilean experience. While the financial liberalization during the seventies led to a slump, the recent integration to the international financial market gave way to consumption smoothing. In other words, the variance of consumption and output in Chile are no longer strongly associated. These authors assert that financial integration is not the result of simply opening the capital account. While the recession of the eighties was followed by the implementation of a prudent approach to financial regulation, the Asian crisis of the late nineties, that caused a mild depression in Chile, inspired several reforms³⁶ that allowed a successful financial integration.

36 These reforms, implemented between 1998 and 2000 can be summarized as: (i) a commitment to run a 1% of GDP surplus; (ii) the adoption of a floating regime; and (iii) the implementation of an inflation targeting approach.

IMF (2007a) suggests that vulnerabilities are reduced through the promotion of effective regulation of domestic financial markets. In fact, an alternative approach to manage risks associated with capital flows is not to attempt to control flows directly, but to restrict the vulnerability of the economy to the risks related with those flows. Strengthening prudential policies applied to financial institutions can help achieve this aim by acting upon excessive risk-taking on the part of financial institutions and by making the financial system more robust to external shocks. Financial institutions are key parties to international capital transactions, as they accept foreign currency deposits, intermediate cross border transactions, make foreign loans and investments. Sometimes financial institutions have exhibited extreme risk-taking behavior. By requiring more effective risk management to these institutions, prudential policies have contributed to weaken transmission and contagion. Prudential regulations do not focus on capital flows directly, but they do affect their composition, volume and volatility and may well be used to conduct capital flows. The set up and upkeep of prudential standards and effective supervision rely on public regulation and monitoring, internal practices and controls together with market discipline (Ariyoshi *et al.*, 2000).

In the four countries in the sample steps taken to strengthen bank supervision have helped to limit the riskiness of capital flows³⁷. Security markets offer an alternative to bank financing by transforming savings into financing for the real sector. These markets are starting to become a source of financing for large corporate players in emerging-markets. The same applies to institutional investors. Therefore, further steps to strengthen the prudential framework of capital markets and guarantee an effective enforcement will help reduce the need of capital controls. According to IMF (2007b), capital controls and prudential controls are becoming gradually intertwined as countries deregulate their financial sector and liberalize the capital account. The relationship between them requires careful study and coordination in order to put limits in the balance sheet risks while liberalizing.

37 As per Heritage Foundation (2009), Chile's financial system is one of the most developed among emerging markets due to vast reforms, e.g., capitalizations requirements and shareholder obligations that expanded the scope of financial transactions.

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Securities Markets
Regulations and
Evaluations on
the Degree of
Implementation

RICARDO A. PASQUINI

4

CHAPTER

Securities Markets Regulations and Evaluations on the Degree of Implementation

RICARDO A. PASQUINI¹

International studies on the cost of raising funds in securities markets suggest that Latin American companies face some of the largest cost of capital levels when raising funds in their own national securities markets. This pattern has direct implications on the financing of new investment projects in these countries and consequently also for their economic growth. Clearly, one of the major reasons behind the high costs in raising capital is the prevailing risks for those purchasing the securities. Therefore, to recognize the sources of those risks is a major policy objective. An interesting observation in this sense is that, in addition to the specific risks of the investment projects that underlie behind each security (i.e., the so called “idiosyncratic” risk), empirical studies (see, for example, CEF, 2007) have documented that systematic (i.e., non-diversifiable) risk is a major determinant of the high cost of capital level across several markets in Latin America. In other words, there is a significant amount of risk that affects the entire market, thus contributing to raise the cost of capital.

While many observers might think that the common movement of the market is only a function of events that are exogenous to it (e.g., macroeconomic events);

1 I would like to thank Alberto R. Musalem, Pablo Souto, Fernando Baer, Felipe Morris, and Nora Rachman for helpful comments and suggestions and to Silvina Vátnick for her continuous support. I am grateful to Martín Yanquilevich for his assistance in this research.

how securities markets work and which rules are followed by their participants, might be determining factors of the levels of risk prevailing in them. For example, the lack of access to complete information for securities purchasers may provide opportunities to adverse selection and moral hazard related problems (see La Porta *et al.*, 2006), therefore, increasing risk levels and the required returns on listed instruments. Moreover, the set of practices ruling the functioning of securities markets might determine how and how much markets react to exogenous events reaching financial markets.

The recognition of the imperfection of markets and their related consequences has raised the need for a regulatory framework that prevents problems and reduces risks. According to the International Organization of Securities Commissions (IOSCO), the objectives of the regulation of securities markets should be the protection of investors, to ensure the fairness, efficiency and transparency of markets, and to reduce systemic risk.

With the objective of increasing the understanding of the regulation of securities markets in Latin America, this chapter compares a set of main regulatory issues across securities markets in four countries: Argentina, Brazil, Chile, and Peru. In particular, several comparable indicators are constructed on the basis of the regulators' self-evaluations of the degree of implementation of securities regulations in their respective institutions and markets. Quantitative indicators simplify the between-country comparison and the recognition of the issues for which the attention of the Regulator is needed. Also, it provides grounds for future in-depth quantitative research on the topic. For example, these measures will allow, with further study, to quantitatively analyze the relationship between regulatory differences and the cost of raising capital in the selected countries.

The selection of the analyzed issues has been made following the IOSCO "Objectives and Principles of Securities Regulation". In particular, this study focuses on regulatory principles concerning the Regulator, Self-Regulatory Organizations, Enforcement and Cooperation (IOSCO, Principles 1 to 13). Therefore, this chapter might also be read as a partial assessment of the implementation of IOSCO standards among these countries.

Finally, this study should contribute to the policy objective of searching for the convergence of countries on their regulatory frameworks. This policy goal looks at improving regional markets interaction while pursuing regional efficiency. It becomes of particular importance in this region, in the presence of agreements of regional integration such as MERCOSUR and the Andean Community.

This chapter is organized in three sections. The first section presents the selection of regulatory issues analyzed in the chapter and describes the methodology for the generation of indices. The second section presents the results of the comparative analysis. Finally, the third section presents the conclusions.

Methodology

For each of the regulation principles that it is analyzed in this chapter, a set of key issues have been first selected. This means that the analysis of IOSCO principles covered in this chapter has not been made with the aim of making a full comprehensive study of the aspects related to the principles², but to focus on the most important of them for comparative purposes. The issues have been formulated as questions and posted in a questionnaire that was distributed to a selected respondent in each country. Respondents include members of Regulator Agencies or specialized consultants³. Results might therefore be read as a type of self-assessment. In general, the questionnaire comprised of two types of questions. The first type asked specifically on the contents of the existent legal and regulatory framework. The second type (the majority of questions) where subjective, asking the opinion of the respondents on the degree of implementation of the regulation.

The resulting answers have been translated into indices as described with precision in Table A.1 in the Appendix. All indicators take values between 0 and 1. In the case of objective questions asked on the contents of the regulation, the {"yes", "no"}, answers were typically translated into dummy variables (i.e., taking a value of 1 if the underlying concept is incorporated in the regulation or 0 if it is not). In the case of questions asked on the degree of implementation of the regulation, intermediate values associated with intermediate levels of implementation have been considered. For example, many multiple choice answers on the frequency of implementation were of the type: *{Never, Infrequent, Occasional, Frequent, Very frequent}*; or when asked on the degree of adequacy of related powers: *{Never, due to the complete absence of powers; Infrequent, due to inadequate powers or related reasons; Infrequent, although powers are adequate; Frequent, although reforms in*

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- 2 For a methodological guide to evaluate the implementation of IOSCO principles, see "Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation" (IOSCO, 2003).
 - 3 As for this research we are interested in the subjective opinions of regulators, in order to collect them, we decided to maintain the confidentiality of the respondents. Even so, in many cases non-official answers were difficult to obtain.

related powers are needed; Frequent use, highly adequate powers}. In these cases the answers were first translated into 1 to 5 indicators and then standardized to the interval $[0,1]$ ⁴.

In order to simplify between-county comparisons and to allow for easier recognition of the key differences among the countries, comparative “diamond” graphics have been created grouping indices results. Each principle presents its respective graphics. The order of the IOSCO principles is followed to present the related results, this is, diamond graphics are displayed in their related principle sub-section. Additionally, average values of indices generated by grouping the indicators by principles were calculated. This allows for a general pattern of results across indices to be obtained, as well as between countries. These summary results are presented first in the next section.

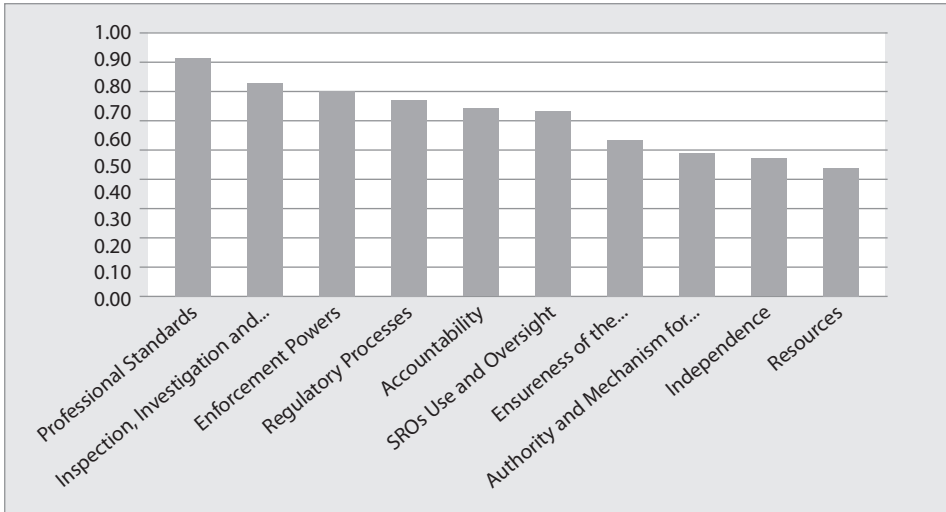
Results

Summary of Results: Aggregate Indicators

Taking the results of the complete survey for all the four countries and after grouping and averaging the values of the related indicators according to the underlying principles⁵, the results obtained are illustrated in Figure 34. The results suggest that the principles which require prior attention are (in order of priority): the availability of human and economic resources (Principle 3); the independence of the Regulator (Principle 2⁶); the effective and credible use of powers (Principle 10); and the authority and mechanisms for sharing information (Principle 11).

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- 4 Notice that we could approximate the average opinion of regulators in a given country by taking the average of the collected responses.
 - 5 Remember that all indicators have been standardized to the interval $[0,1]$, which guarantees that averages will report a coherent number which remains in the interval.
 - 6 According to the methodology employed in this chapter, *Independence* indicators are related with the first part of Principle 2, while *Accountability* indicators are related with the second part of the same principle.

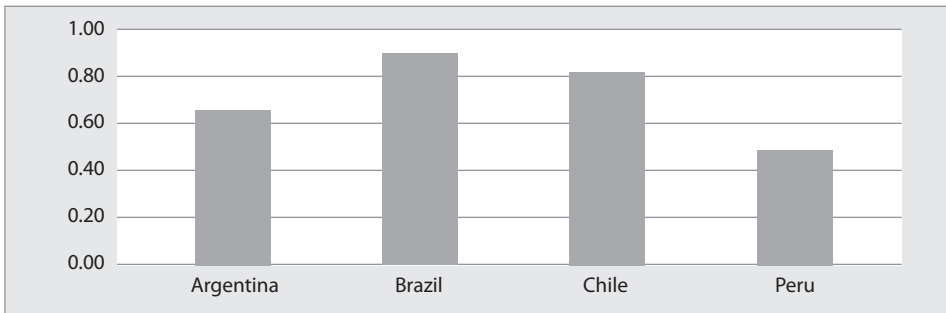
FIGURE 34 AVERAGE VALUE OF INDICATORS GROUPED BY PRINCIPLE (ALL COUNTRIES)



SOURCE: Own elaboration.

If indicators are averaged by countries, the results obtained are displayed in Figure 35. On average, Brazil displays the highest evaluations, followed closely by Chile, with Argentina and Peru in third and fourth place, respectively. Notice that the value displayed by Brazil (close to 0.9) would suggest that on average it is reaching full implementation in terms of the indicators that have been selected. In contrast, the value displayed by Peru (close to 0.5) would suggest that it is approximating a partial implementation.

FIGURE 35 AVERAGE VALUATORS GROUPED BY COUNTRY



SOURCE: Own elaboration.

Results by Principle

1. *The responsibilities of the Regulator should be clear and objectively stated.*

The first IOSCO principle centers the attention on the way the responsibilities of the regulatory agency are stated or defined. Clear and objective responsibilities imply that there is an appropriate legal framework and that the supervising responsibility is clearly delegated into a single body or adequately organized among more than one body. In addition, the focus of the authority should be accurately defined, for example, an important issue is whether the Regulator has exclusive focus on the supervision of securities markets or if their responsibilities are extended to other markets (e.g., insurance, banks).

In this principle, because of its simplicity, we do not analyze indicators. However, the following characteristics are worth mentioning: In the case of the countries selected in this study, the legal framework that states the responsibilities of the regulators are defined by a set of national laws in each of the countries⁷. In all the countries, the responsibility of supervising securities markets is given to a unique regulatory body. They are the: “Comisión Nacional de Valores” (CNV) in Argentina; “Comissão de Valores Mobiliários” (CVM) in Brazil; “Superintendencia de Valores y Seguros” (SVS) in Chile; and “Comisión Nacional Supervisora de Empresas y Valores” (CONASEV) in Peru. These authorities cooperate with the Central Bank in each country and other domestic authorities in order to ensure an appropriate supervision⁸. Finally, in terms of the focus of the authority, in all countries, with the exception of Chile, the Supervisor has to focus on the supervision of securities markets exclusively (i.e., separate supervising agencies in charge of securities markets, insurance companies, pension funds, etc.). In Chile the SVS, supervises both securities and insurance markets.

⁷ These laws are enumerated in Table A.1 in the Appendix.

⁸ Mechanisms for the cooperation with other authorities are analyzed below with Principles 11 and 12. In some of these countries, there is an authority specifically created to supervise issues where joint actions between regulators must be coordinated. This is the case of Brazil, where the Conselho Monetário Nacional (CMN) supervises the responsibilities of the CVM and coordinate joint responsibilities between the CVM and the Central Bank of Brazil. In the case of Chile, regulators have put in place a General Secretariat in charge of coordinating common efforts in markets development and supervision. This secretariat has been formally created by law.

2. *The Regulator should be operationally independent and accountable in the exercise of its functions and powers.*

The second IOSCO principle centers the attention on the extent in which regulation guarantees the independence and accountability of the Regulator.

By independence it is meant the ability to undertake regulatory measures and to take and enforce decisions without external interference. By accountability it is meant that the Regulator should be subject to appropriate scrutiny and review of the use of its powers and resources (IOSCO, 2003). Both concepts are separately analyzed here.

In relation to its independence, the following issues are considered. First, focusing on the way the Regulator (i.e., its president and main directors) is appointed to its charge, *The Appointment Indicator* evaluates if regulation establishes the Regulator not to be unilaterally appointed by the Executive branch of the Government. Then, *The Fixed Term Indicator* regards if the length of the Regulator term is fixed, since in the opposite case (i.e., open term) independence might be compromised with the political cycle. We add here the respondents' evaluations on three issues. *The Independence from Political Pressure Indicator* evaluates the degree of independence in the operations of the Regulator in relation to external political interference. *The Independence from Commercial and Sector Interests Indicator* provides an analogous evaluation for the case of commercial and sector interest pressures. Finally, *The Legal Protection Indicator* provides the evaluation of the respondents on the degree of legal protection of the head and members of the regulatory authority in the discharge of their functions and powers.

In relation to the concept of the accountability of the Regulator, three issues were asked for evaluation: the process of accountability of the Regulator to the legislature or to another government body on itself; the degree of transparency to the public; and finally the process of review and auditing of the reception and use of funds.

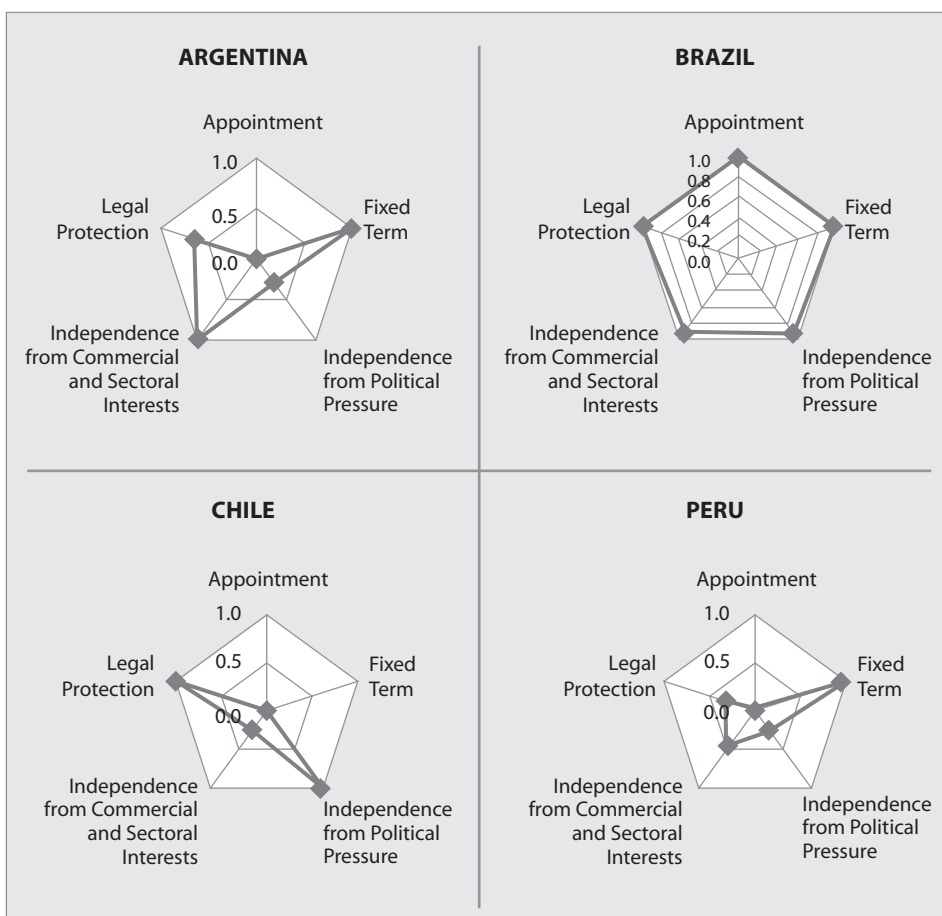
Figure 36 exhibits the results on independence indicators. Brazil displays the highest average value across indices. In all the countries considered, with exception of Brazil, the Regulator is unilaterally designated by the Executive Power (through the Ministry of Economics, Finance or related). In Brazil the designation includes a nomination by the Executive and the approval by Congress. In all countries the term of the Supervisor is fixed with the exception of Chile. In Chile, the designation has an open term, and in practice a new designation may depend on the political authority in turn. Even though terms are fixed in the other countries, there are still

relevant differences on their length. While the term lasts 3 years in Peru, it lasts 5 years in Brazil, and 7 in Argentina.

The evaluation of the respondents suggests that the independence of Regulators in Chile and Peru are severely affected by commercial and economic sector related interests. Also, in Peru and in Argentina the lack of independence from political pressure has been particularly emphasized.

Finally, the legal protection of the regulators has also been reported as inadequate in Argentina and highly inadequate for the case of Peru.

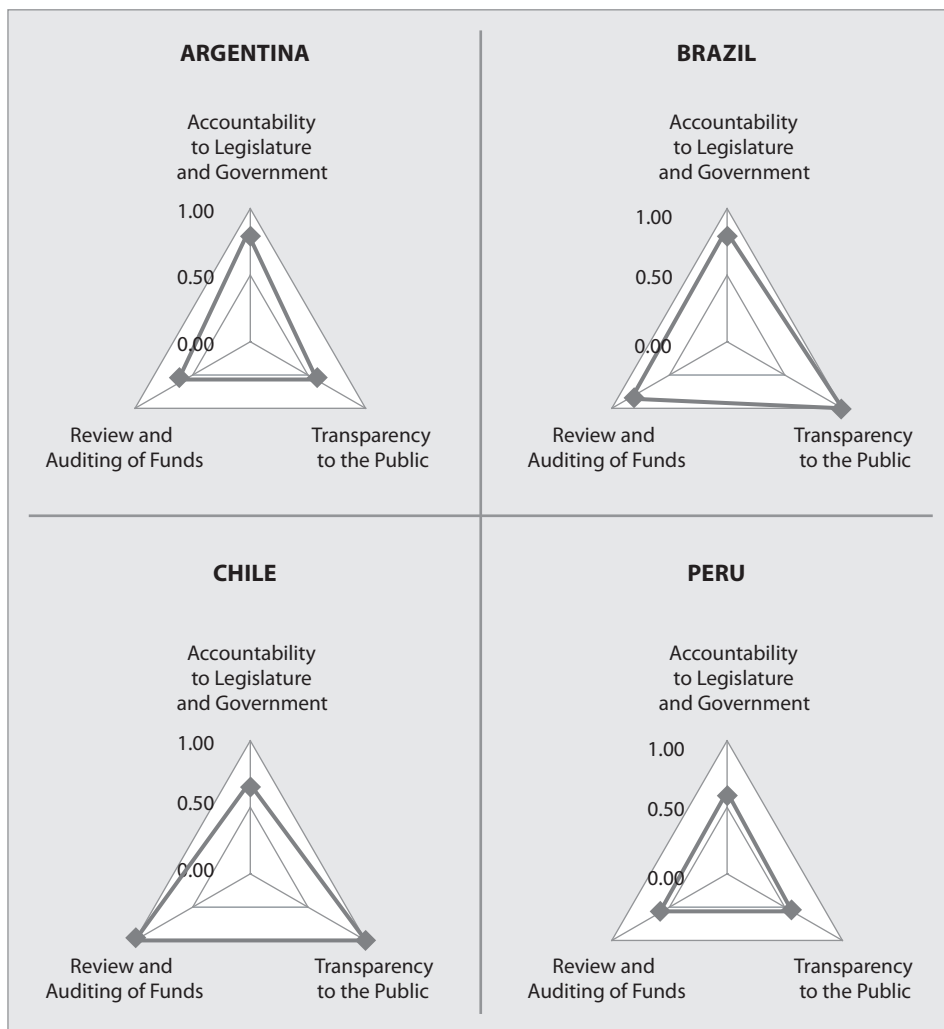
FIGURE 36 INDEPENDENCE OF THE REGULATOR



SOURCE: Own elaboration.

In the case of accountability indicators, Figure 37 displays the main results. The countries display similar patterns, however, the following facts can be mentioned: In Chile and Peru, the accountability process to the Congress was reported as being only occasionally adequate (0.5). The transparency indicator obtained the maximum evaluation for the cases of Brazil and Chile. In Peru and Argentina these actions have been reported to be adequate only occasionally. In Peru, CONASEV has been reported as not being transparent enough in terms of its actions and sanctions.

FIGURE 37 ACCOUNTABILITY OF THE REGULATOR



SOURCE: Own elaboration.

3. *The Regulator should have adequate powers, proper resources and the capacity to perform its functions and exercise its powers.*

Principle 3 concerns the powers and resources of the Regulator. These should be consistent with the size, complexity and type of markets that it oversees. In this section, we will focus exclusively on the Regulator's availability of economic and professional resources⁹.

We consider two objective measures and two subjective ones. First, we compare the Supervisor's budget and the number of professional supervisors. Although we would like to analyze other resources such as human capital measured by the qualification of the Regulator's staff (e.g., the average years of experience of professional supervisors), this information is not publicly available for all countries¹⁰.

The subjective indicators are the following: *Appropriate Funding*, reflecting if the respondent finds current funding appropriate for the needs of market supervision. *Funding Allocation*, evaluating if the Regulator can affect the operational allocation of resources once its budget has been approved and the funds have been received.

Brazilian and Peruvian regulators seem to display stronger supervisors than Argentina and Chile in terms of the economic resources available to perform its functions. According to the 2008 figures, Brazil is the Regulator with the most resources per professional supervisor, with an annual budget of approximately US\$200 thousand followed by Peru with an annual budget of nearly US\$120 thousand. The Total Annual Budget is highest in Brazil with a figure of US\$91 million. In the case of Chile, the figure is biased by the fact that it comprises insurance and securities markets activities. The total annual budget per professional supervisor in Argentina is US\$100 thousand (2008 figures).

9 Adequate powers are covered below.

10 The CVM has a detailed description of the qualifications of professional staff.

Table 9 BUDGET AND NUMBER OF PROFESSIONAL SUPERVISORS (2008)

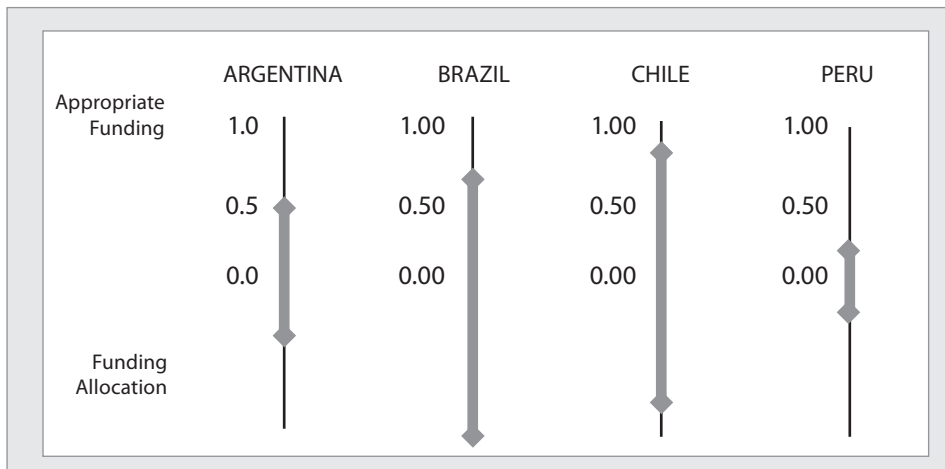
| | Argentina | Brazil | Chile | Peru |
|---|-----------|---------|--------|---------|
| Total Annual Budget for Supervision (in Millions of US\$) | 7 | 91 | 10 | 12 |
| Number of Professional Supervisors | 60 | 452 | 309 | 103 |
| Total Budget for Supervision per Professional (in Thousand of US\$) | 110,003 | 200,344 | 32,362 | 115,647 |

(*) Estimates according to annual budgets. In the case of Chile, the figure includes Securities Markets and Insurance Supervision. In the case of Peru, the figure belongs to the budget of 2009.

SOURCE: Own elaboration.

Do respondents think that these resources are appropriate? Figure 38 displays the results on subjective indicators. The results on subjective indicators do not necessarily reflect the observed budget measures. Financing is reported to be adequate for the case of Chile, not always adequate for the case of Argentina and Brazil, and highly inadequate in Peru. In the case of Argentina and Peru, problems with the possibility of re-allocating resources are also reported.

FIGURE 38 PROPER RESOURCES



SOURCE: Own elaboration.

While not studied sufficiently in this chapter, other issues such as the mechanisms for the independence and stability of the Supervisor's budget constitute a source of concern between regulators in these countries and should be adequately studied and enforced.

4. *The Regulator should adopt clear and consistent regulatory processes.*

The focus of this principle is in the procedures and processes by which regulations are established. In order to foster fairness and accountability, processes should be consistently applied, comprehensible, transparent to the public, fair and equitable (IOSCO, 2003). The indicators that have been selected here consider the existence of mechanisms that encourage participation, transparency, and procedural fairness.

Figure 39 displays the following indicators: (i) *Consultation with the Public* reports the evaluation of respondents on the existence of an ongoing process for consultation with the public (e.g., publishing proposed rules for public comment); (ii) *Policies Disclosure* evaluates if the Regulator publicly discloses and explains all its policies; (iii) *Costs of Compliance* evaluates if the Regulator has regard, in the formulation of its policy, to the costs of compliance with the Regulation. Three more indices focus on procedural fairness. These are: (iv) *New Regulation Review*, which evaluates the degree of adequacy of the process of reviewing new regulations; (v) *Judicial Review* evaluates the availability of a judicial review process for the regulation; and (vi) *License Publication* evaluates if there is a process by which the granting, denying, or revoking of a license is made public, and those affected by the licensing process are entitled to a hearing.

Argentina and Peru present, on average, lower values for the indicators than Brazil and Chile. In all countries, with the exception of Chile, a need to improve the mechanism of consultation with the public is reported.

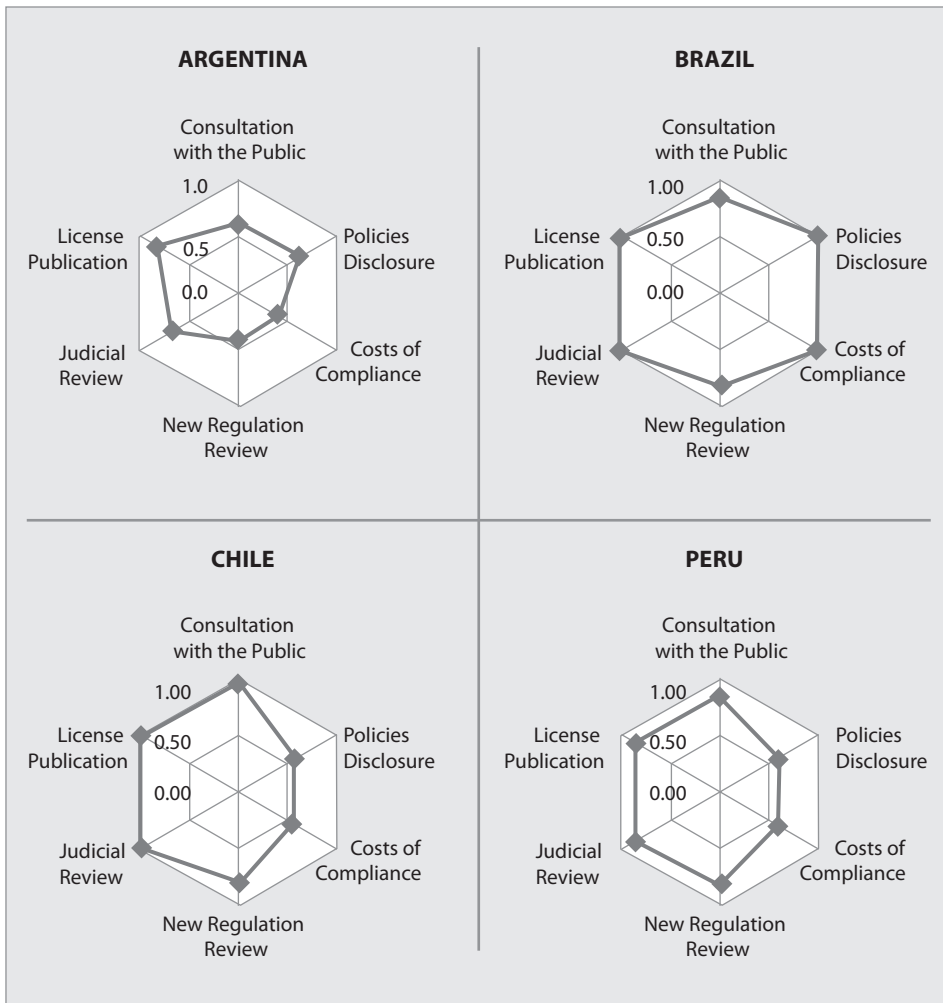
Our available information suggests that, in general, the legal framework among the countries analyzed does not establish that regulators should subject their decisions to a process of revision¹¹. In general, regulators seem not to have established formal and continuous processes for consultation with the public. There exist consultations to members of the market, but they are informal and only in some cases.

11 An exception might be Brazil, where the securities markets law establishes that the Conselho Monetário Nacional (CMN) supervises CVM responsibilities and reviews some regulations. As an example, the law establishes that CMN reviews the proposals for limits on prices, commissions and other fees charged by market intermediaries. Regulators do not seem to be implementing mechanisms for the qualification of their procedures.

A similar diagnostic goes for the system of revision of new regulation. This is a common result across countries and especially critical in Argentina.

In all the countries, with the exception of Brazil, it is reported a need for improving the degree of transparency with due regard to the costs of compliance. The existence of a process of judicial review and the publication of licenses display on average higher values, however, in the case of Argentina the process of judicial review it is reported to still need improvement.

FIGURE 39 REGULATORY PROCESSES



SOURCE: Own elaboration.

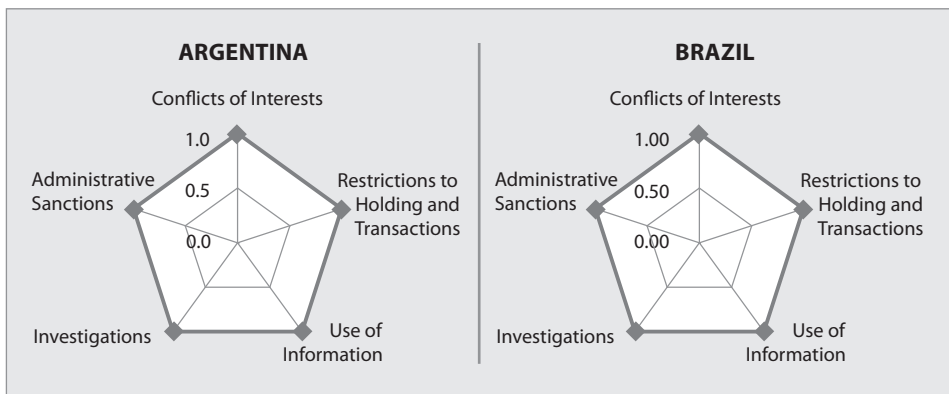
5. *The staff of the Regulator should observe the highest professional standards including appropriate standards of confidentiality.*

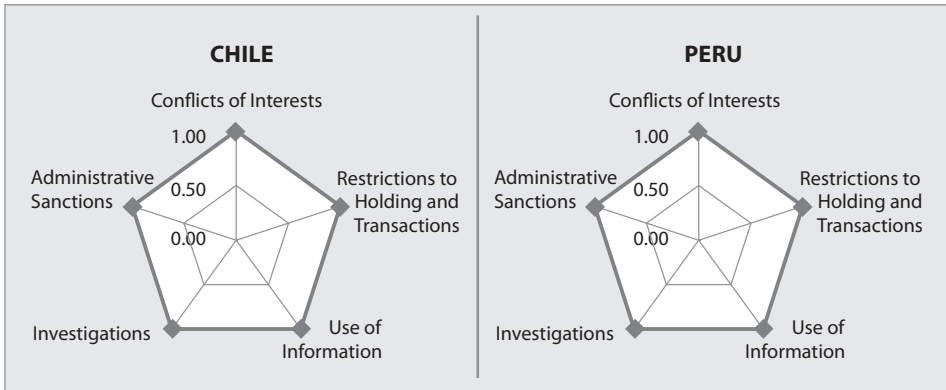
Principle 5 refers to the integrity and the means for achieving and demonstrating the integrity of the regulatory authority and its staff (IOSCO, 2003). The selected indicators focus on some of the mechanisms that should be in place to assure the achievement of these standards.

Figure 40 illustrates a set of objective indicators that account for the existence of a code of conduct specifying the following content: (i) *The Conflicts of Interests Indicator* takes a positive value (one) if the staff of the Regulator is required to observe legal requirements or a “Code of Conduct” specifying the avoidance of conflict of interest situations; (ii) *The Restrictions to Holding and Transactions* indicates if it is restricted on the holding or trading in securities; (iii) *The Use of Information* indicates if an appropriate use of information is required and the observance of confidentiality and secrecy provisions; (iv) *Investigations* indicates if there are processes to investigate and resolve allegations of violations of the code of conduct; (v) *Administrative Sanctions* indicates if there are administrative sanctions in cases of such violations.

As suggested by the responses displayed in Figure 40, all of the countries have implemented a code of conduct including all the mentioned issues; in this sense, the Principle seems to be fully implemented. In the case of Chile, in particular, the SVS does not have a code of conduct for its staff, however, the Organic Law establishes some prohibitions, such as staff using confidential information as well as having interests in regulated entities. Also, the Securities Market Law provides criminal sanctions for violations of confidentiality standards. The Internal Controller has the role of monitoring staff activities, though in practice it focuses on the supervision of the international financial management.

FIGURE 40 PROFESSIONAL STANDARDS





SOURCE: Own elaboration.

Self-Regulatory Organizations (SROs)

The model of Supervision that the securities markets regulatory framework put into operation, incorporate the existence of SROs¹². The following two principles concern the use and oversight of SROs, as well as the fairness and confidentiality standards in the use of delegated responsibilities:

6. *The regulatory regime should make appropriate use of Self-Regulatory Organizations (SROs) that exercise some direct oversight responsibility for their respective areas of competence and to the extent appropriate to the size and complexity of the markets.*
7. *SROs should be subject to the oversight of the Regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities.*

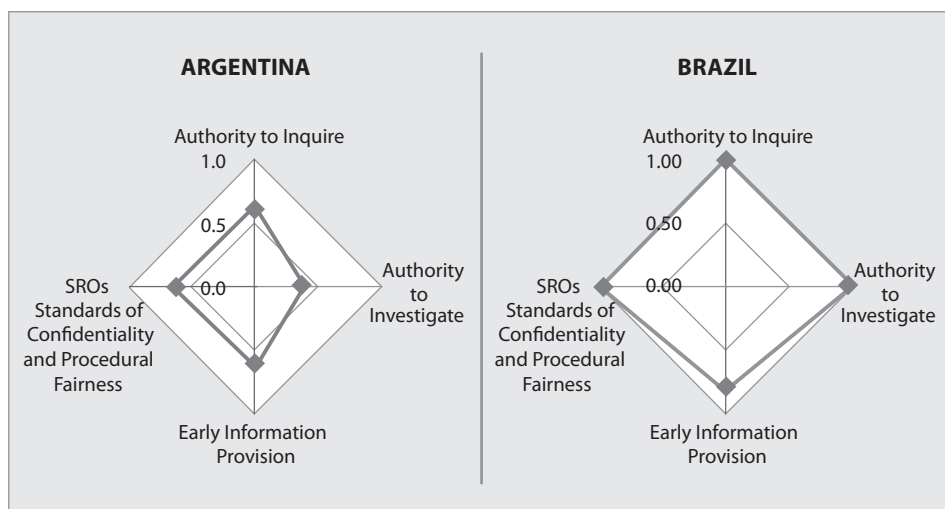
We first focus on the actual use of powers by the Regulator under a supervisory system that incorporates SROs. Two indicators provide the evaluation of respondents on this issue. *The Authority to Inquire Indicator* provides the evaluation on the actual ability of the Regulator to inquire into matters affecting investors under the SROs model. *The Authority to Investigate* is a similar indicator evaluating the ability of the Regulator to conduct any necessary investigation rather than the SRO, in situations where the powers of an SRO are inadequate to investigate. Two indicators are added in relation to the exercise of the SRO delegating responsibilities. *The Early Information Provision* provides the evaluation

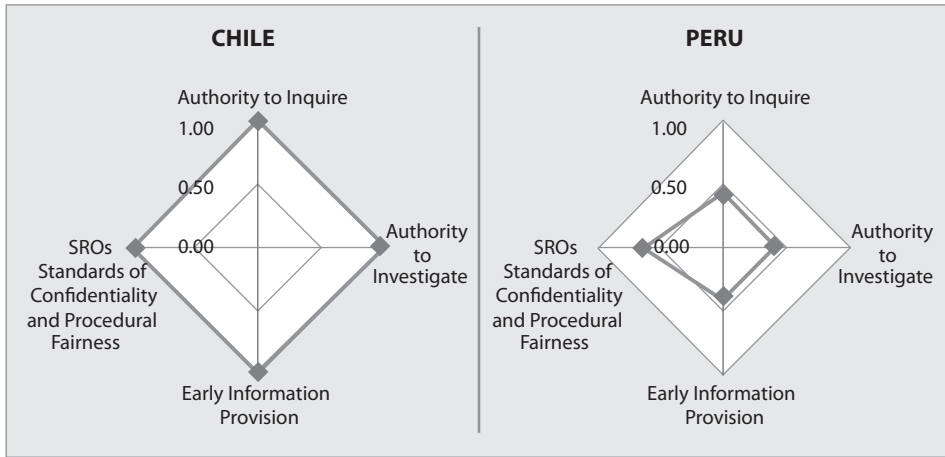
12 Table A.3 displays the main self-regulated entities that operate in the securities markets of each country.

of respondents with the provision of information by the SROs to the Regulator, in a way in which allows matters requiring intervention to be identified at an early stage. Second, *The SROs Standards of Confidentiality and Procedural Fairness Indicator* evaluates if the SRO has adopted standards of confidentiality and procedural fairness for its staff that are comparable to those of the Regulator (e.g., addressing conflicts of interest).

Figure 41 displays the results for SROs Oversight Indicators. On average, Brazil and Chile display higher values for the indicators than Argentina and Peru. In the cases of Brazil and Chile, nearly all indicators were assigned maximum values. For the case of Argentina and Peru, in contrast, the authority that is retained by the Regulator is only occasionally considered to be adequate. The same qualification is given for the early provision of information to the Regulator and the observance of confidentiality and procedural fairness. In particular, in both Argentina and Peru, respondents have expressed their concern on the ability of the Regulator to perform investigations when the SROs powers are insufficient.

FIGURE 41 SELF-REGULATED ORGANIZATIONS (SROs) OVERSIGHT





SOURCE: Own elaboration.

8. *The Regulator should have comprehensive inspection, investigation and surveillance powers.*

Under this principle, we focus on some of the powers that should be available to the Regulator in relation to the regulated entities without a previous suspicion of a breach of the law. Respondents were asked to evaluate the powers to inspect, and the ability to obtain books, records, and customers' identities.

Figure 42 exhibits the results on the following indicators: (i) *The Inspections without Notice Indicator* concerns the ability and the frequency with which the Regulator to performs inspections on the regulated entity's business operations, including its books and records, without giving prior notice; (ii) *The Books and Records without Judicial Action* concerns the ability of the Regulator to obtain books and records, and to request data or information from regulated entities without a previous judicial action; finally, (iii) *The Customers Identity Indicator* considers the ability and frequency of accessing the identity of all the customers of regulated entities.

Although these attributions are quite similar among the selected countries; according to the reported evaluation of the related indicators, Brazil and Chile report a higher average value than Argentina and Peru. In general, regulators have the power to conduct investigations requiring the presentation of documents without limitations, and these attributions are stipulated under the securities markets law in each country. Inspections, investigations and the ability to obtain registries are reported as being adequate and with high frequency in their implementations, with the exception of Peru, where answers suggest that they are infrequent.

It is worth noting that the powers to investigate might conflict with banking secrecy regulations. In particular, this is the case in Chile, where SVS does not have the authority to require access to bank information due to banking secrecy regulations (Larraín and Lazen, 2008). In Peru, this is also the case, where a judicial order is necessary in order to access bank information, which in general takes a long time (Morris, 2008).

FIGURE 42 POWERS TO INSPECT AND INVESTIGATE



SOURCE: Own elaboration.

9. *The Regulator should have comprehensive enforcement powers.*

Principle 9 adds to the investigative powers of the Regulator presented in Principle 8, by incorporating enforcement powers. In this case attention is paid to the set of powers at the hand of the Regulator when a breach of securities laws has already been identified. In particular, respondents were asked to evaluate the powers of imposing administrative sanctions, initiating criminal prosecution, requiring testimony and suspending trade.

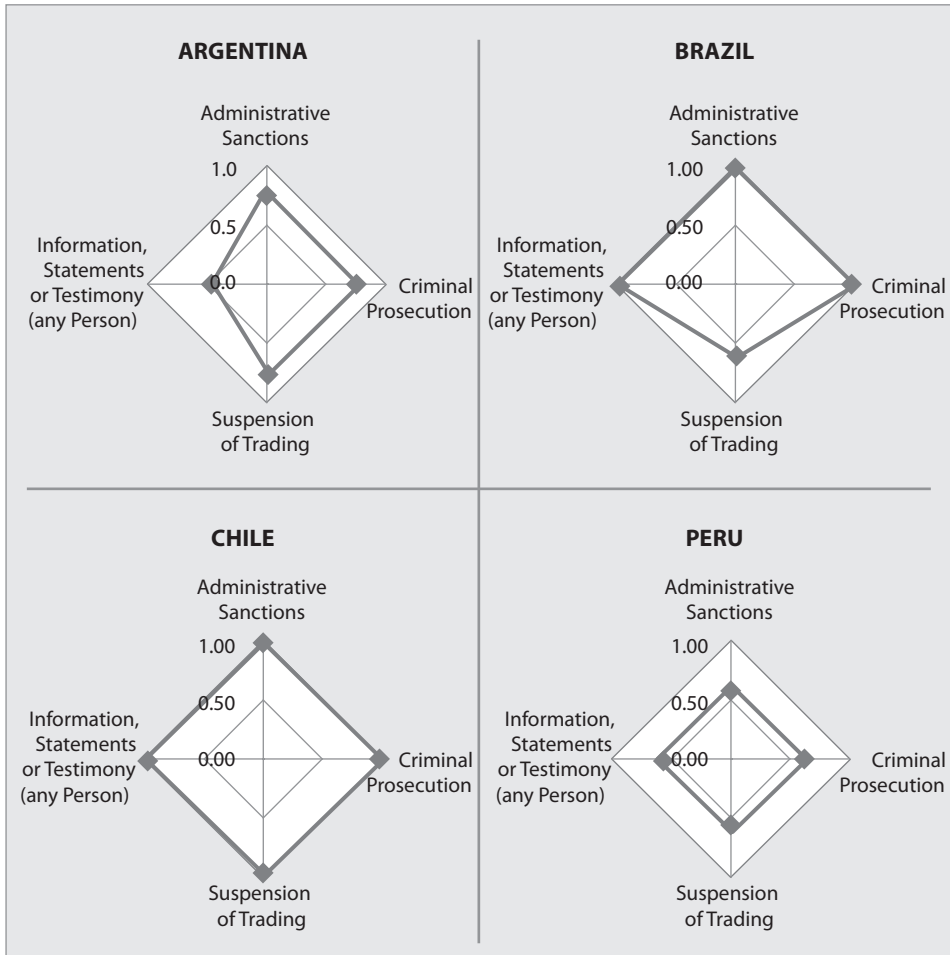
Figure 43 displays the following indicators: (i) *The Administrative Sanctions Indicator* provides an evaluation of the adequacy (and frequency) of the imposition of administrative sanctions; (ii) *The Criminal Prosecution Indicator* evaluates if the Regulator applies powers to initiate or refer matters for criminal prosecution; (iii) *The Suspension of Trading Indicator* evaluates if the Regulator applies the powers to order the suspension of trading in the situations it should; and (iv) *The Information, Statements or Testimony (any Person) Indicator* evaluates if the Regulator applies its powers to require from any person involved or who may have data, information, statements or testimony.

In Chile and Brazil, results suggest that the powers are adequate and in practice the rate of application is frequent. In the case of the suspension of operations, in Brazil a need for further reforms is reported. In the case of Peru, the application of enforcement powers is reported to be infrequent, although the faculty is adequately provided by the regulation. Additionally in Argentina, the need for reviewing the capacity to require information, statements or testimony is highlighted.

Other important enforcement powers, not included in the selection of indicators, are the powers to command or to refrain from specific actions directed to the different agents involved in the listing process. In Peru, for example, CONASEV is entitled to command the issuer, the distributor, or the accounting firm, to stop or to refrain from specific actions. The Civil Processes Code (CPC) gives CONASEV power to apply these sanctions. It also allows CONASEV to issue, as precautionary measures, to maintain an existing factual or legal situation when there is substantial evidence that irreparable damage may occur (La Porta *et al.*, 2006, Questionnaire, page 203). Similar attributions, but only when orders to stop and restrain are given to the CVM in Brazil; including the suspension of duties of directors or inspection committee members in a public company, from an entity taking part of the distribution system, or from other bodies that require the registration of the CVM. Less attributions of this kind apply to the case of Chile and Argentina. In Argentina, the CNV has the power to order issuers to stop

or to refrain from, such as a temporary restraint to make a public offering¹³, but it needs to request the judiciary to impose any other preliminary injunction on the issuer, its directors, distributors or accountants¹⁴ (La Porta *et al.*, 2006).

FIGURE 43 COMPREHENSIVE ENFORCEMENT POWERS



SOURCE: Own elaboration.

13 Law 17811, Section 10.

14 Other sanctions may be imposed on directors, officers or accountants by the CNV in the case of having omitted to disclose any material information, but no sanctions apply to a distributor who sells shares as an underwriter but is not involved in the preparation of an issuance prospectus (La Porta *et al.*, 2006).

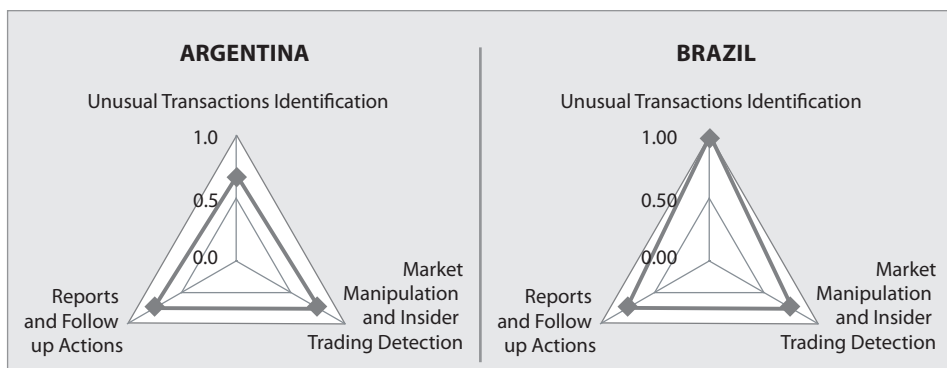
10. *The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers and the implementation of an effective compliance program.*

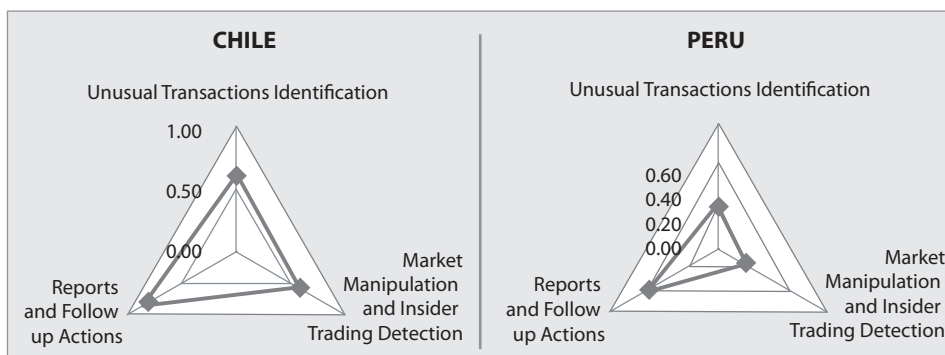
In this principle the focus is given to the effective and credible use of powers, as well as the implementation of a compliance program. In this case a selection of indicators provide an evaluation on some mechanisms and procedures that the Regulator should have put in place to demonstrate its effectiveness and credibility.

Figure 44 illustrates the selected indicators: (i) *Unusual Transactions Identification* evaluates mechanisms and procedures that the Regulator should have put in place to allow the automatic identification of unusual transactions on the exchanges and trading systems; (ii) *Market Manipulation and Insider Trading Detection*, on the respective mechanisms and procedures that allow the detection of market manipulation or insider trading related transactions; and (iii) *The Reports and Follow up Actions Indicator* on the reports and follow up actions that should follow inspections, indicating that the Regulator is competently discharging its inspection responsibilities.

Brazil respondents report that established procedures and mechanisms are adequate (and frequently used) for the detection of unusual operations, as well as market manipulation and insider trading related operations. In Chile and Argentina, these mechanisms are also reported to be adequate for the case of market manipulation and insider trading operations, although improvement might be needed in the case of the automatic detection of unusual transactions. In Peru, respondents explained that the lower evaluations are related with insufficient technological and human resources.

FIGURE 44 ASSURANCE OF INSPECTION, INVESTIGATION, SURVEILLANCE AND ENFORCEMENT POWERS, AND IMPLEMENTATION OF A COMPLIANCE PROGRAM





SOURCE: Own elaboration.

Information Sharing Mechanisms

Principles 11 to 13 concern the authority and actual implemented mechanisms for the sharing of information between regulators at the domestic and international level. The following are the principles:

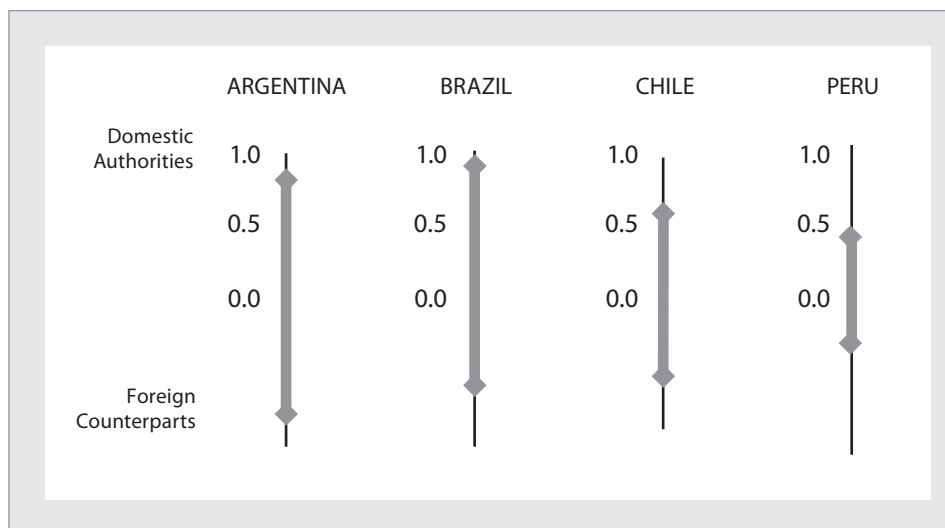
11. *The Regulator should have the authority to share both public and non-public information with domestic and foreign counterparts.*
12. *Regulators should establish information sharing mechanisms that assign when and how they will share both public and non-public information with their domestic and foreign counterparts.*
13. *The regulatory system should allow for assistance to be provided to foreign regulators who need to make inquiries in the discharge of their functions and exercise of their powers.*

While Principle 11 is focused on the authority to share information provided by the legal framework, Principles 12 and 13 centers on the actual existence of mechanisms guaranteeing that the sharing will actually take place and occurs in an organized way. Next, authorities and existent mechanisms are separately examined.

Figure 45 illustrates the indicators for the authority to share information at the domestic and international level respectively. The indicators are the following: (i) *The Domestic Authorities Indicator* provides the evaluation of respondents

on the adequacy of the authority provided to the Regulator by the legal framework to share information with other domestic authorities (e.g., Central Bank, Insurance Commission). In this case, we are interested in the ability to share information without the need of an external approval (e.g., from a relevant government minister). The indicator also evaluates the frequency of the actual sharing of information; (ii) *The Foreign Counterparts Indicator* provides the analogous evaluation for the case of sharing information with international counterparts.

FIGURE 45 SHARING INFORMATION INDICATORS



SOURCE: Own elaboration.

Surprisingly, the authority to share information at the domestic level is indicated by the regulators as infrequent or still requiring reforms. First is the case of Chile, where sharing is reported infrequent although powers are adequate, followed by Peru where powers are reported inadequate. In the cases of Argentina and Brazil, sharing is reported frequent but still related reforms are said to be needed.

The answers for the sharing of information at the international level are quite similar. In the case of Peru, the process might require authorizations and related approvals that result in the sharing of information almost never taking place.

Taking the case of Argentina¹⁵ and Brazil¹⁶, for example, the laws that regulate securities markets explicitly authorize the Regulator to share information with other domestic and foreign counterparts. Also, in both countries, regulations consider the establishment of Memorandums of Understandings (MoUs) between local and foreign authorities. Many of these agreements have been signed between regulators.

In Chile, the SVS is not explicitly authorized to share information with other domestic regulators, however, it has traditionally shared information under an assumption of “superior interest”; and requiring due reserve of that information. This means that the practice of information sharing among Chilean regulators is rather informal. On the other hand, the SVS is authorized by law to share information with foreign regulators (Larraín and Lazen, 2008). In the case of Peru, Securities Markets Law allows CONASEV to share information with other domestic or foreign regulators. However, in the case of foreign entities, the authority to share is limited to information related with the development of the market and other general information, but it cannot share information related with ongoing investigations unless these are linked to drugs or money laundering cases (Morris, 2008).

Notwithstanding the mentioned results, and as it was previously suggested, it is worth noticing that banking secrecy regulation may put restrictions on information sharing at both domestic and foreign levels.

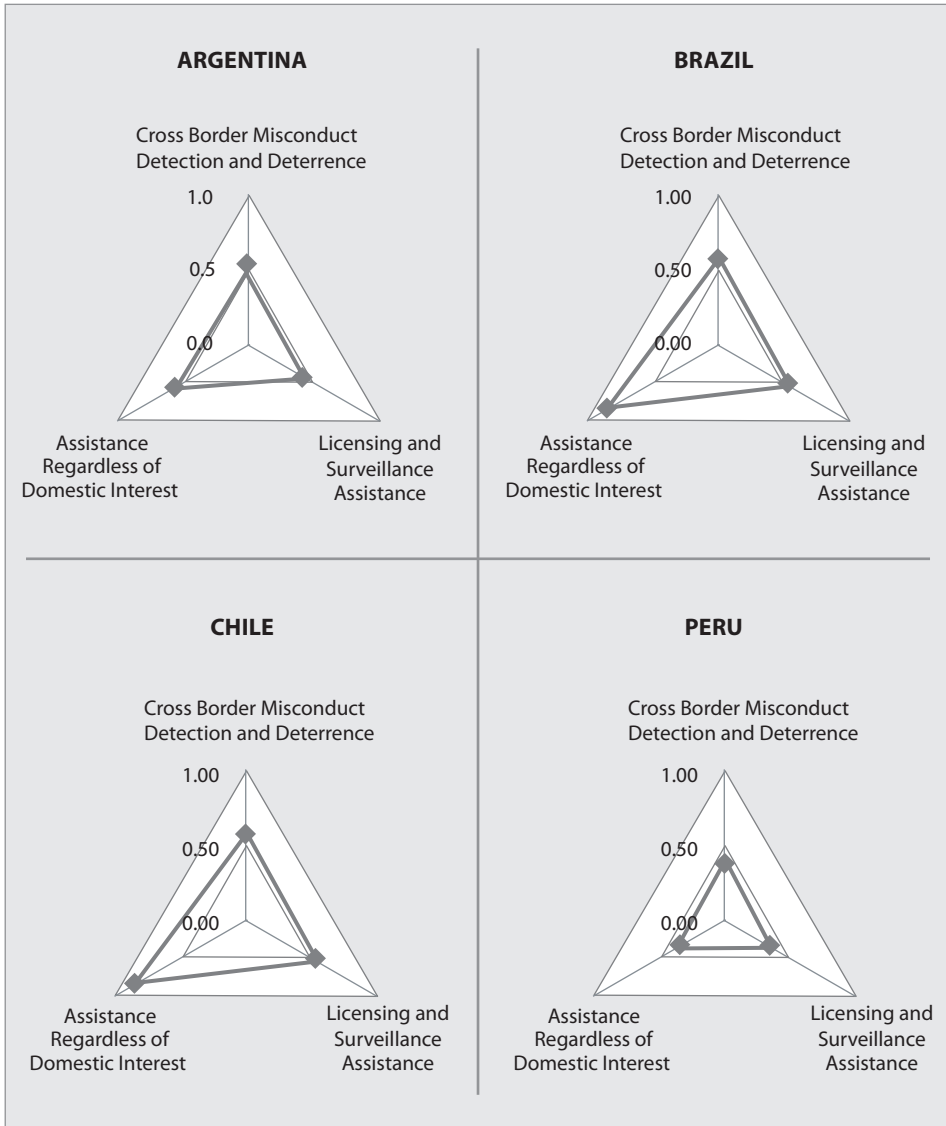
Figure 46 reports the indicators that focus on the implemented procedures and mechanisms for the information sharing process at the international level. These indicators are: (i) *The Cross Border Misconduct Detection and Deterrence Indicator*, which provides the respondents’ evaluation on the implementation of information sharing mechanisms that facilitate the detection and deterrence of cross border misconduct; (ii) *The Licensing and Surveillance Assistance*, which evaluates the mechanisms for the assistance of foreign counterparts in the discharge of licensing and surveillance responsibilities; and (iii) *The Assistance Regardless of Domestic Interest*, which provides the evaluation of respondents on the provision of effective assistance to foreign regulators who make inquiries, regardless whether the domestic regulator has an interest in the matter or not. The results are quite similar here. All the countries reported the need for strengthening the mechanisms of detection and deterrence of cross border misconduct, as well as assisting foreign regulators in the licensing and supervisory responsibilities.

15 Decree 2284/91, and Law 24447.

16 Law 6385/76.

FIGURE 46

INFORMATION SHARING MECHANISMS



SOURCE: Own elaboration.

Conclusions

The main contribution of this chapter is that it provides a first step in the construction of a detailed methodology for the comparative analysis of securities markets regulations and the degree of implementation.

A set of objective and subjective indicators were constructed based on the answers to a questionnaire. The answers came from selected respondents, including regulators and specialized consultants. The results might therefore be read as a self-assessment of the implementation of principles.

The main achievement of the approach is that it provides a clear diagnosis of issues that need prior attention. The results of the chapter show that Brazil and Chile systematically report higher evaluations than Argentina and Peru. But more precisely, the chapter addresses the priorities in each country. Taking all the regulators of the region as a whole, the areas that need prior attention are the availability of human and economic resources, the independence of the Regulator, the effective and credible use of powers, and the authority and mechanisms for sharing information.

Increasing the number of respondents will be desirable to further strengthen the implications of this study. Stimulating the participation of regulators to provide answers would also be desirable. The participation of many professional regulators in each country would lead to indicators reflecting a richer vision of the problems faced by each regulator.

The study needs to be extended to include the remaining principles that have not been analyzed (Principles 14 to 30), which include the standards for issuers, collective investment schemes, market intermediaries, the secondary market, and clearing and settlement systems.

Notice also that, while only four countries have been the focus of this study, the approach can be easily extended to other countries. Future research will allow the incorporation of other countries in order to explore the relationship between securities market regulations, the degree of implementation, and market performance and development.

Another interesting extension would be to direct a part of the questionnaire to selected market players. For many indicators, it will be valuable to contrast the view arising from regulators to the one from markets participants (e.g., processes of consultation with the public, the disclosure of policies and regard to costs in compliance with the regulation).

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Appendix

Table A.1 INDICES AND VARIABLES DEFINITIONS

| I. The Regulator | |
|--|---|
| 1. Clear Responsibility | |
| Responsibilities Established by Law | An index regarding the formality in the establishment of the Regulator responsibilities. Equals one if the responsibilities of the Regulator are set out by law. Equals zero otherwise. |
| Uniqueness | An index regarding exclusive authority on the supervision of securities markets. Equals one if there is only one authority that supervises securities markets. Equals zero otherwise. |
| Focus | An index regarding the focus and responsibility of the supervisor. Equals one if separate government agencies or official authorities are in charge of supervising commercial banks, insurance and stock exchanges. Equals zero otherwise. |
| 2. Independence and Accountability | |
| Independence | |
| Appointment | An index regarding the independence of the supervisor in relationship with its appointment. Equals one if a majority of the members of the supervisor are not unilaterally appointed by the executive branch of the government; and equals zero otherwise. |
| Fixed Term | An index regarding the independence of the supervisor in relationship with the length of its term. Equals one if the head of the supervisory agency (and the other directors) have a fixed term; equals zero otherwise. |
| Independence from Political Pressure | A subjective indicator, based on the opinion of regulators and consultants, evaluating the degree of independence in the operations of the Regulator without external political interference. The index takes values from 1 to 10 and has been standardized to a 0-1 scale. |
| Independence from Commercial and Sectoral Interests | A subjective indicator, based on the opinion of regulators and consultants, evaluating the degree of independence in the operations of the Regulator without external interference from commercial or other sectoral interests. The index takes values from 1 to 10 and has been standardized to a 0-1 scale. |

| | |
|---|--|
| Legal Protection | A subjective indicator, based on the opinion of regulators and consultants, evaluating the legal protection of the head and members of the regulatory authority in the discharge of their functions and powers. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Accountability | |
| Accountability to Legislature and Government | A subjective indicator, based on the opinion of regulators and consultants, evaluating the accountability of the Regulator to the legislature or another government body. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Transparency to the Public | A subjective indicator, based on the opinion of regulators and consultants, evaluating the degree of transparency to the public. The index takes values from 1 to 5 and is standardized to a 0-1 scale. |
| Review and Auditing of Funds | A subjective indicator, based on the opinion of regulators and consultants, evaluating the process of review and auditing of the reception and use of funds. The index takes values from 1 to 5 and is standardized to a 0-1 scale. |
| 3. Adequate Powers and Proper Resources | |
| Budget | Total budget for supervision in 2008. In US dollars. |
| Number of Employees | Number of professional securities markets supervisors (end 2008). |
| Budget per Professional Market Supervisor | Budget for supervision per professional market supervisor in 2008. In US dollars. |
| Appropriate Funding | A subjective indicator, based on the opinion of regulators and consultants, evaluating if regulator funding appropriately reflects the needs of supervising its markets. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Funding Allocation | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the Regulator can affect the operational allocation of resources once it has received its funding. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |

continue >>>

| 4. Processes | |
|---|--|
| Consultation with the Public | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the Regulator has an ongoing process for consultation with the public (including those who may be affected by the policy) (e.g., proposed rules for publishing public comment). The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Policies Disclosure | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the Regulator publicly discloses and explains all its policies. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Costs of Compliance | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the Regulator has regard, in the formulation of policy, to the costs of compliance with the regulation. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Procedural Fairness | |
| New Regulation Review | A subjective indicator, based on the opinion of regulators and consultants, evaluating the degree of adequacy of the process of review of new regulations. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Judicial Review | A subjective indicator, based on the opinion of regulators and consultants, evaluating the availability of a judicial review process for the regulation. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| License Publication | A subjective indicator, based on the opinion of regulators and consultants, evaluating if there is a process by which the granting, denying, or revoking of a license is made public, and those affected by the licensing process are entitled to a hearing. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| 5. Professional Standards and Standards of Confidentiality | |
| Conflicts of Interests | The index equals one if the staff of the Regulator is required to observe legal requirements or a "Code of Conduct" specifying the avoidance of conflict of interest situations; and equals zero otherwise. |

| | |
|--|---|
| Restrictions to Holding and Transactions | The index equals one if the staff of the Regulator is restricted on the holding or trading in securities; and equals zero otherwise. |
| Use of Information | The index equals one if the staff of the Regulator is required an appropriate use of information and the observance of confidentiality and secrecy provisions; and equals zero otherwise. |
| Investigations | The index equals one if there are processes to investigate and resolve allegations of violations of the code of conduct; and equals zero otherwise. |
| Administrative Sanctions | The index equals one if there are administrative sanctions in cases of such violations; and equals zero otherwise. |
| II. Self-Regulation | |
| 6 & 7. Self-Regulated Organizations (SROs) Oversight | |
| Authority to Inquire | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the Regulator retains authority to inquire into matters affecting investors. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Authority to Investigate | A subjective indicator, based on the opinion of regulators and consultants, evaluating if, in situations where the powers of an SRO are inadequate to investigate, the Regulator conducts any necessary investigation rather than the SRO. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| Early Information Provision | A subjective indicator, based on the opinion of regulators and consultants, evaluating if, SROs provide information to the Regulator that allows matters requiring intervention to be identified at an early stage. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |
| SROs Standards of Confidentiality and Procedural Fairness | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the SRO has adopted standards of confidentiality and procedural fairness for its staff that are comparable to those of the Regulator (e.g., addressing conflicts of interest). The index takes values from 1 to 5 and has been standardized to a 0-1 scale. |

continue >>>

| 8. Inspection, Investigation and Surveillance Powers | |
|--|---|
| <i>(The following indicators consider situations where there is no need for suspicion of breach of law in order for these powers to be implemented).</i> | |
| Inspections without Notice | A subjective indicator, based on the opinion of regulators and consultants, evaluating if the Regulator can regularly perform inspections on the regulated entity's business operations, including its books and records, without giving prior notice. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Books and Records without Judicial Action | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator can obtain books and records and request data or information from regulated entities without judicial action. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Customers Identity | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator can have access to the identity of all customers of regulated entities. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| 9. Comprehensive Enforcement Powers | |
| <i>(The following indicators consider the powers –and actual application of them– of the Regulator where a breach of securities laws has been identified).</i> | |
| Administrative Sanctions | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator applies powers to impose administrative sanctions. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Criminal Prosecution | A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the Regulator applies powers to initiate or refer matters for criminal prosecution. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |

| | |
|---|---|
| <p>Suspension of Trading</p> | <p>A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator applies its powers to order the suspension of trading. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate).</p> |
| <p>Information, Statements or Testimony (any Person)</p> | <p>A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the Regulator applies its powers to require from any person involved or who may have data, information, statements or testimony. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and for 1 very frequent (or highly adequate).</p> |
| <p>10. Assurance of Inspection, Investigation, Surveillance and Enforcement Powers, and Implementation of a Compliance Program</p> | |
| <p>Unusual Transactions Identification</p> | <p>A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the Regulator has mechanisms and procedures in place that allow the automatic identification of unusual transactions on authorized exchanges and regulated trading systems. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate).</p> |
| <p>Market Manipulation and Insider Trading Detection</p> | <p>A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the Regulator has mechanisms and procedures in place that allow the detection of market manipulation or insider trading related transactions. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate).</p> |
| <p>Reports and Follow up Actions</p> | <p>A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if inspections usually generates reports and follow up actions indicating that the Regulator is competently discharging its inspection responsibilities. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate).</p> |

continue >>>

| 11. Authority to Share Public and Non-public Information with Domestic and Foreign Counterparts | |
|--|--|
| Domestic Authorities | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator has authority to share information with other domestic authorities. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Authorization or External Approval | A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the Regulator has authority to share information with other domestic regulators without need of authorization or external approval (e.g., from a relevant government minister). The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Foreign Counterparts | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator has authority to share information with foreign counterparts. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Authorization or External Approval | A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the Regulator has authority to share information with foreign counterparts without need of authorization or external approval (e.g., from a relevant government minister). The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |

| 12. Information Sharing Mechanisms | |
|---|---|
| Cross Border Misconduct Detection and Deterrence | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator has implemented information sharing mechanisms to facilitate the detection and deterrence of cross border misconduct. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Licensing and Surveillance Assistance | A subjective indicator based on the opinion of regulators and specialized consultants, evaluating if the Regulator has implemented information sharing mechanisms to assist in the discharge of licensing and surveillance responsibilities. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |
| Assistance Regardless of Domestic Interest | A subjective indicator, based on the opinion of regulators and specialized consultants, evaluating if the domestic regulator provides effective assistance to foreign regulators who make inquiries, regardless of whether the domestic regulator has an interest in the matter. The index takes values from 1 to 5 and has been standardized to a 0-1 scale. A value of 0 stands for very infrequent (or highly inadequate) degree of implementation and 1 for very frequent (or highly adequate). |

Table A.2 THE REGULATOR AND ITS LEGAL FRAMEWORK

| | Argentina | Brazil | Chile | Peru |
|--|---|--|---|---|
| Body/ Agency that Supervises Securities Markets | Comisión Nacional de Valores (CNV) | Comissão de Valores Mobiliários (CVM) | Superintendencia de Valores y Seguros (SVS) | Comisión Nacional Supervisora de Empresas y Valores (CONASEV) |
| Main Laws and Decrees Governing Markets (*) | <p>Laws</p> <ol style="list-style-type: none"> Ley 17811 de Oferta Pública de Títulos Valores Ley 19550 de Sociedades Comerciales Ley 20643 de Régimen de Desgravación Impositiva para la Compra de Títulos Valores Privados Ley 21382 de Inversiones Extranjeras Ley 22169 de Funciones de la CNV Ley 23576 de Obligaciones Negociables Ley 24083 de Fondos Comunes de Inversión Ley 24241 de Sistema Integrado de Jubilaciones y Pensiones Ley 24441 de Fideicomiso | <ol style="list-style-type: none"> Law 6404/76, the "Corporation Act" (as amended by Laws 9457/97 and 10303/01) Law 6385/76, the "Securities Act", which disciplines the securities market and creates the CVM (as amended by Laws 9457/97, 10303/01 and 10411/02) Law 10303/01, Provisional Measure 8 and Decree 3995 alter and add provisions to Law 6404 of December 15, 1976, which governs corporations, and to Law 6385 of December 7, 1976, which governs the securities market and creates the Brazilian Securities Commission (Provisional Measure 8 has been converted into Law 10411/02) | <ol style="list-style-type: none"> Law 3538 from 1980, Organic Law of the SVS (including modifications to OPAS Law) Law 19220, Regulating Establishment of Agricultural Product Exchanges Law 19281, Housing Leasing with Agreement to Sell D.S. of Fin. 734 of 1991, Securities Deposit Regulations Law 18876 on Securities Deposit and Custody D.S. of Fin. 864, Investment Fund Regulations D.S. of Fin. 249 of 1982, Mutual Fund Regulations (includes amendments to OPAS Law) | <ol style="list-style-type: none"> D.L. 755, 1991 D.L. 861, 1996, "Securities Markets Law" D.L. 862, 1996, "Investment Funds Law" Law 27649 (Reforms on the Securities Markets Law) |

| | | |
|--|--|--|
| <p>10. Ley 24587 de Nominatividad de los Títulos Valores Privados</p> <p>11. Ley 25148 de Delegación de Facultades</p> <p>12. Ley 25246, modificación. Encubrimiento y Lavado de Activos de Origen Delictivo</p> <p>13. Ley 25248 de Contrato de Leasing</p> <p>Decrees</p> <p>1. Decreto 1271/05, modificación. Decreto 1526/98 en relación con las tasas y aranceles</p> <p>2. Decreto 476/04, Gabinete de Coordinación de Regulación y Supervisión Financiera</p> <p>3. Decreto 1020/03, Ley 17811-Sustitución Art. 73</p> <p>4. Decreto 1570/01 de Entidades Financieras</p> <p>5. Decreto 677/01 de Transparencia y Mejores Prácticas para el Mercado de Capitales</p> <p>6. Decreto 169/01 de Encubrimiento y Lavado de Activos de Origen Delictivo</p> <p>7. Decreto 1301/00 de Títulos Valores Privados</p> | | <p>8. Law 18815 on Investments Funds (includes amendments to OPAS Law)</p> <p>9. Law 18657 of Foreign Capital Investments Funds</p> <p>10. D.S. of Fin. 249 of 1982, Mutual Fund Regulations (includes amendments to OPAS Law)</p> <p>11. D.L. 1328 of 1976, on Mutual Funds Administration (includes amendments to OPAS Law)</p> <p>12. D.S. of Fin. 587 of 1982, Corporation Regulations</p> <p>13. Law 19705. It regulates Public Offers for Purchasing Stocks (OPAS) and establishes the Corporate Government regime</p> <p>14. Law 19768. It introduces tax-related adjustments to the capital market and makes more flexible voluntary savings mechanism</p> |
|--|--|--|

continue >>>

| | Argentina | Brazil | Chile | Peru |
|--|--|--------|---|------|
| | <p>8. Decreto 749/00, modificación del Régimen de Calificadoras de Riesgo</p> <p>9. Decreto 1526/98 de Tasa de Fiscalización y Control</p> <p>10. Decreto 1130/97 de Régimen Impositivo para Derivados</p> <p>11. Decreto 259/96 de Nominatividad de los Títulos Valores Privados</p> <p>12. Decreto 304/95, modificación del Régimen de Calificadoras de Riesgo</p> <p>13. Decreto 1926/93 de Mercados a Término</p> <p>14. Decreto 1087/93 de Pequeñas y Medianas Empresas. Oferta Pública</p> <p>15. Decreto 174/93, reglamentario de Fondos Comunes de Inversión</p> <p>16. Decreto 656/92 de Sociedades Calificadoras de Riesgo</p> <p>17. Decreto 2284/91 de Desregulación del Comercio Interior de Bienes y Servicios</p> <p>18. Decreto 156/89 de Obligaciones Negociables</p> <p>19. Decreto 659/74, Caja de Valores: su Funcionamiento</p> | | <p>15. Law 19769. It makes more flexible Mutual Fund and Insurance Company investments rules, creates General Fund Administrators, facilitates Bank internationalization, and improves Corporation and Investment Fund laws</p> <p>16. Law 18046 of Corporations Law (includes amendments to Law 20190)</p> <p>17. Law 18045 of Securities Market Law (includes amendments to Law 20190)</p> <p>18. Law 20190 (MK2). It introduces tax and institutional amendments to promote capital risk industry</p> <p>19. Law 20019, regulates Professional Sports Corporations</p> <p>20. Law 20108 extends the terms of Law 20019</p> <p>21. D.S. 75 of 2006, approves Regulations for Sports Organizations</p> <p>22. S. 120 of 1995, Housing Leasing with Agreement to Sell Regulations</p> | |

(*) This list is not aimed to be exhaustive. Some related laws or decrees may not appear.

Source: Regulator websites.

Table A.3 SELF-REGULATORY ORGANIZATIONS

| Argentina | Brazil | Chile | Peru |
|--|--|--|--|
| <p>There are 10 stock exchanges, formally 10 exchange chambers (Bolsas de Comercio) with associated stock markets (Mercados de Valores). The CNV also supervises compensation chambers, investment funds, and credit risk rating agencies.</p> | <p>There are 6 stock exchanges, Bolsa de Mercadorias e Futuros, and Sociedad Operadora do Mercado de Ativos.</p> | <p>There are 3 stock exchanges and the Central Depository for Securities Holdings (DCV).</p> | <p>There are the Lima Stock Exchange (BVL) and the Caja de Valores y Liquidaciones (CAVALI).</p> |

Source: Own elaboration.

Observance of

International Auditing

and Accounting

Standards in

South America

FERNANDO BAER

5

CHAPTER

Observance of International Auditing and Accounting Standards in South America

FERNANDO BAER¹

The accounting standards that companies use when reporting their financial information can differ significantly among countries. The coexistence of different standards and an increasing interdependence between global financial markets have caused two important problems: (i) high uncertainty when choices involving different investments are made; and (ii) costly access to finance due to differences in the presentation of the information depending on the market in which finance is sought. In a globalized world, there is a need for an economic transaction to be put in the books in the same way, regardless of where it is made. This will make globalization more transparent by improving the quality of financial information of economic agents. The transition towards the application of international accounting and auditing standards in stock markets would reduce uncertainty and the cost of accessing alternative financial sources. This would contribute to the modernization, integration and development of said markets, increasing the supply/demand of finance and would add new elements to the strategy of sustained economic growth.

1 I acknowledge comments of my colleagues at CEF Silvina Vatrnick and Alberto R. Musalem; those received at the two Roundtables "Capital Markets in Latin America: Convergence and Integration", organized by CEF, on May 13, 2008, and May 15, 2009, and specially those of Guillermo Larraín, Vicente Lazen and Marco Morales (SVS from Chile), Felipe Morris (Interseguro Compañía Aseguradora from Peru) and Roberto Britos (CNV from Argentina). Finally, I acknowledge Julian Katz-Samuels for translating this chapter from Spanish into English.

This chapter develops a diagnosis of the accounting and auditing standards used in Argentina, Brazil, Chile and Peru *vis-à-vis* the international standards and codes recommended by the standards-setters worldwide. The first section describes the international accounting and auditing schemes. The second section analyses the degree of accomplishment of accounting standards within each of the sample countries. The third section deals with the auditing standards. Finally, the last section presents the conclusions and policy recommendations.

International Outline of Accounting and Auditing Standards

The premise of harmonizing accounting information as an international criterion dates from the latter half of the 20th Century. In this spirit, the International Accounting Standards Committee (IASC) was formed in 1973 through an agreement among professional organization from the following countries: Australia, Canada, France, Germany, Ireland, Japan, Mexico, the Netherlands, the United Kingdom, and the United States. Its character was professional, private and of a global scope. One of the chief objectives of the IASC was to formulate and publish accounting rules that would be observed in the presentation of the financial states of enterprises, thereby, promoting the acceptance and observance of these rules throughout the whole world. Since its founding, the IASC has issued 41 international rules of accounting, which have been observed and analyzed by the group's members.

Table 10 INTERNATIONAL ACCOUNTING STANDARDS ISSUED BY IASC

| IAS Number | Concept |
|------------|---|
| | Framework |
| 1 | Presentation of Financial Statements |
| 2 | Inventories |
| 7 | Statement of Cash Flows |
| 8 | Accounting Policies, Changes in Accounting Estimates and Errors |
| 10 | Events after the Balance Sheet Date |
| 11 | Construction Contracts |
| 12 | Income Taxes |
| 14 | Segmented Financial Statements |
| 15 | Information for Reflecting Changes in Prices |

| | |
|----|--|
| 16 | Property, Plant and Equipment |
| 17 | Leases |
| 18 | Revenue |
| 20 | Accounting for Government Grants and Disclosure of Government Assistance |
| 21 | The Effects of Changes in Foreign Exchange Rates |
| 22 | Business Combination |
| 23 | Borrowing Costs |
| 24 | Related Party Disclosures |
| 26 | Accounting and Reporting by Retirement Benefit Plans |
| 27 | Consolidated and Separate Financial Statements |
| 28 | Investments in Associates |
| 29 | Financial Reporting in Hyperinflationary Economies |
| 30 | Financial Reporting for Banks and Similar Financial Institutions |
| 31 | Interests in Joint Ventures |
| 32 | Financial Instruments: Presentation |
| 33 | Earnings per Share |
| 34 | Interim Financial Reporting |
| 35 | Discontinued Operations |
| 36 | Impairment of Assets |
| 37 | Provisions, Contingent Liabilities and Contingent Assets |
| 38 | Intangible Assets |
| 39 | Financial Instruments: Recognition and Measurement |
| 40 | Investment Property |
| 41 | Agriculture |

SOURCE: Own elaboration.

Furthermore, in 1977, the International Federation of Accountants (IFAC), a global organization for the profession of accounting and auditing, was founded. This institution works with its members and associates in 123 countries –mainly national accounting organizations for professionals– with the goal of protecting the public welfare by encouraging high-quality practices by worldwide accountants. The federation represents 2.5 million accountants who offer their auditing and accounting services to the government, public sector, industry, commerce and academia. After working simultaneously and with similar objectives, in 1981, the IASC and the IFAC agreed that the IASC would have complete control over the accounting standards and the publication and discussion of documents concerning

international accounting. Likewise, all the members of IFAC also became members of IASC. IFAC retained control over auditing standards.

The speed of economic integration in markets was such that in 2000 the IASC restated its goals, turning towards subjects of information for those participating in capital markets, pursuing transparency and comparability among financial statements. In this context, in 2001, the International Accounting Standards Board (IASB) was formed as an independent organization headquartered in London and given the capacity of establishing International Accounting Standards (IASs), subject to those emanating from the IASC. During the transition, the IASB had to adopt the IASs rules as their own and start reformulating/issuing new standards. In this context, the IASs changed their denomination to International Financial Reporting Standards (IFRS). Through this process, there currently are 41 issued IASs prior to 2001 and 8 IFRS after 2001. The IFRS are used (and in some cases imposed) in the European Union, Hong Kong, Australia, Pakistan, India, Russia, South Africa, Singapore and Turkey.

Despite a training period, its progress and consolidation in the criteria of issuing international accounting standards, the IASB is not the only organization that issues them; there are in fact two main issuers: the IASB and the Financial Accounting Standards Board (FASB). On the one hand, the power of IASB comes from its agreement with the International Organization of Securities Commissions (IOSCO) in 1995. As a consequence, the IOSCO recommended that its member countries adopt the IASB standards. On the other hand, the FASB maintains its international status by issuing standards already implemented in the United States or US Generally Accepted Accounting Principles (GAAP) that have also been adopted by the US Securities and Exchange Commission (SEC).

However, there are clear indications of a convergence towards the application of IASB standards by the FASB. In 2002, both organizations agreed that they needed to issue compatible standards of a high quality and eliminate any differences between their existing standards. In 2006, the IASB and the FASB agreed to put forth an outline on the convergence of their accounting standards. The scandals involving Enron and WorldCom have made the need for a convergence of accounting standards even more urgent.

With respect to auditing standards, as was mentioned in the preceding paragraphs, the institution that issues the International Auditing Standards (ISAs) is IFAC. Currently, there are 36 such standards; and the IOSCO is evaluating the proposal of applying auditing standards at the global level.

While each of the mentioned standard setting organizations may have its own idiosyncrasies in the process issuing of such standards, in every case the issue of principles follows a rigorous analysis, which includes consultation and revision, and during which all involved parties may participate. In essence, the process is the following:

- The creation of a preliminary draft of a standard by a specialized committee through analysis and the consultation of experts.
- Publication of the draft for debate and discussion with the general public through a transparent process of open consultation that usually lasts 1-5 months (depending on the case).
- The committee considers and analyzes the comments and suggestions.
- The members of the institution vote on the revised standard. The committee is heterogeneous, including academics and representatives of the public and private sectors. If the standard receives $\frac{3}{4}$ of the vote, it is approved.
- Publication of the standard.

This mechanism of consensus guarantees a proper evaluation of the costs and benefits of issuing a specific standard, considering the effects on every aspect –whether it is included in or excluded from the standard– of the draft on the involved parties.

Performance of Accounting Standards in Argentina, Brazil, Chile, and Peru

Following a relatively long period of economic stability and interactions with the international capital markets, the countries in this region came to realize, especially in the last decade, the necessity of accounting criterion internationally accepted for the reporting of financial information to third-world countries. In this evolution, each country advanced with varying intensity in adopting the generally accepted accounting principles and the regulations locally issued to the international standards. Nonetheless, following this process, the degree to which these standards were applied varied significantly. For example, while Peru has essentially implemented all of these standards, Argentina, Brazil and Chile have only partially implemented some related criteria and have set a timeline for completing implementation, both of which vary according to the country. Argentina is considering some regulatory standards, but the CNV has modified the rules for certain companies (e.g., technical revaluation admitted by general standard but excluded from CNV norm).

The main differences between the accounting standards and each of the countries practices are:

Argentina

There are several institutions, which are responsible for regulating accounting; it is notable that there are distinct councils for issuing and controlling accounting rules. Each jurisdiction (23 provinces and the autonomous city of Buenos Aires) issues and enforces accounting (and auditing) rules. There is no specific institution that supervises each of these jurisdictional committees. That said, the provincial committees can voluntarily adhere to the Federación Argentina de Consejos Profesionales de Ciencias Económicas (FACPCE). The latter through the Centro de Estudios Científicos y Técnicos (CECyT) states accounting activity through the issuance of the Technical Resolutions (RTs, as in Spanish). The provincial committees that adhere to FACPCE adopt RTs without modifying them. Until 2005, the Consejo Profesional de la Ciudad de Buenos Aires (CPCBA) was not a part of FACPCE and their RTs were significantly different from those of the Federation (which, were the same as those of the IASC).

Within the framework of the globalization of markets and with the criterion of homogenizing the local rules, since 1997 (RT 14) the CECyT of the FACPCE began issuing RTs based on the international rules (IASC). However, given that most of the companies are located in Buenos Aires, the CNV adopted resolutions of the CPCBA for regulating the accounting of said companies. Through the Resolution CD 93/2005 (unification of accounting rules) the CPCBA approved the adoption of accounting rules issued by the Federation, thereby closing a gap that consisted not only in rules that were not just inconsistent with those recommended by the international community but also those used in the provinces. In this way, the accounting rules in all jurisdictions were homogenized, in effect making it less difficult to complete the convergence of local and international accounting standards.

Currently, the rules that should be followed by the listed companies (adopted by the CNV with some specific modifications) are:

RT 6 (Financial Statements in Homogeneous Currency)

RT 8 (Presentation of General Rules)

RT 9 (Presentation of Particular Rules)

RT 11 (Presentation of Particular Rules for Non-profit Institutions)

| |
|---|
| RT 14 (Presentation of Joint Business Participations) |
| RT 16 (Conceptual Framework) |
| RT 17 (General Rules on Measuring Procedure, Unit, etc.) |
| RT 18 (Particular Rules on Consolidation, Derivatives, Restructuring, etc.) |
| RT 21 (VPP, Related Parties, etc.) |
| RT 22 (Agriculture Activities) |
| RT 23 (Employers, Lay Offs and Benefits) |
| FACPCE Interpretations 1, 2, 3 and 4 |

As mentioned, from the RT 14, the FACPCE began to consider the criterion of international accounting standards. In this way, the RTs 16-19 revised the previous RTs, adapting them to this criterion. Nevertheless, the CNV only partially adopted the RT 19, and it also should review topics related to accounting presentation (RTs 8, 9 and 11).

At present, some of the main differences between the current rules in Argentina and the IASs are:

- Inventory (IAS 2): These should be appraised according to the smaller value between the cost (First In, First Out or the weighted average) or according to the feasible net value. According to the local rules: (i) fungible inventories must be appraised by the feasible net value; (ii) inventories under production process must be appraised by the proportional realization net value; and (iii) the rest of the inventories at their replacement costs (exceptionally it could be appraised by the acquiring cost).
- Cash Flow (IAS 7): Cash flows under the accounting period should be registered and informed considering the classification: operations; investments; and financing. For such classification, they could use the direct or indirect methods; the local rule includes the same classification methodology. However, there are some discrepancies inside the “cash flows” concept classification.
- Accounting Policies, Changes in Accounting Estimates and Errors (IAS 8): Modifications should always be retrospective to previous financial years. However, the local norm states that they only should be corrected in the comparative data annex (with the exception in the case that the modifications affect initial balance of the evolution in the net wealth statement or variations in the current capital statement).

- Construction Contracts (IAS 11): The local regulatory rules do not apply specifically to these contracts.
- Property, Plant and Equipment (IAS 16): These should be appraised according to original monetary cost (with the exception of the alternative given by the IAS 23 that allows for its activation). In this case, its cost should be equivalent to the original cost minus the accumulated depreciation. In addition, they may be re-appraised (in the Net Wealth Revaluated Surplus Account). According to the local regulatory rules, the local rule partially coincide with the international standard when the definition of “original cost” is unclear.
- Leases (IAS 17): This regulation partially fulfills the local regulatory rules. For example: (i) operative lease, it does not specify whether the costs should rise and fall linearly according to the length of a contract (except when there is a better way of showing intertemporal profits); and (ii) in other cases the local regulatory rules are much more specific, giving alternatives (e.g., income over the course of a lease useful life can be considered according to minimum quotas, residual value is not guaranteed).
- Accounting for Government Grants and Disclosure of Government Assistance (IAS 20): The local regulatory rules do not apply to these subsidies.
- Borrowing Costs (IAS 23): The international regulatory rules base this calculation on the weighted average of financial costs resulting from the interest of loans an organization has received. According to local regulatory rules, this calculation is based on the average of total debts (the weighted average is, in this case, unclear).
- Consolidated and Separate Financial Statements (IAS 27): There are some punctual differences between local and international standards. For example, the international regulatory rules define a majority of votes as the main influence, whereas the local regulatory rules define it as a majority of votes through written agreements with other shareholders. There are also differences in the case of the relation between the net worth proportional value (VPP in Spanish) and irrevocable contributions, in stock portfolios, reciprocal shares, among others.
- Investments in Associates (IAS 28): Local regulatory rules do not fulfill the definition of significant influence and the definition of targeted entities (the IAS excludes entities of capital, risk and collective investment). However, it does fulfill the stock method (cost +/- profit of the associated entity).
- Financial Reporting in Hyperinflationary Economies (IAS 29): The local regulatory rule is not consistent with this accounting rule; the IAS addresses the

re-expression of already existing information at current values through a price index in the event of certain unstable conditions (for example, accumulated inflation of 100% over 3 years). The local regulatory rules do not specify situations in which to adjust by the wholesale price index (IPIM in Spanish, established as the reference index in the local regulatory rules), thus expressing in a homogeneous currency (that is, in intertemporal comparable values).

- Earnings per Share (IAS 33): The local regulatory rule is somewhat inconsistent with the international rule. According to the international standard, this should be calculated according to a weighted average, while in the local regulatory rules, the calculation is made solely on the basis of an average (although it is used the word “weighted”, its application is not clear). Moreover, there is no mention of retroactive adjustments and potential stocks.
- Intangible Assets (IAS 38): The local regulatory rules are somewhat inconsistent with this norm: (i) there are differences in their respective valuation methods (according to IAS, the model of cost or reevaluation vs. the cost according to the local regulatory rules); (ii) concepts to consider (e.g., whereas according to IAS, the costs that a new or existing organization incurs at the beginning of a new activity or operation and lifetime utilization, defined or undefined; IAS does not allow amortization, while the local rule allows it for a maximum of 20 years, in the case this would be demonstrable). Furthermore, the local regulatory rules allow amortizing considering the linear method.
- Financial Instruments: Recognition and Measurement (IAS 39): The local regulatory rules do not consider this standard.
- Investment Property (IAS 40): The local regulatory rules are somewhat inconsistent with this standard. While recognition is the same, there are differences in their respective methods of appraisal. On the one hand, the IAS recommends a re-appraisal of the original purchase price of the house. Re-appraisal is based on a model taking into account the property's value and its cost. The local regulatory rules, on the other hand, do not permit such re-appraisal.

As mentioned, the CNV adopted the accounting rules of the FACPCE (RT 19 partially) with some differences following the IASs expressed in the preceding paragraphs. Nevertheless, it also made some additional modifications; some of the most relevant of these changes are presented in the following:

- Discontinuation of the inflation adjustment method, thus not allowing the reinstatement of financial information on homogeneous currency.

- Capitalization of Borrowing Costs will be mandatory in those cases in which the RT made it optional. They cannot capitalize the interests that exceed market rates among similar operations.
- Presentation of financial results and holdings results in the body of the Profits and Losses Statement requires detailing those generated by assets and liabilities (also those generated by interests, exchange rate differences, and exposure to a volatile currency and other holdings results).
- Reevaluation of goods in use is prohibited (while it is permitted by RT). It only permits information regarding the goods in use to be included in the section of supplemental information.
- Changes in supplemental information (attachments on goods in use, intangible assets, forecasts, etc.).
- Incorporation of an informative summary.

Notwithstanding these differences, the CNV has come to recognize the necessity of advancing in the convergence of domestic accounting rules and international accounting rules. Moreover, it has begun to work towards accomplishing this. It was in this context that in August, 2007, in conjunction with the FACPCE and the CPCBA, the CNV reached a conclusion as to the adoption of the IASs by publicly-owned companies. Subsequently, in November of the same year, the CNV decided to delegate to the FACPCE the responsibility of designing the implementation of such rules. To this end, the Federation formed a commission to exclusively handle the planning and implementation of said goals. In its turn, the Commission undertook a variety of analyses and ultimately adopted a plan, which included diverse perspectives on a realistic implementation. This process included the following: (i) a broad analysis of the global and domestic economic situation with a focus on the potential impact of the implementation of said rules on companies; (ii) research on similar processes in Latin American countries (Venezuela, Brazil, Chile, Uruguay, Mexico, and Peru); (iii) interviews with agents directly involved in the subject matter (exchanges, analysts of financial information of listed companies, auditors and personal of the CNV); (iv) surveys sent to companies that would be subject to these new accounting rules, and surveys sent to auditors affiliated with the CNV; and (v) consultation to the IASB on relevant matters (for example, the application of VPP in under control companies).

In essence, the document concerning the 2008 principles establishes distinct phases for transitioning to the complete implementation of the international standards. The complete adoption will have to occur for financial statements completed by December 31, 2011. In the project, there is a lot of demand for

building awareness and knowledge, such as training and monitoring the involved parties, in particular independent professionals who do not generally have access to as much information and training. The following is a presentation of some of the subjects and elements of the aforementioned plan:

- The date of the first application, including the presentation of supplementary information prior to the main application.
- The main application.
- The organizations to which the application corresponds.
- A choice between alternatives existing among the IASs.
- A timeline to fulfill a function in the interaction between those interested, the listed companies, the accounting profession and the CNV.
- A resolution of the differences between the rules and ISAs.
- A program that companies must present and complete before the CNV is to advance in the process of adoption.
- A program that the auditors must present and complete before the CNV is to facilitate the process of adoption.
- The actions of the CNV in order to facilitate the process of adoption.
- CNV resolutions concerning financial information.
- The actions of the accounting profession in order to facilitate the process of adoption and other considerations.

Brazil

In recent years, Brazil has achieved significant advances in increasing transparency, flexibility and encouraging the global integration of its markets. In the BOVESPA, for example, there are different market segments; level 1, level 2 and Novo Mercado. Each of these is different, as far as upholding corporate governance standards and protecting minority shareholders are concerned. Novo Mercado is the furthest along in implementing these concepts.

To further the process of harmonization and convergence, the Accounting Federal Council created, through Resolution 1055/05, the Accounting Statement Committee (CPC, as in Portuguese). The latter is composed of representatives from distinct public and private institutions that operate in the sphere of accounting, and, indirectly, in capital markets. Its specific objectives are: (i) to further the international homogenization of accounting rules; (ii) to delegate the duty of

issuing accounting rules to a single organization; and (iii) to represent and process consistently and democratically the issuance of accounting rules (considering authorities, auditors, users, intermediaries and academics).

Subsequently and with legal support from Law 11638 (December 2007) and, as a result of the processing of Law 3741/2000 by Congress, it demanded the revision of the accounting chapter of the law of corporations (Law 6404/1976), including, among other advances, the convergence of domestic rules to international rules. Based on this law, from then on, rules issued by the Securities and Exchange Commission (CVM, as in Portuguese) would need to follow the criteria of the international accounting rules (IASB). The objective of both laws, supported by the CVM and the Executive Power, was essentially to create regulatory restrictions on accounting, which would, on the one hand, allow companies to adjust to international accounting rules, and, on the other, increase the transparency of balance sheets. The CVM believed that this action would create more opportunities for finance from outside the country and reduce its cost. According to the CVM, the disciplinary measure of Law 11638 initiated a new cycle of development in Brazilian capital markets, a cycle that will demand a great effort on the part of companies, organizations, professional accountants, and so forth. In particular, in its regulatory function, the CVM will need to designate significant economic and human resources in order to stimulate the process of regulation, dissemination, orientation, and training pertaining to the modifications in the aforementioned law.

This law compelled specific, punctual and immediate modifications in the financial statements completed in December 2008. Furthermore, it authorized the CVM to issue rules that would obligate open companies to accomplish certain objectives. Among the main changes in the law are the following.

- Substitution of the Origin and Flows Application Statement by the Cash Flow Statement (IAS 1).
- Financial Assets classification, including derivatives (considering those for negotiation; hold up to maturity; and available for sale, IAS 39).
- Valuation Criteria of Financial Assets, including Derivatives: (i) market value or the equivalent value (when they may be sold); (ii) acquisition cost or production value or realizable probable value (in the case it was lower); (iii) intangibles (new category established in said law) by the acquisition cost minus accumulated depreciation; and (iv) those associated to the long-term operations by their current value (IASs 32-39).
- Prohibition of assets revaluation (breach of IAS 16).

- Periodical completion by the company of an analysis of recoupable value of goods in use and intangibles, reflecting capital losses or in the lifetime utilization (IAS 36).
- Reclassification of assets, including intangibles (IAS 38).
- Valuation and accounting at market value of all assets and liabilities of the incorporated company in operations comprising companies combination between non-related parties and with control transference between them (IFRS 3).
- Creation of a fiscal incentive reserve to be accounted for in the financial statements (total or deferred) (IAS 20).
- Reinforcement of the role of the CPC in the drafting of accounting rules.
- Publication of financial information of companies according to international rules following the financial statements completed by December of 2010 (Instruction 457/2007 of the CVM). In this context, the CVM and the CPC define a timeline to drive the convergence of accounting rules according to the necessities of the short-and-medium-term, respectively. The timeline is dynamic and will change itself to remain consistent to advances and changes made by international institutions.

It was in this context during 2008 that the CVM made a concerted effort to enforce rules involved in the modifications made by the aforementioned law. Those modifications, which are most difficult to implement and require a consensus among involved parties (valuation and accounting of financial instruments and operations of a combination of businesses), will have priority. Hitherto, the CVM compelled the aforementioned companies to abide by the following resolutions, which, incidentally, were consistent with international accounting practices:

- Reporting of Financial Information (Deliberation 488/05) (IAS 1).
- Provisions, Contingent Assets, Contingent Liabilities (Deliberation 489/08) (IAS 37).
- Events after the Balance Sheet Date (Deliberation 505/06) (IAS 10).
- Accounting Practices, Correction of Errors and Changes in Estimations (Deliberation 506/06) (IAS 8).
- Reduction of Recoupable Value of Assets (Deliberation 527/07) (IAS 36).
- Effects of the Variations of Exchange Rates (Deliberation 534/08) (IAS 21).
- Basic Conceptual Framework of Financial Information (Deliberation 539/08) (Conceptual Framework IASB).

- Cash Flows (Deliberation 547/08) (IAS 7).
- Intangible Assets (Deliberation 553/08) (IAS 38).
- Leases (Deliberation 554/08) (IAS 17).
- Accounting for Government Grants and Disclosure of Government Assistance (Deliberation 555/08) (IAS 20).
- Financial Instruments: Recognition and Measurement (Deliberation 556/08) (IAS 39).
- Value Added (Deliberation 557/08).
- Related Party Disclosures (Deliberation 560/08) (IAS 24).
- Property Agents (Deliberation 561/08).
- Dividends in Shares (Deliberation 562/08) (IFRS 2).
- Present Value Adjustment (Deliberation 564/08).
- Financial Instruments: Recognition and Measurement and Disclosure (Deliberation 566/08) (IASs 32 and 39).
- Also, it was formalized the adoption of Law 11638/07 and Transitory Measures (Deliberation 449/08) for adequate IFRSs observance.
- Some legislation related to Investment Funds was approved.
- Finally, there are 32 norms in the process of elaboration/consultancy; thus the elaboration, consultation, and incorporation of the remaining standards should be passed at the end of 2009.

Chile²

The first and second reforms of the capital markets (MK1 in 2001 and MK2 in 2007) boosted development, adopting saving instruments and plans according to what users preferred (e.g., voluntary pension plans, SMEs financing, incentives to the risk capital industry and the introduction of corporate governance best practices standards and codes, among others). Nevertheless, the accounting rules require modifications to be consistent with the new market structure, international standards (IASB) and the regional tendency towards convergence.

2 This section is based on Larraín and Lazen (2008).

In effect, current regulation (Ley de Sociedades) requires the preparation of annual financial information according to the Generally Accepted Accounting Principles (PCGA, as in Spanish) of Chile. This framework is significantly different from the international requisites. Some of the most important of these are:

- Provisions: The PCGA do not require the existence of an obligation in order to recognize a provision. An example of this case is the recognition of benefits (e.g., the employee benefits recognition at the end of her/his professional career, IAS 19). According to the international rules, it is required in this case that the benefits be recognized as costs only when the working relationship is terminated. Chilean rules allow these benefits to be recognized without this last condition.
- Foreign Investments in Hyperinflationary or Unstable Economies: Chilean rules permit foreign subsidiaries to use the United States dollar as their functional currency and restate their balances in terms of Chilean pesos, if their activities do not constitute an extension of Chilean operations and also do business in countries of significant risk, restrictions or an elevated fluctuation of prices/exchange rates. The international rule permits this to be done only if the United States dollar is recognized as the currency, which best reflects the financial operations of the foreign subsidiary.
- Financial Instruments: Chilean rules do not require the classification of financial assets provided that they are for: (i) negotiation; (ii) maintaining through maturity; and (iii) for sale. Moreover, the financial assets for negotiation do not necessarily need to be valued at the lesser of the following two: a recalculated acquisition cost or market value.
- Statement in Homogeneous Currency: Chilean rules currently permit the statement of balances to take into account variable prices. According to international rules, the restatement is allowed only in the event of a hyperinflationary economy.
- Market Segment Information: According to Chilean rules, reports of accounting information cannot promote good news concerning companies that diversify their operations, above all, in various industries and geographical areas.

However, understanding the need for listed companies to access better and more markets under more beneficial conditions, the Securities and Insurance Superintendency (SVS, as in Spanish) gave instructions to gradually introduce international standards concerning the reporting of financial information. In October 2006, through the Circular 368/06, it instructed every listed organization to

adopt international accounting rules in reporting financial information beginning in January 2009.

In 2007, the SVS put forth a timeline, indicating that:

- From January 2009, listed corporations with a minimum benchmark traded volume (traded volume that exceeds 25% of total trading days) will be required to fulfill international standards.
- By the same standard and timeline, banks, pension funds and their administrators will have to fulfill these international standards.
- The rest will be required to do so, beginning in January 2010.

Under this plan of action, SVS will be responsible for formulating the format for presenting financial information. Furthermore, this organization is working on the development of technological platforms required for administering accounting information according to international standards. The objective is to validate, codify and correctly transmit financial information in an electronic format. To this end, the SVS is actively working with other government regulators.

Peru³

The legal and institutional scaffolding that organizes the accounting profession in Peru is extensive. Law 28708, the National Accounting System General Law, enacted in April 12, 2006, regulates the accounting of public and private entities and establishes the Accounting Normative Council. Besides that law and the council, there are the laws regulating financial intermediation such as: Law 26702, the Financial and Insurance Systems General Law and Organic of the Superintendency of Banking and Insurance, and Law 27328 of the Private Pension System (SPP, as in Spanish), and the pension fund administrators (AFPs, as in Spanish), which establishes that the Superintendency of Banking, Insurance and Pension Funds dictates rules for the record of operations, compiling, presentation and publication of financial information of these aforementioned entities. Likewise, the Securities and Exchange Commission (CONASEV, as in Spanish), regulates the accounting of those companies listed in stock markets, the stock brokers and other intermediaries.

3 This section is based on Morris (2008).

Like Brazil (with the CPC), the Accounting Normative Council (CNC, as in Spanish) is composed of various institutions directly and indirectly involved in capital markets. In effect, it is chaired by an official appointed by the Minister of Economics and Finance and integrated by representatives from the Central Bank, CONASEV, Banking, Insurance and Pension Funds Superintendency, Accounting Universities, Public Accountants National Association, Private Companies National Confederation, among others.

The application of the IASs in Peru came into effect over the course of a long process, which began in 1986. Initially, diverse National Congresses of Public Accountants adopted agreements for the application of said rules. Subsequently, the Accounting Normative Council, in April 18, 1994, through Resolution 005-94-EF/93.01 made official the application of the IASs adopted in the aforementioned congresses, specifying that the financial information should be collected and presented according to the mentioned rules. The Resolution 013-98-EF/93.01 of the Accounting Normative Council specified that the Generally Accepted Accounting Principles, to which Corporation General Law refers, substantively include the official IASs, and the rules established by Supervision and Control Organizations for entities of its area that always considered the IASs Theoretical Framework. In this same Resolution 013-98-EF/93.01, it was included that in those circumstances in which determined accounting proceedings were not established in the IASs, accounting principles used in the United States may be used.

Following a long process of evolution, implementation and training for the involved parties, on December 31, 2007, the CNC approved the application of all the international rules in Peru, with the exception of the following rules for which there is an estimated timeline of approval:

- IFRS 7, Financial Instruments Disclosures: This rule has been in effect at the international level since January 1, 2007 and it does not modify any of the accounting practices, but requires the detailed disclosure of the financial instruments of entities.
- IAS 1, Presentation of Financial Information, modified: Requires disclosures on the management of the capital of entities.
- CIIFRS 8, Reach of the Application of the IFRS 2, effective in May, 2006.
- CIIFRS 9, Evaluation of Incorporated Derivatives, effective on June 1, 2006.
- CIIFRS 10, Intermediary Financial Reports and Assets Depreciation, effective on November 1, 2006.
- CIIFRS 11, IFRS 2, Transactions with Treasury Shares, effective on March 1, 2007.

Likewise, at the international level, diverse rules have been approved that will have become obligatory in 2008, 2009 and 2010. These, however, have not yet been approved by Peru:

- IFRS 8, Operative Sectors.
- IAS 23, Borrowing Costs, modification.
- CIIFRS 13, Customer Loyalty Programs.
- CIIFRS 14, IAS 19, Limits for Defined Benefits, Funding Minimum Requirements and its Interaction.
- IFRS 3, Combination of Companies and IAS 27 Consolidation, modified.

In addition, there are differences in the application of certain concepts for the case of financial and savings entities; in some cases, these differences are significant. One particularly notable difference is that the SBS forms its rules within the international parameters. Some of the other main differences are the following:

Financial Entities

- Specific Provision for Jobs: According to the SBS, they should be determined following the established percentages by the SBS and registered in the specific period profits and losses. If authorized by the SBS, provisions may be recorded as a charge to the net worth. In contrast, according to the IFRSs, the difference between the value in books and recouped sum (value resulting from the expected inflows of net income discounted at the original interest rate of the loan) is recorded during accounting. The expected value to recoup from the guarantees should be decreased from the provision in the event that it is believed that the credit will be recouped through the guarantees execution.
- General Provisions for Jobs: According to the SBS, portfolios classified as normal require provisions and are recorded in the results of this period. In some cases, the SBS authorizes the registry of the provision with the debit of the accumulated results (net worth). It is permitted to be recorded as generic voluntary provisions with charges over profits and losses of the period or net worth. In contrast, according to the IASs, the additional provisions resulting from the requirement of a regulatory entity will be registered in the net worth as an appropriation of retained profits (debit to accumulated results and credit to a special reserve account).

- **Provision for Allocated Goods:** According to the SBS, these are recorded in retained provisions with percentages that require a provision of a value of registered cost in a maximum period of 60 months. In addition, it is necessary to have values assessed by business appraisers, those cannot be older than a year, and a provision has to be constituted in case there is a devaluation generated by a net realization value lower than its respective net book value. On the other hand, according to the IASs, these should be registered at the lesser value of either the value in the books or the reasonable value minus the costs needed for selling them. The provision for the deterioration is registered at the end of the period.
- **Goodwill (Fund of Commerce):** According to SBS, the cost of Goodwill is recouped at the latest in 5 years. Additional redemption periods are permitted, granted by the authorization of the SBS. In contrast, according to the IASs, Goodwill does not redeem itself. The provisions are registered by annual evaluation of deterioration of Goodwill and indications of deterioration.
- **Other Voluntary Provisions:** According to the SBS, the additional provisions, including the voluntary generic provisions, are to be accepted with authorization from the SBS. In contrast, the IASs do not permit these provisions.
- **Record of Costs or Deficits of Provisions Charged to Retained Earnings or Deferred Earnings:** According to the SBS, in authorized cases, this is allowed. In contrast, the IASs do not allow it.
- **Costs and Revenue of Prior Years:** According to the SBS, these are recorded as costs or revenue in the profit and loss statement. In contrast, according to the IASs, the material errors from past years, once discovered, are retroactively corrected in the first financial statement published.
- **Outstanding Items:** According to the SBS, these include items such as revenue and costs from the sale of adjudicated goods outside of use, the sale of credit portfolios and so forth. These are recorded in the profit and loss statement as revenue and costs before the results, participations and income tax. In contrast, the IASs do not permit this. It requires separate disclosure of outstanding items, which are needed for assessing the yield of entities.

Insurance Companies

- **Insurance and Reinsurance Contracts-Deposit Accounting and the Breakdown of the Deposit Components:** The SBS did not establish rules in this regard. In contrast, for the IASs, the record of deposits is required when the measurement of the deposit components is reliable and when the rights and obligations

associated with these are not reflected in the general balance. The breakdown is required if the deposit can be reasonably measured.

- Life Mathematical Reserves: According to the SBS, these must be established based on actuarial calculations using mortality tables authorized by the SBS and a 3% annual interest rate. In contrast, for the IASs, market interest rates must be used.
- Reserves for Catastrophic Risk: According to the SBS, these should be put together on the basis of SBS rules (obligatory). In contrast, for the IASs, these are not permitted.

Performance of Auditing Standards in Argentina, Brazil, Chile, and Peru

Diverse auditors have explained the importance of auditing in commercial activities. In every case, the support auditors provide advice in helping management to make decisions. Auditors are of significant importance in business; without auditing, the levels of decision-making in a company would be incapable of determining whether the economic and financial data are true and reliable. Auditing has the role of determining the real situation of a company. Furthermore, it evaluates the effectiveness and efficiency of administrative duties and the performance of plans formulated by management. In this way, auditing can evaluate, for example, the financial statements on the whole or a part of them, the degree and form of utilization of human resources, the use of materials and teams, their distribution, and so on. Given these characteristics, it is common for financial institutions to ask for audited financial statements when determining whether to give out loans to a particular entity.

As mentioned at the global level, the institution which issues International Auditing Standards (ISAs), is the IFAC. Through the International Auditing and Assurance Standards Board (IAASB): (i) it issues standards pertaining to auditing, quality-control, related services and so forth; and (ii) it facilitates the transition to international standards in distinct countries. The objective is to attain uniformity and to increase the quality of financial information. To this end, the IFAC carries out a program consisting of three parts, which collectively monitor and measure the performance of the standards: (i) evaluation of the Regulatory Framework and Standards (stage launched in 2004); (ii) automatic assessment of the level of commitment to the implementation and performance of the IFAC and IAASB standards; and (iii) developing a plan of action for transitioning to international standards.

In March 2009, IFAC published a new version of the Auditing Standards Manual⁴; there are 36 standards pertaining to said issues (standards for companies, behavior and independence of auditors and so forth). In turn, as IASB had accomplished the adoption of its standards by IOSCO, the IFAC could count on IOSCO considering the recommendation of these standards for general use at the global level as well.

Then, shortly thereafter, the statement of the current situation on the implementation of auditing standards (ISAs) would be presented in countries within our specific sample about the dynamics towards convergence according to official plans.

Argentina

Through Resolution 284/2003 of the FACPCE, a work plan was designed for implementing the international auditing standards. The plan entailed a concerted effort: (i) to actively participate in the consultation process of modifications of the current and new ISA; (ii) adopt and adapt a set of ISAs translated into Spanish with Argentine idioms; (iii) produce a manual on the application of the ISAs to small entities; and (iv) proceed to offer training related to the auditing rules, stressing their application to small entities and new auditing services.

Within the framework of the plan, the ISAs should have begun to be used in the exercises beginning in July, 2005, with modification that the CECyT could have found convenient. Nevertheless, in light of the important volume of the NIA and the projects that the CECyT considered in 2004, and the expiration of the established periods, it was decided to postpone the implementation of the work plan for 3 months (Resolution 295/2004). Subsequently, none of the established aspects of the aforementioned plan made any progress.

However, an agenda has been developed (July 2008) including the ISAs' consultancy initial plan, translation, elaboration of a manual for small entities and capacity building (FACPCE, CENCyA and CECyT).

Some of the results of the said stage of automatic evaluation of the IFAC (the last one was in 2007) are listed below:

- The regulatory rules do not establish a set of auditing standards for private companies, regardless of whether or not they are listed.
- The existing standards are the same for listed and non-listed companies. These standards are established by the FACPCE through the RT 7. The implementation of the mentioned technical resolution is not required by

4 "The 2009 Handbook of International Auditing, Assurance, and Ethics Pronouncements".

the CNV in the auditing of financial statements of companies listed in the stock markets of the country.

- Finally, mechanisms for transitioning to international standards on a general level have not been designed yet. Nevertheless, for listed companies, the plan of implementation of the IASs, which was collectively elaborated by the CNV, involved institutions and the accounting profession includes a chapter on the training and certification in the IAS/IFRSs of the auditors in the Auditors' Registry.

Brazil

The entities in charge of issuing auditing rules are the Brazilian Auditors Institute (IBRACON, as in Portuguese) and the Statements Committee (CPC, as in Portuguese).

In this case, the automatic evaluation, which was most recently completed in 2007, indicated the following:

- The regulatory rules do not establish a set of auditing standards for private companies, regardless of whether they are listed or not. Nevertheless, the BACEN and the CVM issued certain rules that the auditors of listed companies and financial entities must follow.
- The existing standards do not differentiate between listed and non-listed companies.
- The objective to transition to international standards is expressed explicitly.

Chile

The auditing standards are issued by the Accountants Institute and the Auditors Institute. While they may be consistently well developed, they have significant differences with the international standards. Consequently, in the automatic evaluation (most recently completed in 2007), the following issues were observed:

- As in Brazil and Argentina, the regulatory rules do not establish a set of auditing standards for private companies, regardless of whether or not they are listed.
- The existing standards do not differentiate between listed and non-listed companies.
- It is currently in the process of transitioning to standards of the IFAC. These standards will ultimately be implemented without modification (except the translation into Spanish and the adoption of local technical idioms).

In turn, according to local experts, the Chilean standards are implemented without relying on a clear guideline for their implementation. This fact generally misleads individuals into bad interpretations or incorrect applications of said standards.

Peru

Unlike the previous case, the rules issued by the IFAC are completely in effect. Consequently, the international rules have been adopted by the professional organizations representing public accountants. Hence, the use of auditors' services has become a formal requisite, including his/her surveillance and application in all independent auditing work. This particular regulation allows for an auditor, under exceptional circumstances, to be able to remove himself/herself from the ISAs, but this fact must be clearly justified.

Peru relies on the Peruvian Institute of Independent Auditors (IPAI, as in Spanish), a private association composed of 11 international auditing firms that operate in Peru. Its function is to enforce the international standards. In the automatic evaluation (last completed in 2007), the following issues were observed:

- Like in the other mentioned countries, the regulatory rules do not establish a set of auditing standards for private companies, regardless of whether or not they are listed.
- The standards issued do not distinguish between listed and non-listed companies.
- Nevertheless, the international standards elaborated by the IFAC were completely met.

Conclusions and Recommendations

At the global level, there is a clear commitment to increase transparency and encourage uniformity in the reporting of financial information. Currently, more than 100 countries require/permit companies to use the IAS/IFRSs or some modified form of them. Indeed, in 2005, almost 7,000 listed companies in 25 countries made their financial statements, using the international rules.

Recently, this tendency towards the international rules has even intensified on the regional level. The interconnection of goods, services, and in particular, capital markets have mobilized countries, which remain behind in the implementation of accounting and auditing principles. While Peru successfully

implemented the standards of the IASB and the IFAC a decade ago, Argentina, Brazil and Chile have only just begun in these past few years to define the outlines of a transition to the aforementioned standards, with clearly defined plans and stages. Consequently, through distinct outlines and work-schedules, these standards will be implemented between 2009 and 2011. The Securities and Exchange Commissions, supported by specialized organizations, lead the programs and interact with the involved parties to maximize the benefits of implementation.

The initial efforts would improve performance in the case of listed companies. The success in this stage could generate positive externalities for other companies, which could internalize the concept and the benefits that the first group of companies would have received following implementation. In particular, those associated with the reputation and transparency of and access to financial markets. Peru has put into effect the international standards and continues working systematically to update these laws. However, there might be advantages to a collective approach to transitioning to the international standards –that is, in such an approach, countries in the region would be able to learn together, facilitating the training process for several countries– a regional dynamic, which would, in turn, lead to a more harmonious transition to international standards.

One important issue that deserves consideration is the way in which the adaptation of some laws indirectly related to accounting will need to be conducted during this transition. Indeed, the adoption must have a transaction harmonization process as its guiding principle and must assure a uniform format for said transactions. Minimizing the amount of regulatory arbitration will allow for the consolidation of the convergence, maximizing the transparency and quality of financial information.

The whole process of convergence requires a coordinated strategy of training the institutions and involved professionals. The change in customs and practices will create new challenges for the accounting profession. In this process, constant training, support and monitoring will be crucial and ultimately will determine the success of the transition. The creation of a Registry that certifies accountants and auditors to be qualified as experts in IAS/IFRSs could be a factor to take into account for putting together incentives and generalizing knowledge. At the same time, introducing the subject matter in the pertinent academic fields in universities and diverse training centers would fulfill the work of creating and assimilating a generation of accountants and auditors to these new rules.

Lastly, for the politicians and governing institutions of the profession, the international standards will need to be updated constantly. This will require the creation of suitable mechanisms at the domestic level –if necessary, with regional coordination– so that accounting does not become dysfunctional. The experience in implementing standards that Argentina made at the end of last decade and the subsequent setbacks are clear examples of the need for adopting a methodology in this continuous process of adaptation to international standards⁵. Finally, the principles and actions of the plan for implementation, which was made in Argentina in 2008, have elements of significant relevance for its development, and at the same time, diffuse the tensions of the process of convergence.

5 It must be noted the institutional and economic breakdown that implied the currency board collapse in 2001-2002. This certainly might have affected the pace of convergence and the updated process towards international standards.

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Taxation Structure for Financial Instruments in Argentina, Brazil, Chile, and Peru

FERNANDO GROSZ



6
CHAPTER

Taxation Structure for Financial Instruments in Argentina, Brazil, Chile, and Peru

FERNANDO GROSZ¹

The purpose of this chapter is to identify asymmetries in the current taxation regimes on financial instruments in Argentina, Brazil, Chile and Peru. Since financial development is a key element for sustainable growth, understanding the tax structure on financial instrument holdings is important for promoting financial integration and development.

The motivation for this analysis lays in the fact that investors are interested in the after tax-return on financial investments. The chapter will begin with a description of the taxes borne by holders of financial instruments, such as bank deposits, sovereign and corporate bonds, stocks, mutual funds and financial trusts.

The chapter will focus on national taxes borne by holders of financial instruments in Argentina, Brazil, Chile and Peru. The only country that charges state taxes on capital income and gains is Argentina. The so-called turnover tax (or *Impuesto a los Ingresos Brutos*) is imposed by each state/province and rates may vary from state to state. None of these countries has county (local) taxes on capital income

¹ I am grateful to my colleague at CEF Alberto R. Musalem for his comments and to the participants of the Roundtable “Mercados de Valores en América Latina: Convergencia e Integración” organized by the CEF on May 15, 2008 for their remarks, particularly those from Vicente Lazen and Marco Morales (Chile’s SVS), Felipe Morris (Interseguro Compañía Aseguradora, Peru), Julián Martín (Partner, Julián Martín & Asociados), and Ariel Becher (Ernst & Young). Finally, I am also grateful for comments received from Isaias Coelho from the IMF Fiscal Affairs Department.

or gains. In general, these state indirect taxes significantly affect after-tax returns. Since investors will choose those states where there are exemptions or tax rates are lower, this chapter will not analyze intra-state asymmetries, such as those introduced by the turnover tax in Argentina. It will focus on how national taxes generate asymmetries in after-tax returns of financial instruments and therefore may affect portfolio decisions.

In order to describe the asymmetries on taxation of financial instruments in the four countries under study, this chapter will proceed in the following way. The first section identifies the main differences in the taxation regimes. The second section is devoted to the description of the main features of the tax structure for financial instruments as well as identification of their main asymmetries. The third section specifies the tax rates on financial instruments to which holders are subject to; and the final section presents the conclusions. Moreover, the current tax regime with regard to financial instruments holdings in Argentina and Brazil can be found in Grosz (2009); and those corresponding to Chile and Peru can be found in Larraín and Lazen (2008), and Morris (2008), respectively. All of them were part of the project conducted at CEF.

Main Differences in the Current Taxation Regime with Regards to Financial Instruments

The current taxation regime on financial investment has several features that need to be addressed. Taxes and rates vary across the countries analyzed in this chapter. For instance, the four countries tax income, indeed, at different rates, and therefore any interests or capital gains the financial instrument may accrue are subject to income tax unless it is exempt. Moreover, in Argentina, there is an “assets tax” on individuals that is independent of income tax and must be paid on some assets that an individual, resident or not, owns on December 31 of each year. Besides, not every single asset is subject to this tax. Therefore, accumulation of wealth may be distorted by investing in certain assets that are exempt from this tax. This assets tax on personal wealth will constitute our first main difference in the taxation regimes.

From an economic point of view, investors always take into account the after-tax return, and therefore, optimal investors’ decisions would be affected. As an example, holdings of government bonds shall not be included in the determination of the assets tax base. However, holdings of private bonds (that is, corporate debt) are subject to this tax unless they were purchased before March 1995. This introduces a wedge in the return of private *vis-à-vis* government

issued bonds, because investors internalize that they will need to pay assets tax on those private bonds if held on December 31 of each year. Therefore, this tax introduces a distortion by driving demand for government bonds up and that of private bonds down.

There is another tax that introduces several distortions: the so-called “bank debit and credit tax” or “tax on financial transactions”. This tax must be paid whenever checking accounts (sometimes also savings or time deposit accounts) are debited, and sometimes, it must be paid if the account is credited as well. This tax does not exist in Chile, but does exist in Argentina and Peru, while in Brazil it was effective until December 31, 2007. Whenever an investor buys or sells certain securities by debiting or crediting his/her bank account, he/she may be subject to this tax, constituting our second key difference in the taxation regime on financial investment.

Third, there are some exemptions or lower rates that apply to some financial instruments interest and issuance costs regarding general taxes the countries impose, such as Value Added Tax (VAT). In Argentina, for instance, interest on bank loans is subject to a lower VAT rate, while placing and commission costs of publicly traded financial trusts or mutual funds are exempt from VAT.

Fourth, there are also special taxes that apply to certain transactions in some countries, such as Day Trade operations tax and the Tax on Financial Operations in Brazil that may affect the return of financial instruments, thereby constituting another asymmetry.

Finally, bank lending, through the existence of prudential regulation on reserve requirements in these four countries, constitutes a cost on commercial bank intermediation that is not symmetric among these countries, thereby affecting companies’ optimal decision of financing with bank debt or through capital market instruments. This constitutes a cost for funding bank loans that is not negligible. Minimum reserve requirements affect bank spreads and therefore increase interest rates to borrowers from banks *vis-à-vis* capital markets instruments, such as private debt or financial trusts. It may also affect the interest rate received by depositors.

Description of Tax Regimes for Financial Instruments Holdings

Income and Assets Tax

Argentina, Brazil, Chile and Peru tax resident individuals or companies on their worldwide income and non-resident individuals or companies on their domestic income. Capital gains or interest accrued on domestic financial instruments generally receive the same treatment as income tax, even though some financial instruments receive a special treatment in some countries. The rates vary among the countries that are analyzed in this chapter. For each country, marginal tax rates on interest and capital gains are shown in Table 11, according to the holder of the financial instrument: resident individuals, resident companies and non-residents (both individuals and companies generally receive the same treatment).

There are several asymmetries that can be inferred from the table. Taxation of capital gains and interest on financial instruments vary among countries and type of holder. Each country has its own exemptions that vary among instruments. The taxes and rates that particularly apply to each financial instrument will thoroughly be discussed in section Conclusions.

Assets Tax

Argentina and Peru hold an asset tax on corporations. Moreover, resident individuals in Argentina are also required to pay assets tax on their total taxable assets, and rates vary from 0% to 1.25%, depending on the instrument and the level of wealth, that is, depending on the amount of total taxable assets on each December 31, and therefore most financial instruments (including currency holdings and checking account balances) are taxable assets and constitute the tax base for assets tax. Non-resident individuals and companies are also required to pay assets tax, as well on assets located in Argentina. However, for most financial instruments the applicable tax rate for non-resident individuals or companies is 1.25%. There are several exceptions to this tax that are based, basically, on the type of financial instrument that may be exempt. For instance, savings and time deposits in any currency in Argentine banks are excluded from the taxable assets of resident individuals. Government bonds can also be excluded for resident individuals as well as for non-residents. Please refer to Grosz (2009), Appendix 1, for further details on individual asset tax.

Table 11 INCOME TAX STRUCTURE REGARDING FINANCIAL INCOME IN ARGENTINA, BRAZIL, CHILE AND PERU

| Country | Type of Individual | Tax Rate Percent | Observations |
|-----------|-----------------------|------------------|--------------|
| Argentina | Resident Individuals | 0-35 | (a) |
| | Resident Corporations | 35 | (b) |
| | Non-residents | 35 | (c) |
| Brazil | Resident Individuals | 0-22.5 | (d) |
| | Resident Corporations | 15-22.5 | (e) |
| | Non-residents | 25 | (f) |
| Chile | Resident Individuals | 0-40 | (g) |
| | Resident Corporations | 17 | (h) |
| | Non-residents | 35 | (i) |
| Peru | Resident Individuals | 5 | (j) |
| | Resident Corporations | 30 | (j) |
| | Non-residents | 4.99 or 30 | (j) |

(a) Rates vary with income. There are exceptions such as interests and/or capital gains on fixed-interest time deposits, bonds issued by federal, state or local governments, publicly traded mutual funds and financial trusts, and privately issued bonds acquired before 03/24/1995. Time deposits with an inflation adjustment clause pay income tax on the real interest rate component, while fixed interest time deposits do not. Please refer to Grosz (2009), Appendix 1, Section A.1.1, for further details.

(b) Dividend distributions from companies owned are excluded.

(c) Dividend distributions from companies that are owned are excluded for non-resident companies. Interest and capital gains on bonds issued by federal, state or local governments are excluded from income tax base. Bilateral tax treaties may apply. Please refer to Grosz (2009), Appendix 1, Section A.1.3.

(d) Rates vary according to the maturity of the financial instrument. Interest accrued on fixed income instruments is taxed at the rate of 15%. Equity interest is taxed at 15%. Capital gains realized on the sale of capital assets are subject to a flat 15% tax rate. Individuals investing in stocks or investing in investment funds that invest in stocks are subject to a 15% tax on the profits of the investment. Please refer to Grosz (2009), Appendix 2, Section A.2.1.

(e) General income tax rate is 15% plus an additional 10% on yearly earnings greater than R\$ 240,000. There is another 9% mandatory "Social Contribution Tax". Corporations are required to pay a 15% tax on interest paid or credited to stockholders, partners or owners as a return on equity. Corporations investing in stocks or investing in investment funds that invest in stocks are subject to a 15% tax on the profits of the investment. Please refer to Grosz (2009), Appendix 2, Section A.2.2.

(f) Bilateral tax treaties may apply. Dividend distributions are exempt from income tax. Please refer to Grosz (2009), Appendix 2, Section A.2.3.

(g) When individuals hold shares of resident companies, income tax paid by the company can be credited upon individual income tax. Capital gains deriving from the exchange of highly traded local stocks are exempt from Complementary Income tax. A rate of 17% applies on capital gains from shares held for more than 1 year. Capital gains on open end (mutual) funds shares are excluded from income tax as long as these funds are invested at least 90% of the portfolio in highly traded local stocks. The same treatment is given to the sale of closed end investment funds whenever these funds' shares are highly traded. Mutual funds are financial trust and are not liable for income tax, but the individual will. Please, refer to Larraín and Lazen (2008).

(h) Please, refer to Larraín and Lazen (2008).

(i) Capital gains deriving from the exchange of highly traded local stocks are exempt from Additional Income tax. Capital gains on open end (mutual) funds shares are excluded from income tax as long as these funds are invested at least 90% of the portfolio in highly traded local stocks. The same treatment is given to the sale of closed end investment funds whenever these funds' shares are highly traded. Dividends are subject to a 35% withholding tax. Please, refer to Larraín and Lazen (2008).

(j) Until December 31, 2008, interest on corporate bonds were excluded from income tax as well as gross capital gains on publicly traded stocks. Interest on bank deposits (in any currency) and interest and capital gains on government bonds were excluded as well and will continue to be after December 31, 2008. Interest on corporate bonds can permanently be excluded from income tax if they were issued on or before March 11, 2007. Dividends are subject to a 4.1% withholding tax except for resident companies. The 4.99% rate on non-resident companies only applies to special cases referred in Section 56, Item "a" of the Income Tax law. Mutual funds receive a special treatment. Please, refer to Morris (2008).

Argentina also holds an assets tax on corporations (called Tax on Minimum Presumed Income), but this one works in a completely different manner. The tax consists of 1% of the assets of the firm on each December 31, but it can be taken as a credit on corporate income tax and can be carried forward. Therefore, all undesirable effects of this tax should not be present in most cases.

Peru holds an assets tax on corporations of 0.5% of total assets (when they exceed S/1 million). The rate was reduced to 0.4% in 2009. Tax payments on this tax can be taken as a credit on corporate income tax.

Tax on Financial Transactions

In Argentina and Peru, credits and debits on bank accounts are subject to a tax. As for Argentina, on every credit and every debit on a checking account an amount equivalent to 0.6% is debited (therefore, totaling 1.2%). Also, when a check is deposited in a savings account, a tax of 1.2% of the amount of the check is automatically debited from the savings account (but nothing when the savings account is debited). However, 34% of the tax paid on bank credits in checking accounts can be taken as an advance on income tax payment (for individuals or corporations in the general regime), with 17% of the credit tax on checks deposited in savings account for individuals in the general regime, while the remainder is deductible from income tax return forms.

Brazil used to charge a bank debit tax of 0.38% on every bank debit made on a bank account. This tax expired on December 31, 2007. However, there is another tax that affects some financial transactions, the so-called "Tax on Financial Transactions" (IOF). It is important to mention that the government may change the IOF tax rate at any time without the intervention of the Congress (i.e., there is a maximum rate and within its interval the government could change it). The most common situations involving IOF are related to exchange and credit transactions. The rate of this tax varies according to the taxable event:

- a) IOF on Credit Transactions: In 2008, the tax rate of the IOF/Credit tax levied on certain Credit Transactions carried out by individuals was increased from 0.0041% to 0.0082% (daily). Basically, the IOF is levied on loan transactions of any type, including loan facilities and purchases made on credit (except credit card transactions). An additional rate of 0.38% was imposed on a number of other credit transactions, regardless of the term of the transaction and of whether the borrower is an individual or a firm (these are more specific transactions such as those involving exports, as well as fostering production or encouraging

exports, of a rural type, destined for investments, financing and sales, carried out by savings banks, secured by a civil pledge using jewelry, precious stones and other objects).

- b) IOF Tax on Foreign Exchange (FX) Transactions: This tax is imposed on the conversion of reals into foreign currency or vice versa. The IOF/FX tax rate formerly applied to almost all foreign currency exchange transactions was zero.

As of January 2008, however, different IOF/FX tax rates apply to specific exchange transactions: (i) funds entering the country as a result of, or destined to, any loans, in cash, which have an average minimum term of less than 90 days are subject to a rate of 5.38%; (ii) exchange transactions related to the import of services and to the export of goods and services are subject to a 0.38% tax rate; (iii) exchange transactions intended to comply with obligations assumed with credit card administrators resulting from the purchase of goods and services made abroad by credit card users: 2.38%; and (iv) funds entering the country destined to fixed income assets (including public bonds): 1.5%.

An IOF/FX tax rate of zero shall still apply to certain exchange transactions, such as those carried out by foreign investors in the Brazilian variable income assets (stock market) and their derivatives; and between financial institutions which are authorized to operate in the FX market, and between such financial institutions and foreign financial institutions.

- c) IOF on Financial Assets: IOF on capital gains on fixed income assets (funds and bonds), applicable only on operations up to 30 days, are subject to a 1% tax.

Peru also taxes bank debits and credits at the rate of 0.07% (therefore totaling 0.14%). The tax can be used in full as a credit on income tax. Therefore, the effects of this tax are mild. Furthermore, the rate will be decreased to 0.05% in 2009.

Minimum Reserve Requirements Regulation²

Since central banks impose minimum reserve requirements on commercial banks for monetary policy and prudential reasons, banks face an extra cost *vis-à-vis* capital markets instruments. In general, reserves held by banks in order to fulfill minimum reserve requirements are not remunerated at market rates, and therefore, banks will have to charge higher interest rates spreads. This constitutes an asymmetry since corporations that can finance their projects in local capital markets do not

² This section is based on Grosz *et al.* (2008).

need to pay this extra cost imposed by banks' regulation. Hence, an asymmetry exists whether an investment project is financed with bank loans or through capital markets instruments.

In Argentina, requirements vary depending on the residual maturity of the deposit: on checking and savings accounts in domestic currency, the requirement is 19%; on domestic currency time deposits, it varies from 0% (on time deposits of more than 180 remaining days) to 14% (1 to 29 remaining days). Whenever deposits are denominated in foreign currency, requirements are higher, and can go up to 35%. Requirements on time deposits in any currency are remunerated at a 1% rate, which is well below market rates. In October 2008, the Central Bank of Argentina lowered minimum reserve requirements on deposits denominated in foreign currency to foster bank credit for international trade related activities.

In Brazil, reserve requirements are 53% on demand deposits, 20% on savings account deposits and 15% on time deposits. Requirements on demand deposits and savings accounts are remunerated at rates that vary between 3 and 6 annual percentage rates, while only 8% of time deposit reserve requirements are remunerated at SELIC rate.

In Chile, reserve requirements are 9% on demand deposits and 3.6% on time deposits. Only the requirement on time deposits is remunerated at a 50% of the change in consumer price index of the previous month of the moment at which the time deposit took place.

Reserve requirements in Peru are 8.5% on demand deposits held by residents (both in local or foreign currency) and are remunerated at overnight rate minus 100 basis points (for local currency deposit reserve requirements) or at 1 month Libor (for foreign currency deposit reserve requirements).

Other Taxes

In Argentina, interest on bank loans pay a lower VAT rate –10.5%–, while issuance costs of publicly traded mutual funds and financial trusts are exempt from VAT. Since the general VAT rate is 21%, this constitutes an important asymmetry. The lower rate that applies on interest on bank loans tends to offset the extra cost imposed on banks stemming from minimum reserve requirements.

Interest on government bonds, bank deposits and financial instruments with public offering such as private bonds or financial trusts are exempt from VAT in Argentina, while, say, privately placed corporate bonds are subject to the full VAT

rate on interest. In Brazil, the VAT is a state tax called Tax on the Circulation of Goods and Services (ICMS). In Chile, all fixed income instruments are exempt from VAT on interest payments. In the region, Argentina is the only country that imposes a VAT on financial income.

Brazil charges a tax on day trade operations at 1% of the gain made on a day trade operation. This tax does not exist in the three other countries.

Tax Rates Borne by Holders of Financial Instruments

In this section, the taxes borne by different financial instruments will be addressed by type of holder: individual residents, resident companies and non-resident individuals or companies. As for the last group, several exceptions apply, since each of the countries analyzed in this chapter signed double taxation agreements with other countries, therefore, depending on the country of residence of the individual or company, the tax rates may be different when the financial instrument is contemplated by a treaty.

Individuals

BANK DEPOSITS

Interests on bank deposits in local banks (i.e., banks operating under the central bank supervision) are exempt from income tax for individuals that are residents of Argentina and Peru. The only exception is on interest on deposits in Argentina that include an inflation adjustment clause. In this case, interest is subject to income tax on the “real” interest rate of the deposit. Moreover, as for Argentina, savings and time deposits in banks located in the country are exempt from assets tax.

In Brazil, interest on bank deposits is subject to a 15 to 22.5% tax depending on the length of the deposit (22.5% tax if the remaining period of the instrument is less than 180 days; 20% between 181 and 360 days; 17.5% between 361 and 720 days; and 15% for more than 720 days).

In Chile, interest on bank deposits pay income tax at the rate that applies to the individual (the rate will depend on the total income of the individual during the fiscal period). Interest on bank deposits is exempt from income tax in Peru.

GOVERNMENT BONDS

As for domestic government issued bonds, both interest and capital gains are exempt from income tax in Argentina, Brazil and Peru. Moreover, holdings of government

bonds are exempt from assets tax as well (in Argentina). However, in Chile, interest and capital gains derived from government bonds are subject to income tax.

PRIVATE BONDS

Interest and capital gains realized on private bonds with public offering are exempt from income tax in Argentina, while holdings of privately placed bonds are exempt from assets tax as long as they were acquired on or before March 23, 1995. Privately placed bonds without public offering in Argentina are subject to income tax on interest and capital gains and to assets tax on holdings at the end of each year.

Brazil taxes interest on private bonds at the rates of 15 to 22.5% depending on the maturity of the bond, with the same rates as for bank deposits.

In Chile, private bonds are subject to income tax. Interest and capital gains are generally taxed as regular income, and therefore the rate will vary depending on the income bracket of the individual during the fiscal period.

Interest on private bonds is taxed as regular income at the rate of 5% in Peru, while capital gains are exempt. However, as of January 1, 2009, capital gains on private bonds are subject to income tax, and therefore taxed at the rate of 5%. Interest on private bonds issued by a Peruvian corporation through a public offering in accordance with the requirements of Peruvian company law is exempt from income tax.

After 2009, interest earned on corporate bonds issued after March 10, 2007 continue to pay income tax in Peru, while interest on those issued on or before March 10, 2007 are exempt.

DIVIDENDS

Cash dividends paid to individuals in Argentina are exempt from income tax if the company that pays the dividend is a resident company for tax purposes. Therefore, all individuals pay income tax on dividends at the corporate income tax rate, regardless of their income tax bracket. This system is regressive as individuals in income brackets corresponding to tax rates lower than 35% are penalized when investing in corporate shares. Furthermore, when a non-resident firm pays dividends to a resident individual, the individual has to pay income tax; the rate depending on the income bracket of the individual.

Dividends paid to individual residents of Brazil are exempt from income tax. As for Chile, the individual declares the dividend received as income, but uses the income tax paid by firms as tax credit. That is, individuals pay tax on dividend income according to their income tax bracket rate. In Peru, dividends are taxed at a 4.1% rate.

SHARES

In Argentina, profits derived from the purchase and sale or from the exchange of shares with public offering are exempt from income tax. Capital gains on shares without public offering are subject to income tax. Holdings of stocks pay a lower assets tax rate of 0.5%, independent of taxable assets owned by the taxpayer.

In Brazil, capital gains obtained from the sale of shares listed on Brazilian stock exchanges are exempt from tax if the sale price is less than R\$20,000. If the sale price exceeds R\$20,000, then the entire capital gain is taxed at the 15% rate, with one transaction per month exempt if the sale price is less than R\$35,000.

In Chile, capital gains realized on shares are taxed at a flat rate of 17% (set at the same level as First Category Tax) but are exempt when shares have been held for more than 1 year and the operation is not part of the seller's habitual business.

In Peru, capital gains on shares are taxed at a 5% rate.

MUTUAL FUNDS

Profits generated by the purchase or sale of mutual funds (investment funds) are exempt from income tax in Argentina and Peru. In Chile, they are exempt as well, as long as at least 90% of the mutual fund portfolio is invested in highly traded local stocks; otherwise, any capital gain is subject to income tax as ordinary income. In Brazil, capital gains realized on investment funds are subject to a 15% tax.

Investment funds are subject to assets tax in Argentina. It is worthwhile to note that holdings of bank savings and time deposits or government bonds are exempt from assets tax, but holdings of mutual and investment funds that invest in bank deposits or government bonds are not. In general, it can be observed that in many cases mutual funds receive a different tax treatment than the underlying assets that the fund is composed of.

FINANCIAL TRUSTS

In Argentina, interest or capital gains generated by the purchase or sale of financial trusts with public offering are exempt from income and VAT and subject to assets tax; but are subject to income, assets and VAT at the general rates when the financial trust is privately placed³. In Brazil and Peru, interest and capital gains on

3 On August 1, 2008 the government of Argentina eliminated an exemption on financial trusts and mutual funds that were satisfying certain conditions (Decree 1207/08). These instruments were exempt from income tax. Therefore, even though a resident individual is still exempt from income tax on dividends from financial trusts, the instruments themselves are subject to income tax.

financial trusts are subject to a 15 and 5% income tax rate, respectively. In Chile, interest and capital gains on financial trusts are considered as regular income and therefore subject to the corresponding tax rate that applies on the individual.

SUMMARY

Table 12 summarizes national taxes borne on financial assets to which resident individual are subject to.

Table 12 SUMMARY OF TAX TREATMENT ON FINANCIAL INSTRUMENTS HELD BY RESIDENT INDIVIDUALS

| | Argentina | Brazil | Chile | Peru |
|--|--|--|----------------------------|--|
| Bank Deposits (Int.) | Exempt (Unless CER: IT) | 15%-22.5% | IT | Exempt |
| Government Bonds | Int.: Exempt Cap. Gains: Exempt | Int.: Exempt Cap. Gains: Exempt | Int.: IT Cap. Gains: IT | Int.: Exempt Capital Gains: Exempt |
| Private Bonds (Public Off.) | Int. & Cap. Gains: Exempt. Assets Tax (*) | Int.: 15%-22.5% Cap. Gains: 15% (*) | Int.: IT Cap. Gains: IT | Int.: Exempt or 5% Cap. Gains: Exempt (*) |
| Dividends | Exempt | Exempt | IT-IT Paid by Company | 4.1% |
| Shares (Public Off.) (IT on Cap. Gains) | Assets Tax (0.5%) IT Exempt | IT: 15% (*) | IT: 17% (*) | IT: 5% |
| Mutual Funds (Public Off.) | Assets Tax | IT: 15% | IT: 17% (*) | Exempt |
| Financial Trusts (Public Off.) (Int. & Cap. Gains) | Assets Tax | 15% | IT | 5% |
| Observations | IDCB | IOF, Day Trade 1% | | IDCB |

(*) Means exceptions apply: see text.

NOTE: IT = Income Tax; IDCB = Tax on Bank Debits and Credits; Int. = Interests; Cap. Gains = Capital Gains; "IOF" means Tax on Financial Operations; "CER" is an adjustment coefficient (resembles inflation); Public Off. = Public Offer.

As an example, suppose that a resident individual in Argentina invests US\$100 in government bonds. The individual buys the bond on July 1 and sells the bond 1 year later and receives a price of P. The profitability of this financial investment will be the following: $(a_0P + a_1 \text{ interest payments} + a_2 \text{ coupons payments}) - 100$, where a_0 , a_1 and a_2 denote discount factors to express amounts in present value. Since these bonds are exempt from income and assets tax, after-tax and before-tax profitability are the same.

In this example, the bank debit/credit tax was disregarded, because a resident individual could always operate with the bank (buy or sell financial instruments)

using an investment account that is linked to a savings account, and therefore would be able to legally dodge this tax provided the individual deposits and withdraws cash from the savings account. This will not be the case of resident companies, since companies cannot open savings accounts.

If instead, an investor purchased private bonds with public offering after March 1995, he/she would also need to subtract assets tax, which amounts to 0.5 to 1.25% of the value of the assets on December 31 (the exact percentage depends on the total value of taxable assets owned by the individual).

If an investor buys shares with public offering for US\$100 on July 1, and keeps them for 1 year, the profitability will be $a_0P + a_1 \text{ dividend} - a_2 \text{ assets tax} - 100$, where a_0 , a_1 and a_2 denote discount factors, P is the price received at the time the investor sells the shares, and assets tax payment represent 0.5% of the value of the shares on December 31. If the investor sells the shares before December 31, he/she would not be subject to assets tax on those shares (but may be subject to assets tax on other assets unless they were exempt). Again, we can omit the bank debit/credit tax, since an individual can legally dodge this tax.

In all three examples, the Bank Debit/Credit Tax can legally be avoided if the investor operates with cash transactions through a bank savings account. Otherwise, the investor would also need to subtract another 1.2% whenever he operates with a checking account or a savings account with non cash transactions. However, 17% of it can be taken as an advance payment towards personal income tax and 83% is deductible from other sources of income this individual may have.

A resident individual investor of Chile that purchases shares for US\$100, keeps them for less than 1 year and sells them at the price of P , will have a profitability of $a_0 0.83(P - 100) + a_1 (\text{dividends}) \times (1 - IT^* + 0.17/0.83)$, since capital gains and dividend will be subject to 17% income tax, but the income tax paid by the firm (17%), which is accounted for in the dividend distribution, can be subtracted from personal income tax (where IT^* is the personal income tax rate).

Resident Companies

Interest on bank deposits (with or without an adjustment clause), in any currency, are subject to income tax in Argentina when the holder is a resident company. Interests and capital gains on Argentine government bonds, private bonds and financial trusts as well as capital gains on investment funds and shares are subject to income tax as well. The income tax rate for resident companies is 35%. In summary, any interest or capital gains are considered as income in Argentina.

In Brazil, interest on Brazilian government bonds are exempt from corporate income tax on capital gains, while interest on bank deposits, private bonds or financial trusts are subject to income tax at rates varying between 15 and 22.5%, depending on the length of the deposit or bond (22.5% tax if the total length of the instrument is less than 180 days; 20% between 181 and 360 days; 17.5% between 361 and 720 days; and 15% for more than 720 days). Capital gains are treated as ordinary income and accordingly, are subject to corporate income tax (which is 15% plus an additional 10% for annual profits exceeding R\$240,000) and social contribution tax (another 9%). The same taxes apply on capital gains realized on the purchase and sale of mutual funds, financial trusts or shares.

In Chile, interest on bank deposits, interest and capital gains on Chilean government bonds, private bonds or financial trusts are treated as income and therefore taxed at 17%. The same applies to capital gains realized on the purchase and sale of mutual funds or shares. However, there are some exceptions. When the portfolio of a mutual fund is composed of 90% or more of highly traded local shares, the capital gains that are realized are exempt from income tax. Also, capital gains realized on highly traded local stocks or held for more than 1 year are exempt from income tax.

In Peru, interest on bank deposits is exempt from income tax, and continues to be after January 1, 2009. Interest and capital gains on Peruvian government bonds are exempt from income tax, but interest and capital gains on corporate bonds are taxed at the 30% corporate income tax rate. After 2009, interest earned on corporate bonds issued after March 10, 2007 continues to pay income tax, while interest on those issued on or before March 10, 2007 is exempt from income tax.

Dividends paid by companies are exempt from income tax in the four countries when the recipient of the dividend is a company. This is to be expected, since the company that distributes the dividends already paid income tax, the recipient of the dividends (another company subject to the same tax rate) has to be exempt from income tax on the amount of the dividends distribution.

Capital gains on shares are subject to a 30% income tax in Peru after January 1, 2009. Capital gains on shares were exempt until December 31, 2008, if the shares were registered at the Public Registry of Stock Exchange. Interest and capital gains on financial trusts are subject to corporate income tax, as well as capital gains on mutual fund holdings.

Table 13 summarizes national taxes borne on holdings of financial assets by resident companies.

Table 13 SUMMARY OF TAX TREATMENT ON FINANCIAL INSTRUMENTS HELD BY RESIDENT COMPANIES

| | Argentina | Brazil | Chile | Peru |
|--|--------------------------|---|--------------------------|--|
| Bank Deposits (Int.) | 35% | 15%-22.5% | 17% | Exempt |
| Government Bonds (Int. & Cap. Gains) | 35% | Int.: 15%-22.5% Cap. Gains: Exempt | 17% | Exempt |
| Private Bonds (with Public Off.) | 35% (Int. or Cap. Gains) | Int.: 15%-22.5% Cap. Gains: 24/34% (*) | 17% (Int. or Cap. Gains) | Int.: Exempt or 30% Cap. Gains: 30% (*) |
| Dividends | Exempt | Exempt | Exempt | Exempt |
| Shares (IT on Cap. Gains) | 35% | 24 or 34% | 17% (*) | 30% |
| Mutual Funds (IT on Cap. Gains) | 35% | 24 or 34% | 17% (*) | 30% |
| Financial Trusts (Public Off.) (Int. & Cap. Gains) | 35% | 24 or 34% | 17% | 30% |
| Observations | IDCB, Corp. Assets Tax | IOF, Day Trade 1% | | IDCB, Corp. Assets Tax |

(*) Means exceptions apply: see text.

NOTE: IDCB = Tax on Bank Debits and Credits; Int. = Interests; Public Off. = Public Offer; Cap. Gains = Capital Gains; "IOF" means Tax on Financial Operations.

SUMMARY

A resident company of Argentina will pay income tax at the rate of 35% for any kind of profit obtained from financial investments. There is currently no inflation adjustment allowed in Argentina, so even if the interest paid by a financial instrument was compensating for the loss in purchasing power generated by inflation, that interest is subject to income tax. In fact, it will also have to pay the bank credit and debit tax whenever it operates with a checking account. As an example, assume that a company buys private bonds at a price of P_0 on June 1, debiting its checking account and sells those bonds on December 1 at a price of P_1 greater than P_0 . Let us assume the bond pays interest on July 1 and that interest and the price received at the time the company sells the bond is credited to the company's checking account.

The rate of return of this investment is approximately $(0.994 a_1 P_1 + 0.994 a_2 \text{interest}_{7/1} - 1.006 a_0 P_0 - \text{present value of income tax}) / 1.006 a_0 P_0$. Note that the company will also be subject to the bank credit and debit tax whenever

its checking account is debited or credited⁴. The income tax will be the 35% of interest and capital gains (net of the part of the bank credit tax and the bank debit tax that are deductible from income tax) minus 34% of the bank credit tax that can be taken as an advance payment towards income tax. Specifically, 66% of the bank credit tax and 100% of the bank debit tax are deductible from income tax. In other words, $\text{Income Tax (IT)} = 0.35 \times \{\text{interest}_{7/1} + P_1 - P_0 - 0.006 P_0 - 0.66 \times 0.006 \times (P_1 + \text{interest}_{7/1})\} - 0.34 \times 0.006 \times (P_1 + \text{interest}_{7/1}) = 0.35 \times \{0.99604 (P_1 + \text{interest}_{7/1}) - 1.006 P_0\} - 0.00204 \times (P_1 + \text{interest}_{7/1})$ ⁵. The company may also be subject to assets tax (at the rate of 1% of its assets), although asset tax payments can be taken as an advance payment towards income tax.

A Peruvian company that buys shares of another company will have to pay 30% income tax on capital gains. It will also have to pay bank credit and debit tax, although these payments can be deducted from income tax. Note that dividend distributions are exempt from income tax for Peruvian companies. The after-tax return of this investment for the company will therefore be the present value of the sum of 0.7 times the capital gain and the dividend that may have been distributed.

Non-resident Individuals and Companies

Because the tax treatment that applies on holdings of financial instruments does not vary much whether the holder is a non-resident individual or company, this section will consider both types of holders.

It is important to stress the fact that Argentina, Brazil, Chile and Peru have signed tax treaties with several countries each, in order to avoid double taxation issues. This section discusses the general tax structure that would apply to non-resident holders of financial instruments. Nevertheless, each of these tax treaties should be taken into account whenever non-resident individuals or companies that are residents of a country with which Argentina, Brazil, Chile and Peru has a double taxation agreement, respectively.

4 The term $0.996 a_1 P_1$ represents: $a_1 P_1$ (present value of the sale price) minus 0.006 times $a_1 P_1$ (present value of the bank credit tax, which is 0.6% of $a_1 P_1$). This is what the investor receives net of bank credit tax at the time of sale. Similarly, the term $1.006 a_0 P_0$ denotes the $a_0 P_0$ (present value of the purchase price) plus the bank debit tax (0.6%) charged to the bank account.

5 The income tax will be the 35% of: interest ($\text{interest}_{7/1}$) plus capital gains ($P_1 - P_0$) minus 100% of the bank debit tax ($0.006 P_0$) and 66% of the bank credit tax ($0.66 \times 0.006 \times (P_1 + \text{interest}_{7/1})$) that can be deducted from income tax. Also, an amount equivalent to 34% of the bank credit tax can be taken as an advance payment towards income tax ($0.34 \times 0.006 \times (P_1 + \text{interest}_{7/1})$) and should therefore be subtracted from income tax.

BANK DEPOSITS

Interest on bank deposits on domestic banks is subject to income tax in Argentina, at the rate of 35% of the presumed income, which is 43%, therefore totaling 15.05%. Moreover, non-resident individuals or companies are subject to assets tax at the rate of 1.25% as well as bank debit and credit tax whenever they operate with a checking account.

Interest on bank deposits are subject to a 15 and 35% income tax in Brazil and Chile, respectively. Furthermore, Chile exempts from income tax any interest or capital gains obtained on any fixed-income instrument when the holder is a non-resident institutional investor such as pension funds⁶. As for Peru, interest on bank deposits is exempt from income tax.

GOVERNMENT BONDS

Holdings of domestic government bonds are exempt from assets tax in Argentina, and the interest and capital gains realized are exempt from income tax as well. Interest and capital gains on government bonds are also exempt in Brazil, while in Chile, they are taxed at a 35% rate; and at a 30% in Peru. In the case of Brazil, IOF applies as explained in section Tax on Financial Transactions.

CORPORATE BONDS

Corporate bonds with public offer are exempt from income tax in Argentina. They are also exempt from assets tax. When private bonds are privately placed, they are subject to income tax at a 35% on interest and capital gains, but are not subject to assets tax.

In Brazil, interest and capital gains are treated as income and subject to income tax (15%). IOF applies in the case of Brazil as noted in section Tax on Financial Transactions. In Chile, they are taxed at 35% and in Peru, at 30%.

CASH DIVIDENDS

Argentina taxes dividend distributions received by non-residents. However, Argentina has signed tax treaties with several countries. The tax rate on dividend distributions for countries without a tax treaty is 35% in Argentina. In Brazil, dividend distributions to non-residents do not pay taxes. In Chile, dividend distributions are subject to a 35% tax on the gross up or before tax dividend, therefore, the effective

6 See Larraín and Lazen (2008).

tax rate on dividend distributions being 21.7%⁷. In Peru, dividend distributions are taxed at a 4.1% rate.

SHARES

Capital gains on shares are taxed at a 35% income tax rate in Argentina and are also subject to a 0.5% assets tax on holdings on each December 31. Non-residents of Spain, Chile and Switzerland are exempt from assets tax on shares.

Capital gains on shares are taxed at 0% in Brazil in all jurisdictions except for low-tax jurisdictions (where the income tax rate on equity capital gains is 15%).

Capital gains are taxed at 35% in Chile and are currently exempt in Peru.

MUTUAL FUNDS

Interest and capital gains are taxed at the 35% income tax rate, but holdings are exempt from assets tax in Argentina. In Brazil, interest and capital gains are taxed at 15%, in Chile at 35% and in Peru at 30%. In Chile, interest and capital gains are exempt to the extent that at least 90% of the mutual fund portfolio is invested in highly traded local stocks.

FINANCIAL TRUSTS

Interest and capital gains on holdings of financial trusts are subject to a 35% income tax rate in Argentina. Furthermore, they are subject to assets tax at a 1.25% rate on holdings on each December 31. In Brazil, interest and capital gains on financial trusts are subject to a 15% tax rate, while in Chile and Peru, the tax rate is 35 and 30% respectively.

SUMMARY

Table 14 summarizes general aspects of the tax treatment on financial instruments for non-residents. The rates on the table hold whenever the non-resident company or individual does not belong to a country that has signed a tax treaty.

⁷ For every \$100 that a company distributes, the gross-up or before tax dividend is \$120.48 (= \$100/0.83), since the corporate income tax rate is 17% (0.83 stands for 1 minus 0.17). Therefore, non-resident individuals or companies have to pay 35% of \$120.48 (equivalent to \$42.17) minus what the company already paid as corporate income tax (\$20.48), which is \$21.69. Therefore, the effective tax rate on dividend distribution is approximately 21.7%.

Table 14 SUMMARY OF TAX TREATMENT ON FINANCIAL INSTRUMENTS HELD BY NON-RESIDENT INDIVIDUALS OR COMPANIES

| | Argentina | Brazil | Chile | Peru |
|---|---|-------------------|---------|--------|
| Bank Deposits | (Int.): 15.05% (IT) Assets Tax (1.25%) | 15% | 35% | Exempt |
| Government Bonds (Int. & Cap. Gains) | Exempt | 0% | 35% | 30% |
| Private Bonds (Public Off.) (Int. & Cap. Gains) | Exempt | 15% | 35% | 30% |
| Dividends | 35% | Exempt | 21.7% | 4.1% |
| Shares (IT on Cap. Gains) | IT, Assets Tax (0.5%) | IT: 0 or 15% | IT: 35% | Exempt |
| Mutual Funds (IT on Cap. Gains) | 35% | 15% | 35% (*) | 30% |
| Financial Trusts (Public Off.) (Int. & Cap. Gains) | IT, Assets Tax (1.25%) | 15% | 35% | 30% |
| Observations | IDCB | IOF, Day Trade 1% | | IDCB |

(*) Means exceptions apply: see text.

NOTE: IT = Income Tax; IDCB = Tax on Bank Debits and Credits; Int. = Interests; Cap. Gains = Capital Gains; "IOF" means Tax on Financial Operations; Public Off. = Public Offer.

For instance, whenever non-treaty non-residents buy shares of mutual funds in Argentina, they are subject to income tax at the 35% rate but exempt from personal assets tax. The after-tax return is 0.65 times the capital gain, if any. The bank debit/credit tax should also be taken into account whenever the non-resident operates with a checking account but can be disregarded whenever non-residents individuals operate with cash either directly or through savings/investments accounts.

TAX TREATIES

Argentina holds tax treaties with Australia, Austria, Belgium, Bolivia, Brazil, Canada, Chile, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, and the United Kingdom. For further details, please refer to Grosz (2009), Appendix 1.3. Recently, Argentina has unilaterally enacted a reform of the tax treaty with Austria, making returns on Austrian bonds taxable to Argentineans. Furthermore, it has the intention of making the measure retroactive to 2002.

Brazil holds tax treaties with the following countries: Argentina, Austria, Belgium, Canada, Chile, China, Denmark, Ecuador, Finland, France, Hungary, India, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Norway, Philippines, Portugal, South Africa, Spain, and Sweden. For further details, please refer to Grosz (2009), Appendix 2.3.

Chile holds tax treaties with Argentina, Brazil, Canada, Croatia, Denmark, Ecuador, France, Mexico, Norway, New Zealand, Peru, Poland, South Korea, Spain, Sweden, and the United Kingdom. These treaties are in place.

Chile also signed treaties with Colombia, Ireland, Malaysia, Paraguay, Portugal, Russia and Thailand. It concluded negotiation with South Africa and is negotiating tax treaties with Australia, Belgium, China, Cuba, Czech Republic, Finland, Holland, Hungary, India, Italy, Kuwait, Switzerland, United States, and Venezuela.

Peru has signed treaties with Bolivia, Colombia and Ecuador, which are in place. It also signed treaties with Canada, Chile, and Sweden, which are currently not in place. It is negotiating treaties with France, Italy, the United Kingdom, Switzerland, and Thailand; and at the Congress there are two treaties (with Spain and Brazil) pending to be approved.

SOME REMARKS ON ARGENTINA-BRAZIL, ARGENTINA-CHILE AND ARGENTINA-PERU TAX TREATIES⁸

Under the tax treaty between Argentina and Brazil, an Argentine that receives investment income from a Brazilian source is exempt from income tax in Argentina because the investment already paid income tax in Brazil. But on the other hand, a Brazilian that receives income from an Argentine source, will pay income tax in Argentina, but will have to pay income tax in Brazil as well, although the income tax paid in Argentina can be taken as a credit. For instance, a Brazilian individual or company that buys government bonds from Argentina does not need to pay income tax in Argentina because they are exempt, though they will have to pay income tax in Brazil (implying transference of tax collection to the Brazilian Treasury). On the other hand, an Argentine resident that buys Brazilian government bonds does not pay income tax in Brazil nor in Argentina. However, these bonds will be subject to assets tax in Argentina. Moreover, Argentine companies located in Brazil will pay income tax on investment income at lower rates than the 35% rate corresponding to Argentina. These companies will, in fact, receive the same treatment; that is, they will pay the same tax rate as Brazilian companies. If there was not a tax treaty between Argentina and Brazil, Argentine companies would be subject to higher income tax rates on investment income.

Regarding the tax treaty between Argentina and Chile, income tax has to be paid in the country where the income was generated. For instance, Argentines investing in the Chilean stock market are only subject to income tax in Chile.

8 This section is based on Musalem (2009).

The same applies to personal assets tax: since Chile does not have an assets tax, Argentines investing in financial instruments of a Chilean source (such as Chilean government bonds) are not required to pay assets tax on these holdings. Therefore, this tax treatment tends to stimulate financial investments from Argentines in Chilean stocks, since they will be subject to a 21.7% tax on dividends in Chile and no income nor personal assets tax in Argentina. The opposite could hold for Chilean residents investing in capital markets in Argentina: they will be subject to a 35% income tax rate in Argentina, and nothing in Chile, which could turn out to be higher than the income tax rate in Chile. However, Chilean residents investing in Argentine government bonds will be exempt from assets tax in Argentina and from income tax in both countries. Last but not least, Chilean companies located in Argentina will receive the same tax treatment as Argentine companies. Furthermore, Chilean companies (or individuals) holding shares of Argentine companies are exempt from assets tax. Finally, Argentine companies located in Chile will also receive the same tax treatment as Chilean companies, i.e., they will both be subject to a 17% income tax rate.

Because there is no tax treaty between Argentina and Peru, a Peruvian investor will be subject to income and assets tax in Argentina. Therefore, a Peruvian investor will be subject to a 15.05% income tax rate and a 1.25% assets tax rate on Argentine deposits; he or she will be subject to a 35% income tax rate and a 1.25% assets tax rate on Argentine stocks and will be exempt from income and assets tax if he or she purchased government bonds. This tax framework does not induce capital flows from Peruvian residents into Argentina.

But on the other hand, the absence of a tax treaty between Argentina and Peru does not induce capital flows from Argentines to Peru either: Argentine residents investing in Peru are subject to a 30% income tax on investment income on government or corporate bonds, and are exempt from income tax on deposits, but are subject to assets tax in Argentina and to up to a 35% income tax rate in Argentina (assuming income tax paid in Peru can be taken as a credit towards income tax in Argentina).

Peruvian companies located in Argentina will be subject to the same taxes as Argentine companies in Argentina. But on the other hand, Argentine companies located in Peru will be exempt from income tax on deposits and government bonds, as Peruvian companies are. But Argentine companies will be subject to a 35% income tax rate in Argentina. This results in a transfer of resources from the Peruvian to the Argentine Treasury, or, equivalently, in a discrimination against Argentine companies located in Peru.

Conclusions

There are several asymmetries in the taxation regime on financial instruments. Perhaps the most striking one, present in Argentina, Brazil and Peru, is that these countries charge lower tax rates (sometimes zero) on government issued bonds, generating an asymmetry between purchasing government issued bonds or private bonds. Instruments with public offering generally benefit from some exemptions.

There are many asymmetries that lie in the different tax structures each country has, as well as in the financial instrument itself or the type of holder of the instrument. In general, non-resident individuals are required to pay higher tax rates. It is also interesting to note that income tax in Chile is considerable lower than in other countries for resident companies. Because many foreign companies that are present in Chile will pay a 17% income tax in Chile, they will probably have to pay income tax in their home countries for the difference between income tax rate at home and in the foreign country. Therefore, a low income tax rate would consequently constitute a transfer of resources from the Chilean Treasury to the foreign treasury, when the income tax rate is smaller in Chile (unless tax treaties handle this issue). This same logic applies to financial instruments that have some exemption in one country but not in the other: a Brazilian resident that buys government bonds of Argentina is not required to pay income tax in Argentina (government bonds are exempt) but will pay income tax in Brazil. Therefore, this asymmetry constitutes a transfer of resources from the Argentine Treasury to the Brazilian Treasury. Therefore, tax treaties should take into account these important asymmetries to allow cross border neutrality. Unfortunately, this is not the case nowadays.

There is a long way to go in terms of achieving tax neutrality across instruments and cross border transactions for the group of countries considered in our study. Obviously, each country will need to adopt reforms in agreement with their own budget constraints.

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CAPITAL MARKETS

IN THE SOUTHERN CONE OF LATIN AMERICA

Convergence to International Standards and Integration

South American countries have not considered integration in financial services yet. Accordingly, trade liberalization in financial services did not follow as would have been expected and financial integration among those countries remains incomplete. Consequently, financial development is still a pending issue in the region. Needless to say, there are several causes of this phenomenon, namely macroeconomic instability, inadequate regulation and enforcement, tax treatment, foreign exchange controls, barriers to trade in financial services (including capital flows), among others. The differences in the way countries regulate their financial sector has made South America vulnerable to regulatory arbitrage. Therefore, the best strategy would be to integrate financial services on a regional basis by having each country adopt financial sector standards and codes as established by international standard-setter institutions.

The current research at CEF has identified the existing gaps in legal, regulatory, taxing, foreign exchange, accounting and auditing frameworks of financial services provided through capital markets in South America vis a vis the international best practices, standards and codes. During the last two years, CEF has carried out this comparative analysis of capital market experiences in Argentina, Chile, Brazil, and Peru. Financial integration is necessary in order to foster domestic financial development. But there are many asymmetries among the countries in the sample, as reported in this study.

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