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Financial Development in Latin America and the Caribbean

Stylized Facts and the Road Ahead

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Abstract

The paper documents the major trends in financial development in Latin America and the Caribbean since the early 1990s. The paper compares trends in Latin America and the Caribbean with those in Asia, Eastern Europe, and advanced countries and compares countries within Latin America and the Caribbean. The findings show that financial systems in the Latin America and the Caribbean region have become more diversified and more complex. In particular, domestic financial systems have become less bank-based, with bond and stock markets playing a larger role; institutional investors have gained some space in channeling domestic savings, thus increasing the availability of funds for investment in capital markets; and several economies in the region have started to reduce currency and maturity mismatches. Nonetheless, a few large companies continue to capture most of the domestic savings. And because these trends have unfolded more slowly than pro-market reformers had envisioned, broad, market-based financial systems with dispersed ownership have yet to materialize fully in the region. As a result, convergence is still largely failing to happen and the region's financial systems remain less developed than those of the advanced economies and several other emerging economies, most notably those in Asia.

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Financial Development in Latin America and the Caribbean: Stylized Facts and the Road Ahead

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1. Introduction

Since the early 1990s, many economies in Latin America and the Caribbean (LAC) have undertaken significant efforts to expand the scope and depth of their financial systems. The literature suggests several reasons for doing so. Financial development has long been linked to faster growth and greater welfare (see, for example, Levine 1997, 2005; Luintel and Kahn 1999; Levine and Zervos 1996; King and Levine 1993a, 1993b). Increased access to financing has beneficial effects, especially for historically underserved segments, such as small and medium enterprises (SMEs) (see, for example, de la Torre, Martínez Pería, and Schmukler 2010; Beck, Demirgüç-Kunt, and Martínez Pería 2008; Beck and Demirgüç-Kunt 2006). A deep financial system has usually been perceived as more resilient to shocks and less prone to volatility and financial crises (see, for example, Easterly, Islam, and Stiglitz 2000; Aghion, Banerjee, and Piketty 1999; Acemoglu and Zilibotti 1997). These policy efforts have involved, among other things, improving access to banks (for savings, credit, and financial transactions in general) and developing capital markets as an alternative and competitor to the bank model, which is usually viewed as more costly.

The policy approach of countries in the LAC region to financial development has basically followed a model of dispersed ownership, or what can be called "the U.S. model." In this model, household savings are channeled directly into the capital markets, either through the retail market or, more generally, through financial intermediaries, such as pension funds, mutual funds, and insurance companies, that manage their savings. At the same time, firms can go directly to these markets to raise capital, which allows them to undertake riskier, longer-term investments than they would if they could raise funds only from banks. To entice households to put their savings in capital markets, firms protect shareholder rights, and market discipline helps punish firms (and financial intermediaries) that deviate from what is optimal for shareholders. In this model, risk is dispersed, idiosyncratic, and diversified. Banks play a less central role, competing with capital markets and financing projects that require more relationship lending. The role of the state in this model is to provide an enabling environment by safeguarding the investors and ensuring the stability of the financial system through regulation and supervision. The model entails a fundamental faith in free markets and competition.

Efforts at financial development have not been unique to LAC in this period, of course, as many emerging countries have also implemented significant pro-market reforms. Initially, there were large-scale privatizations of state-owned companies (see, for example, de la Torre and Schmukler 2008; de la Torre, Gozzi, and Schmukler 2007a; Perotti and van Oijen 2001). Widespread pension system reforms, among others, introduced and established institutional investors, generating a significant supply of funds for the financial system. Financial markets were liberalized, and foreign banks were allowed to operate in domestic markets with the intention of channeling foreign savings into the domestic economy. Following the numerous financial crises of the 1990s and early 2000s, prudent macroeconomic and financial policies to foster growth, stability, and resilience were implemented. The goal was to adopt well-regarded international standards and to reduce mismatches, such as currency and maturity mismatches, while at the same time withdrawing the state from the markets and avoiding crowding out.

LAC's record on achieving reforms is mixed—the region has been at the forefront of implementing many reforms, although it has been lagging in others. For example, LAC has been a pioneer in pension fund reforms, switching from a defined-benefit, pay-as-you-go system to a defined-contribution one, where workers save by investing in financial instruments (see, for example, Kritzer, Kay, and Sinha 2011; Dayoub and Lasagabaster 2007). Countries in the region have also been leaders among emerging economies in opening up their financial markets to cross-border flows and to the entry of foreign financial institutions (see, for example, Cull and Martínez Pería 2010; Kaminsky and Schmukler 2008). Several LAC countries have tried to stabilize inflation by following floating exchange rate regimes and adopting inflation-targeting policies (see, for example, Schmidt-Hebbel and Corbo 2002; Mishkin 2000). Finally, many countries have actively fostered the development of long-term bond markets and a benchmark yield curve for the private sector by issuing debt in their domestic currencies. In contrast, a number of countries in the region have a long road ahead on regulatory issues. Many have still not fully met the minimum Basel I international standards on capital requirements, and the implementation of Basel II has thus far been limited in the region. While the LAC7 countries—Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay—have recently taken some preliminary though important steps toward compliance with Basel III reforms, the rest of the region is markedly silent on its implementation (see Auqui and Heysen 2013).

The two decades of financial sector and macroeconomic reforms and, more recently, the global financial crisis provide us with a uniquely rich tapestry of themes and issues through which to review (and ponder) Latin America's financial development and its potential vulnerabilities, both present and future. The time is thus ripe for an in-depth evaluation of the returns on those efforts by taking stock of how these financial systems have developed and where they stand.

The conclusions in de la Torre and Schmukler (2008) and in other papers were based on data up to the early 2000s and suggested that outcomes did not match expectations and reform efforts. At that time, we were somewhat pessimistic about the prospects for financial sector improvement, given the difficulty of overcoming high systemic risk and volatility, the slow progress of financial development, and the large mismatches in currencies and maturities, all of which were the result of inherent deficiencies in emerging economies (see de la Torre and Schmukler 2008; de la Torre, Gozzi, and Schmukler 2007b; de la Torre and Schmukler 2004). Other economists shared our pessimism, focusing on the metaphor of "original sin" in emerging economies—that is, the inability to issue long-term debt in their own currencies—as well as on outright dollarization and "sudden stops" that would subject the economies to frequent shutdowns of foreign financing (see, for example, Hausmann and Panizza 2003; Calvo and Reinhart 2000; Eichengreen and Hausmann 1999; Hausmann et al. 1999).

More recently, however, new data from the mid- to late-2000s and several anecdotal accounts suggest some reasons for optimism. Emerging economies have improved their macroeconomic performance, lowered inflation, and reduced fiscal deficits (Gourinchas and Obstfeld 2011). These policy achievements, together with high liquidity in international markets, have allowed emerging economies to issue long-term bonds in domestic markets, as foreign investors have expected further appreciations of local currency and entered local markets in search of higher yields. In addition, these economies weathered the storms of the recent global financial crisis relatively well, indicating the strength and resilience of their financial systems (see, for example, Didier, Hevia, and Schmukler 2012; Eichengreen 2009).

Even with these reasons for optimism, the path ahead will certainly be challenging, especially for policy makers. In particular, the old model of convergence to international standards is being questioned precisely because those standards are being revised in the wake of the 2008–09 global financial crisis. One example is the housing finance model fostered by public institutions like Freddie Mac and Fannie Mae in the United States, which other countries, such as Mexico, have also followed. Another example is the definition of the limits of regulation when banks and shadow banks are interconnected and when banks pose too high a systemic risk to be allowed to fail. This situation—wherein assets are excluded from banks' balance sheets through securitization and special-purpose vehicles—evolved in several emerging economies as capital markets were developing and other financial intermediaries arose. A third example is the need to provide better services to savers and investors, while monitoring the degree of risk, given the prevalence of global shocks. A fourth example is the increasing role of public banks as a way to foster access to finance in good times and bad.

The main goal of this paper is to document some basic trends in the development of financial systems in LAC and in emerging economies more broadly. The primary value of this exercise is to put in perspective the absolute and relative size and the evolution of different components of the financial system using traditional and new indicators. We analyze both the borrowers' (firms, government, and households) and the savers' (households) side but focus on the perspective of the companies that are trying to raise capital and households that are trying to channel their savings. We also investigate how the nature of financial activity (currency, maturity, and scope of credit) has developed and to what degree changes in the size of markets have implied greater availability of financing for corporations (proxied by the concentration of capital market activity by the top firms). Our objective is to present a bird's-eye view of the financial system, although we provide many details for the interested readers. Since it is very difficult to evaluate the extent of financial development given the lack of clear benchmarks, we provide comparisons over time and across regions relative to gross domestic product (GDP) and relative to different measures of market size. De la Torre, Feyen, and Ize (2013) present an analysis that takes into account other factors that can influence financial development. To our knowledge, no other publication has conducted this type of analysis.

We systematically analyze the evolution of the financial development of the LAC region during the 1990s and the 2000s. While we provide some evidence on the banking sector, most of the new evidence focuses on capital markets, at which many of the recent reforms were aimed and where most of the expectations were laid. We also document the evolution of the main financial intermediaries aside from banks: pension funds, mutual funds, and insurance companies. We focus on seven of the largest countries in LAC, the so-called LAC7; as noted, this group includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. In addition, in cases where patterns differ from the broad trends documented, we present evidence for specific countries within LAC7.[1] We also compare the patterns observed in the LAC7

1. In complementary work, we took a deeper look within Latin America and compared LAC7 to other South American countries (Bolivia, Ecuador, Paraguay, and Venezuela), Central America (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and, exceptionally, due to the characteristics of its economy, the Dominican Republic), the Caribbean (Jamaica and Trinidad and Tobago), and offshore financial centers (Aruba, the Bahamas,

countries with those in other developed and emerging regions. Among developed countries, we consider the G-7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) as well as other advanced economies that are typically regarded as being somewhat more similar to emerging markets (Australia, Finland, Israel, New Zealand, Norway, Spain, and Sweden). As comparable emerging economies, we focus on two main regions: Asia (Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand; and separately, because of their distinct natures, China and India) and Eastern Europe (Croatia, the Czech Republic, Hungary, Lithuania, Poland, the Russian Federation, and Turkey).

The main findings in this paper provide a mixed, nuanced picture of the main trends in financial development and can be summarized as follows. The financial systems of emerging economies, including those in Latin America, have effectively developed over the past two decades, becoming in many respects and by several standard measures deeper and more complex. In particular, there has been a transition from a mostly bank-based model to one that is more complete and interconnected. Nonbank markets—namely, bonds and equities—have increased in absolute and relative sizes. New markets are also forming, albeit somewhat timidly. Nonbank institutional investors now play a much more central role, channeling a large part of the savings, and the number and sophistication of participants are increasing (even without taking into account the additional increasing participation of cross-border investors). The nature of financing is also changing to some extent, in general for the better, but at a slow pace. For instance, there is a longer maturity of bonds from both the private and the public sectors in domestic markets. The extent of the dollarization of loans and bonds has also declined. However, not all regions have moved in the same direction. For example, Eastern Europe increased its foreign currency debt before the global financial crisis, which was linked to the higher transmission of the crisis to the countries in that region.

In the case of Latin America, despite these new developments, financial systems still remain underdeveloped in comparison to other regions. Bank credit has stagnated. Consumer credit has increased, apparently at the expense of firm financing. Bond markets have expanded but not as fast as those in the rest of the world. Private bond markets have increased in size but remain relatively small. Equity markets remain small, illiquid, and highly concentrated in large firms. While institutional investors are sophisticated and large, most of the savings are still channeled to government bonds and deposits, and as a result, large amounts of private savings

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Barbados, Bermuda, the Cayman Islands, the Netherlands Antilles, and Panama).

are not being channeled directly to firms. In other words, we do not observe a convergence of the region's indicators of financial development with those of more developed regions. In fact, developed countries have expanded their degree of financial development much more than emerging economies. Nevertheless, there is a large heterogeneity within the region. LAC7 countries are still substantially more developed than the rest of the region. Within LAC7, Brazil and Chile show some progress in particular areas (equity and bond markets, respectively), which, though incomplete, look encouraging.

The rest of the paper is organized as follows. Section 2 documents and gives a broad overview of where LAC and emerging economies stand on commonly used and simple measures of financial sector development. Section 3 analyzes whether and how the nature of financing has changed over time and Section 4 looks at which firms access capital markets. Section 5 presents the cases of Brazil and Chile. Section 6 describes recent developments in alternative markets and products. Section 7 examines the main players in the financial system. The final section discusses the challenges ahead for financial sector development.

2. Financial Sector Development

We start by providing some basic stylized facts showing where LAC countries stand on commonly used broad indicators of financial sector development, comparing them with other emerging and developed countries over the past two decades. More specifically, we focus on the depth of the financial sector, analyzing the size of bond and equity markets and that of the banking sector. Overall, we observe that financial systems in LAC countries have developed significantly over the past two decades, typically transitioning from an "old" mostly bank-based model to a "new" more complex and interconnected model in which nonbank institutions play a more central role. Despite these improvements, financial systems in LAC remain underdeveloped compared to other developed and emerging regions.

Regarding the banking system, one perhaps surprising fact is that LAC7 lags behind developed and developing countries not only in relative size (as measured by total banking claims over GDP) but also in growth. The banking sector in developed countries is deeper to start with and has typically expanded faster than the banking sectors in many emerging economies over the past three decades. In the G-7 economies, for example, bank size increased more than 20 percent, growing from 96 percent to 115 percent of GDP on average between 1980–89 and 2000–2009. In stark contrast, the banking system in LAC7 countries saw very little or no expansion in total assets as a percentage of GDP during the same period, even though it started from much lower bases (figure 1a). At the same time, also starting with more shallow banking sectors than the developed world, Asia and Eastern Europe had strong growth, with total bank assets having expanded as much as 47 percent in the former and 25 percent in the latter over the same period. Within the LAC region, the Caribbean countries and Central and South America show trends similar to LAC7. Offshore centers in LAC, such as the Bahamas, Barbados, and Panama, are exceptions, showing an impressive, almost twofold growth between the decades of the 1980s and the 2000s.

The patterns of financial development are strikingly different for bond markets across developed and developing countries over the past two decades. Bond markets have grown significantly in developing economies—by almost 80 percent in LAC7 countries (figure 1b)—but far less in developed countries. For example, bond market capitalization in Asia and Eastern Europe grew, respectively, 57 percent and 66 percent on average in the 2000s relative to the 1990s, whereas other advanced countries experienced no growth, on average. Despite the fast growth, bond markets in LAC7 countries remain particularly small, at 32 percent of GDP on average during 2000–2009, compared to about 56 percent for Asia and 112 percent for G-7 countries. Within LAC7, Peru and Colombia are at the bottom of the distribution, with 15 percent and 23 percent of GDP, respectively, whereas Brazil and Chile are at the top with 40 percent and 59 percent, respectively. The heterogeneity is even greater across the broad set of countries in LAC.

Somewhat similar patterns are also observed in the development of equity markets—equity market capitalization has typically grown faster in developing countries than in developed ones during the past decade, although there is greater heterogeneity across countries. For example, equity market capitalization across LAC7 countries expanded 60 percent in the 2000s vis-à-vis the 1990s, whereas it increased only 3 percent across G-7 countries (figure 1c). However, increases in equity prices can explain this trend, at least in part; that is, after adjusting market capitalization for changes in equity prices, a much more modest expansion of equity markets is observed around the world. For instance, equity markets in Eastern European and LAC7 countries expanded just 3 percent per year on average between 2000 and 2009. Similarly, equity markets expanded about 1 percent and 3 percent, respectively, in the G-7 and other advanced countries over the same period.

Despite its significant growth in nominal terms, equity market capitalization as a percentage of GDP remains relatively small in LAC7 countries. For instance, equity markets represented on average 42 percent of GDP in LAC7 countries, while they represented about 66 percent of GDP in Asian countries and more than 85 percent in developed countries during the 2000s. Within LAC, Central and South America considerably lag behind the LAC7, with 15 percent and 9 percent of market capitalization over GDP, respectively, during the 2000 decade. The Caribbean and offshore centers, however, have more developed equity markets, at 79 percent and 71 percent, respectively, for the same period.

These differences in the relative size of equity market capitalization are even larger once we attempt to control for differences in the availability of shares for investors, that is, the free float. Dahlquist et al. (2003) provide evidence that most firms in countries with poor investor protection are controlled by large shareholders, so that only a fraction of the shares issued by firms in these countries can be freely traded and held by portfolio investors. In other words, closely held shares typically represent a larger fraction of total market capitalization in emerging countries than in advanced ones. Once the percentage of closely held shares is taken into account, equity market capitalization becomes significantly smaller in LAC7 countries, and in emerging countries more broadly, than in developed ones.

Although LAC countries are closing the gap in financial sector development relative to advanced economies in many respects, they are still lagging behind, particularly in comparison with the developing countries in Asia. To shed light on the extent of underdevelopment of the LAC7, we compare the size of its financial systems in 2005–07 with those of Asia in 1989–91, when their per capita incomes were similar (figure 2). We also include a comparison with developed economies in 1989–91. These comparisons suggest that the financial systems in LAC7 might be 20 years or more behind those of more advanced economies. The depth of LAC7's banking system in the late 2000s is significantly lower than that observed on average in Asia and in developed countries in the early 1990s. Brazil and Chile stand as notable exceptions, with banking sectors similar in size (as a percentage of GDP) to those of developed countries like Australia, Italy, and Norway. Similar patterns are observed in bond markets. In equity markets, the patterns are more encouraging, as stock markets in many LAC7 countries are comparable in size (relative to GDP) to those in developed and developing Asian countries during the early 1990s, although this might be driven only by valuation effects, as discussed above. The relative underdevelopment of LAC7 countries seems surprising, given the number of reforms introduced in the financial system and the improved macroeconomic stance in recent years, both of which were expected to yield closer convergence with the more mature financial systems of developed countries and emerging economies in Asia.

On the bright side, there has been some convergence—a transition from a mostly bank-based model to a more complete and complex model has been a broad trend in the LAC region as well as in many other developing countries (figure 3). For example, bond and equity markets in LAC7 countries now account for 64 percent of their financial systems on average in contrast with 54 percent observed in the 1990s. Similarly, these markets have grown from 45 to 55 percent of the size of the financial system in Eastern European countries and from 18 to 45 percent of the financial system in China. In developed countries, these markets typically account for about 60 percent of the financial system.

3. Changing Structure of Domestic Financial Systems

The increased depth of financial systems in LAC7 countries has come along with changes in the nature of financing—though slowly—toward the better: for example, the private sector has seen an expansion in local currency bond financing, the extent of dollarization of loans and bonds has declined, and the maturity of public and private sector bonds has typically increased. However, plenty of room remains for future development of the scope and depth of markets: bank credit has stagnated in various countries; firm financing has declined in relative terms; and private bond markets as well as equity markets remain typically small, illiquid, and highly concentrated in large firms. We now review more systematically these qualitative developments in domestic financial systems in emerging markets in light of trends in developed and other developing countries.

3.1. Banking Systems

While the composition of bank credit between the public and the private sector has not changed substantially over the past two decades in LAC7 countries, significant changes have taken place in the rest of the world. The large expansion of banking systems in developed countries has been concentrated mostly in an increase of their claims on the private sector, which rose from 50 percent of GDP in the 1980s to 98 percent in the 2000s in other advanced economies, accounting for 97 percent of total bank lending (figure 4a). In contrast, governments increased their borrowing not only in absolute but also in relative terms in many emerging markets, particularly in Eastern Europe and India, over the same period. Across LAC7 countries, the public sector represented a larger fraction of total bank lending during the 2000s, at about 26 percent of the total claims by the banking sector, whereas in G-7 countries and emerging Asian countries that number was around 12 percent and 10 percent, respectively.

Although not greatly expanding, credit to the private sector in LAC7 countries has undergone significant qualitative changes in its composition, with credit shifting away from commercial lending and mortgage credit toward household financing (figure 4b). Qualitative changes in the composition of private sector credit have also occurred in some other emerging markets, although mortgage lending has increased in the case of Eastern European countries and China. In contrast, the composition of bank credit has remained relatively stable in developed countries.

In a context of somewhat stagnant private sector credit in a number of developing countries, these patterns may indicate an unbalanced expansion of credit in a particular segment at the expense of the underdevelopment of others. For example, mortgages seem comparatively small across LAC countries. For LAC7 countries, these patterns in the development of banking systems indicate that as countries have grown over the past two decades, bank credit to the private sector and to households in particular has also expanded, thus alleviating any potential financial constraints. These patterns also suggest that banks have expanded, in relative terms, in areas where it has been easy for them to grant credit at low risk, such as consumer credit through credit cards and collateralized loans, such as car loans and housing (not to mention the expansion of credit to the government). The increased use of capital markets by corporations, which has lessened demand for bank finance, would also be consistent with these patterns.

Two other key qualitative changes in the nature of bank lending in LAC7 countries are appropriate to mention. One is a decline in the dollarization of loans—indeed, this has also occurred in most other emerging markets, although Eastern Europe is an exception. The other is a decline in the percentage of foreign currency deposits in many emerging markets, although it remains particularly high in Eastern European and LAC7 countries (figure 5). These developments are likely a consequence of the emerging market crises of the 1990s, when currency mismatches rendered the private sector vulnerable to currency fluctuations and limited policy options.

Banking systems in LAC7 countries are also becoming slightly more concentrated, with increasing shares of loans and deposits in the top five banks (figure 6). Surprisingly, the opposite trend is occurring in a number of other emerging markets. At the same time, foreign banks are increasing their presence in LAC7 and emerging markets more broadly; the LAC region and Eastern Europe have the highest penetrations, which are noticeably larger than those in Asia, China, and other developed economies (Claessens and van Horen 2013). The increase in concentration might raise concerns about banking competition in the LAC region. When fewer and larger banks (higher concentration) exist, banks might be more likely to engage in anticompetitive behavior (Berger 1995). The literature has linked bank competition with lower prices for banking products, increased access to finance, and greater bank efficiency. However, some studies have shown that, at times, concentration is not a reliable measure of competition and that the link between concentration and performance is not always negative (see, for example, Cetorelli 1999; Jackson 1992). Empirically, Anzoategui, Martínez Pería, and Rocha (2010) show that although banking systems in LAC countries exhibit a high degree of concentration, competition does not seem to have declined during the 1990s and 2000s.

3.2. Bond Markets

Despite their considerable expansion between 2000 and 2009, private (corporate and financial institutions) bond markets in LAC7 countries remained relatively small in comparison to those in more developed countries and to public bond markets. For example, private bond market capitalization typically represented around 40 percent of GDP in developed countries during the 2000s, whereas it stood at only 10 percent and 23 percent across LAC7 and Asian countries, respectively, over the same period (figure 7a). A positive development is that private bond markets across LAC7 countries have grown more as a percentage of GDP than government bonds, gaining space in relative terms and hinting at less crowding out by the public sector. Issuance data also suggest a significant size difference between private and public bond markets. While issuance of bonds by the private sector stood at around 1 percent of GDP per year in LAC7 countries, public sector bond issuance was around 5 percent of GDP on average for most of the 2000s.

Bond market liquidity remains a concern in LAC7 countries. While turnover between 2008 and 2009 was around 60 percent in G-7 countries and reached 146 percent on average across other developed nations, it was merely 12 percent in LAC7 countries (figure 7b). In addition, the differences in turnover levels are significant relative to other emerging markets, some of which have experienced increased liquidity over the past 10 years. Trading volumes in secondary markets have been increasing in emerging Asian countries, for example, growing from 27 percent during 2000–2003 to 45 percent in 2008–09. These patterns suggest that primary bond markets have developed substantially more than secondary markets, and they are broadly consistent with the evidence that institutional investors hold bonds to maturity and do little trading (Raddatz and Schmukler 2008).

Not only are private bond markets in LAC7 countries, and in emerging countries in general, small in size, but also they have a limited reach, remaining a restricted source of firm financing. Only a small number of firms access bond markets for new capital in comparison to developed countries. For example, during the 2000s, 19 firms on average issued bonds in LAC7 countries, compared to 21 and 27, respectively, for Asia and other advanced economies, and an astounding 432 firms in G-7 countries (figure 8a). Moreover, this indicator even declined from its 1990 reading. At the same time, LAC7 markets remain largely concentrated, with the top five issuers capturing 43 percent of new bond financing during the 2000s (figure 8b). In other words, a few firms (typically the larger ones) capture the bulk of the new bond financing. These patterns seem to be intrinsically related to the behavior of institutional investors in local markets, as discussed below.

On a positive note, the profile of new bond issues across LAC7 countries has been improving considerably over the past two decades. As in developments in the composition of bank debt, and most likely as a consequence of a series of financial crises in the 1990s, LAC countries (in keeping with a broader trend across emerging countries) have on average made a conscious effort to try to reduce currency and maturity mismatches, minimizing concerns about credit risk and rollover difficulties. In particular, the maturity profile of both public and private sector bonds has been extended during the 2000s, and the degree of domestic currency debt has increased significantly. For example, relative to the 1990s, the private sector of LAC7 countries has increased the average maturity of domestic bonds from 6.1 years to 7.7 years. The increase in the average maturity of public debt is more striking, but it is not uniform across the LAC7 countries: between the 2000–2003 and the 2008–09 periods, Brazil, Peru, and Uruguay showed significant increases in the maturity of public bonds, while Argentina's and Chile's public debt maturity remained somewhat unchanged or even declined (figure 9b).

At the same time, bonds denominated in foreign currency in local markets have declined significantly in the private and public sectors. For instance, such bonds represented about 25 percent of total outstanding private sector bonds in the 2000s in LAC7 countries, down from 33 percent during the 1990s (figure 10). These overall trends probably reflect a conscious effort by governments to change the profile of their debt, given the serious rollover difficulties that mismatches generated during earlier periods of global and domestic shocks (Broner, Lorenzoni, and Schmukler 2011).

3.3. Equity Markets

Figure 1c showed a sizable increase in equity market capitalization in LAC7 countries between the 1990s and the 2000s. In contrast, figure 11a shows that the value of capital-raising activities in equity markets actually fell between those periods. For example, new capital raising through equity markets increased between 26 percent and 31 percent on average in developed countries, whereas it actually declined between the 1990s and the 2000s in developing countries—by about 70 percent in LAC7. As we suggested above, these results may not be inconsistent, as the expansion of market capitalization might be partly explained by the increasing equity valuations around the world during the 2000s.

Furthermore, trading activity is consistent with this less than rosy picture of equity markets in LAC7 countries. Domestic markets are not only relatively illiquid in the region, but liquidity has also been declining over time, unfortunately confirming trends documented with data up to the early 2000s (de la Torre and Schmukler 2004). Turnover rates in LAC7 equity markets have declined from 25 percent in the 1990s to 17 percent in the 2000s. In contrast, in Asia, the G-7 countries, and other developed countries, turnover has increased significantly (figure 11b). Turnover ratios calculated with free-float market capitalization suggest similar patterns, with LAC7 countries lagging significantly behind other emerging and advanced countries.

Despite some improvements in depth, the use of equity markets remains limited in LAC7 countries, with only a few firms capturing most of the (primary and secondary) market. One reason is that the number of listed firms is rather small compared to developed and other developing countries, and it has been declining over the past decade (figure 12a). In addition, the number of firms using equity finance on a regular basis is typically small in LAC7 countries; for instance, on average, only six firms issued equity in any given year during the 2000s in LAC7 compared to more than 290 in the G-7 countries, over 110 in other developed countries, and over 90 firms in Asian countries (figure 12b). Third, the bulk of equity financing is concentrated in a few firms; in fact, the share raised by the top five issuers increased in LAC7 countries from 72 percent to 82 percent between the 1990s and the 2000s (figure 13a). Last, trading in equity markets is highly concentrated in a few firms as well, with the top five firms capturing almost 60 percent of the trading in LAC7 countries (figure 13b). Again, within the region equity markets are most liquid in LAC7 countries, while other countries have generally much smaller and more illiquid markets—with fewer than 50 listed firms on average and turnover rates below 5 percent. These patterns suggest that if there were any deepening of equity markets, it did not bring about a greater breadth of access for firms. Equity markets seem to remain small, illiquid, and highly concentrated in a few firms across the region.

4. Which Firms Access Capital Markets?

While the description above shows that few firms access bond and equity markets, it provides little information about which firms do so. It is well known that larger firms have greater access to capital markets, due at least in part to cost and liquidity considerations. In practice, these considerations render the minimum issue size rather large for smaller firms (see Beck et al. 2006). Furthermore, firm-level data on publicly listed companies (generally the largest firms in an economy) across emerging markets show that not all public firms actually raise capital in bond and equity markets regularly, suggesting that an even more restricted set of firms uses financing from capital markets. Typically, firms that raise capital through either bonds or equity are larger (in assets), are growing faster (as represented by sales growth), are more profitable (greater return on assets), and are more liquid (that is, they have a higher cash-to-current-asset ratios) than publicly listed firms that do not issue bonds or equities over a given period. There are, however, some differences across emerging regions: firms raising capital in some LAC7 countries (Brazil and Chile, for example) tend to be more leveraged than firms that do not use capital markets, while the opposite is true on average in a number of Asian countries, like China, Indonesia, and Malaysia. The fact that only a restricted set of firms uses capital markets can be partly explained by supply factors. For instance, the restricted investment practice of institutional investors is one possible explanation. As documented in a number of papers, institutional investors tend to invest in larger and more liquid firms, thereby limiting the supply of funds to smaller and less liquid firms (see, for example, Didier 2011; Didier, Rigobon, and Schmukler 2010; Edison and Warnock 2004; Dahlquist and Robertsson 2001; Kang and Stulz 1997).

5. Promising Spots in LAC? The Cases of Brazil and Chile

While the patterns documented so far focus mostly on LAC7 countries, we have shown at times that the broad picture is even more dismal in other LAC countries, reflecting the region's heterogeneity. However, the adoption of a more capital market–based approach is relatively more advanced in Brazil, Chile, Colombia, and Mexico. The cases of Brazil and Chile in particular are worth noting and show important progress in key areas that, though still incomplete, look encouraging, as documented below.

5.1. Bond Markets in Chile

Private bond markets in Chile grew from 13 percent of GDP during the 1990s to 21 percent in the 2000s (figure 14a). Moreover, the private sector now accounts for a greater share of total outstanding bonds than the public sector—51 percent of total outstanding bonds on average in the 2000s compared to 33 percent on average during the 1990s. Consistent with these trends, primary markets are also highly active in Chile, with new bond issues by the private sector of 3.4 percent of GDP on average on an annual basis between 2000 and 2008. In contrast, the second largest primary market for bond issues by the private sector among LAC7 countries is Brazil, with annual amounts issued of about 1.4 percent of GDP on average (figure 14b).

The use of primary bond markets by firms in Chile is also growing. In the 1990s, on average 8 firms issued bonds in local markets in a given year, and in the 2000s the average increased to 23, or almost 1.4 firms per million inhabitants (figure 15a). Although small compared to G-7 countries, which boast 6.5 firms per million inhabitants, this is a greater number of firms raising capital than seen in many other emerging economies. Moreover, state-owned enterprises correspond to only 3 percent of outstanding amounts of corporate bonds, according to LarrainVial (2011), one of the largest brokerage firms in Chile. Concentration in Chile is also less a concern than it is in other emerging countries, with statistics comparable to those of G-7 countries (figure 15b). Nevertheless, the minimum issue size is, in practice, still quite high, and firms that use bond markets have on average US$173 million in outstanding bonds, which suggests how restricted access is for smaller firms.

The maturity structure of private bonds in Chile is surprisingly long for an emerging market—15.5 years at issuance, significantly longer than the observed average of 6.2 years in the other LAC7 countries and the 10 years typically seen in a number of developed countries (figure 15c).[2] The long maturities in Chile are generally linked to indexed, high-grade bonds. In

2. Bonds whose maturity is less than one year (commercial paper mostly) are excluded from these statistics due to

December 2005, 97.7 percent of issued bonds were inflation-linked bonds, and 1.5 percent were linked to the U.S. dollar. In December 2010, a similar composition was observed, when almost 94 percent of bonds were linked to inflation and 1.5 percent were linked to the exchange rate.[3] Domestic bonds are also mostly rated at investment grade, with very few high-yield issues. Non-investment-grade bonds correspond to 0.2 percent of issues, and by the end of 2010 the percentage of bonds rated BBB or below was about 3 percent, which is significantly lower than those in developed countries: high-yield bonds have reached almost 40 percent of issues in Japan and around 10 percent in the United States (statistics from LarrainVial 2011).

Although primary bond markets for the private sector seem highly developed, liquidity in secondary markets remains limited. According to LarrainVial (2011), trading of corporate bonds in Chile corresponds to about 20 percent of the total value traded in domestic bond markets, a disproportionate amount given its size relative to government bonds. Even though turnover ratios increased consistently in the 2000s, going from about 30 percent in 2002 to almost 60 percent in 2010, they stood in marked contrast to a turnover ratio of 294 percent for government bonds in 2010.[4] Liquidity in corporate bond markets in Chile also seems limited when compared to other LAC countries: about 463 percent in Mexico, 123 percent in Brazil, and 75 percent in Colombia.

These developments in Chilean corporate bond markets need to be viewed in light of their main institutional investors, pension funds, insurance companies, and, to a lesser extent, mutual funds. These investors, and particularly pension funds, provide stable demand for corporate bonds given their sheer size (about 65 percent of GDP for pension funds and 20 percent for insurance companies in 2010). Pension funds, for instance, held about 50 percent of the stock of bonds in 2010, while insurance companies held 32 percent. Given their status as large market players in corporate bond markets, their investment behavior will be tightly linked to developments in this market. For example, their large size implies that investments are usually made in large amounts, which limits the potential demand for smaller issues. These investors typically pursue buy-and-hold strategies, keeping bonds in their portfolios until maturity, as shown in Opazo, Raddatz, and Schmukler (2009) and Raddatz and Schmukler (2013), which can explain the low liquidity of the secondary private bond markets. In addition,

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data availability.

3. Notice, however, that, while nominal bonds are still a very small fraction of total issued corporate bonds, they have increased significantly over the past five years.

4. The trading of bonds issued by banks accounts for a large fraction of total trading in secondary bond markets in Chile—60 percent on average during 2010.

current restrictions on pension fund investments limit their exposure to non-investment-grade issues, thus possibly explaining the low fraction of outstanding high-yield corporate bonds. The long maturity of corporate bonds can also be associated with the maturity structure of the liabilities of pension funds and insurance companies, which allows them to make longer-term investments. The nature of their liabilities, mostly indexed to inflation, also implies a significant demand for inflation-linked bonds.

Regulatory changes that took place in the early 2000s may also be related to the timing of these developments in local currency bond markets. For instance, capital market reforms allowed pension funds and insurance companies more flexibility in their investments. The combination of sound macroeconomic and financial frameworks with price stability and credible fiscal and monetary policies, along with reduced macroeconomic volatility, might also have been important. Yet significant challenges remain in addressing some of the limitations of corporate bond markets in Chile. More specifically, greater access for smaller firms and more liquid secondary markets are particularly important goals.

5.2. Equity Markets in Brazil

Equity markets in Brazil have gone through significant changes over the past 10 years with clear improvements in corporate governance. According to Nenova (2003), by the end of the 1990s Brazil had poor investor rights, low enforcement of contract law, and weak accounting standards. However, in December 2000, the São Paulo Stock Exchange (Bovespa) created three new corporate governance listing segments through which issuers could voluntarily adopt corporate governance practices beyond those required by Brazilian corporate law and capital market regulation more generally. Bovespa listing segments include the traditional Bovespa, Level 1, Level 2, and Novo Mercado, with each of these market segments requiring progressively stricter standards of corporate governance.[5] The main goal of creating these distinct segments and of Novo Mercado in particular, was to reverse the weakening of the equity markets in Brazil that was taking place at the end of the 1990s by fostering good

5. The main requirement for equity listings in Novo Mercado is the issuance of common voting stocks (that is, the so-called one-share-one-vote rule). This requirement was a response to the predominance of nonvoting stocks known as "preferred stocks" among Brazilian companies, allowing holders of voting stocks to take control of companies by owning small percentages of the total equity. In addition, Novo Mercado also required complying with a number of other good corporate governance practices such as a minimum 25 percent free float, U.S. GAAP reporting, and 100 percent tag-along rights, with all shareholders getting the same conditions in the event that a company was sold. The corporate governance listing segments Level 1 and Level 2 are intermediate segments between the traditional listing segment and the Novo Mercado, their main goal being to facilitate a gradual migration from traditional markets to Novo Mercado. A detailed description of the rules governing these different segments is available on Bovespa's web page (http://www.bmfbovespa.com.br).

corporate governance practices, such as disclosure, transparency, and accountability.[6] According to Bhojraj and Sengupta (2003) and Shleifer and Vishny (1997), good governance practices increase investor confidence as they tend to reduce agency and information risks. Therefore, companies are likely to have access to capital at lower costs and better conditions, to increase the value and liquidity of their shares, and to improve their operating performance and profitability.[7] In fact, since then, equity markets have become more liquid and less concentrated, and a greater number of firms have been issuing equities; hence, larger amounts are being raised in Brazil (figure 16). These trends suggest that the improvements in the investor protection environment might have indeed paid off.

In spite of a timid beginning, due mostly to a number of external shocks, the Novo Mercado had taken off by the mid-2000s. The number of companies listed in these new corporate governance segments of Bovespa rose steadily, while the number of companies listed in the traditional segment of Bovespa decreased during the 2000s. By December 2010, 168 companies were listed in the three segments: 38 companies in Level 1, 18 in Level 2, and 112 in Novo Mercado. These trends suggest a migration from the traditional segment to the corporate governance segments.[8] According to Gorga (2009), by 2007 the large, established, and successful corporations with alternative sources of financing tended to migrate to segments that required small changes in corporate governance (Levels 1 and 2), while the vast majority of companies listed in the Novo Mercado were new entrants looking at the equity market as a viable option to raise capital.[9] Moreover, the improved corporate governance segments of Bovespa have gained market participation, in 2010 representing more than 65 percent of market capitalization and almost 80 percent of value traded (figure 17).

The implementation of the Novo Mercado has been well received by foreign investors as well. During 2004–06, on average, foreign participation in the improved corporate

6 Glaser, Johnson, and Shleifer (2001) and La Porta et al. (1997) show that protection of minority shareholders is fundamental to the development of a country's capital market. In addition, Klapper and Love (2004) show that good governance practices are more important in countries with weak investor protection and inefficient enforcement.

7 Ashbaugh-Skaife, Collins, and LaFond (2006), for example, find that better corporate governance practices improve corporate credit ratings and reduce bond yields. De Carvalho and Pennacchi (2011) argue, for the case of Brazil, that migration from traditional markets to the Novo Mercado brings positive abnormal returns to shareholders and an increase in the trading volume of shares. Klapper and Love (2004) find that better corporate governance is associated with higher operating performance and higher Tobin's Q. Joh (2003) concludes that firms with a higher control-ownership disparity exhibit lower profitability.

8 It is important to note that some firms with a traditional Bovespa listing have public debt but not public equity.

9 This argument is consistent with data on the financial reports of Bovespa's listed companies that show that companies listed in the corporate governance segments, on average, are larger than companies in the traditional market but that companies listed in Levels 1 and 2 are larger than firms listed in the Novo Mercado.

governance segments was 70 percent of the new stocks offerings (Santana 2008). Similar patterns occurred during 2008–10. Santana (2008) has also argued that the Novo Mercado has allowed Brazilian companies, and particularly new entrants, to access foreign capital without having to cross-list on international stock markets. For example, among Bovespa's 27 initial public offerings between 2004 and the first half of 2006, only two companies were listed simultaneously on the New York Stock Exchange.

6. Alternative Markets and Products

In recent years, LAC countries have seen the development of less traditional forms of financing; for example, factoring has deepened along with derivative markets and credit by retailers. Quantifying these new developments is, however, not an easy task as cross-country data are typically not available. Therefore, we focus instead on specific country studies or particular datasets that allow us to shed some light on recent trends in these nontraditional markets.

6.1. Derivatives Market

Since the late 1990s, trading of exchange rate derivatives in LAC7 countries has grown in dollar terms and as a percentage of GDP, particularly in Mexico.[10] Trading of interest rate contracts in LAC7 more than doubled as a percentage of GDP in the 2000s compared to the 1990s. Nevertheless, derivatives remain relatively illiquid in most emerging markets: turnover rates remain very small in comparison with those in developed countries. For example, the turnover in exchange rate contracts stands at about 1.1 percent of GDP in LAC countries, whereas the turnover in G-7 countries stands at 7.3 percent of GDP. Turnover figures also suggest that foreign exchange derivatives are largely concentrated in U.S. dollar contracts across developing countries, with U.S. dollar contracts representing about 98 percent of the turnover in LAC7.

6.2. Factoring

Factoring is a financial transaction in which accounts receivable (that is, invoices) are sold at a discount to a third party.[11] Invoices are typically short term (less than 90 days), so that a market for invoice trading would be equivalent to a high-yield commercial paper market. This is a particularly important market for SME financing. Smaller firms are typically more opaque

10 The Bank for International Settlements publishes the "Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity," which provides comprehensive and internationally consistent information on turnover in foreign exchange and interest rate derivative markets for over 50 countries.

11 See de la Torre, Gozzi, and Schmukler (2007c) and Klapper (2006) for a detailed discussion of factoring per se, as well as for a few case studies around the world.

(as credible information is less available and more limited) and riskier (with higher mortality rates, lower growth, and less profitability), and they usually do not have adequate collateral. Consequently, their access to bank financing is more restricted. Factoring helps them overcome a number of these constraints, allowing them access to short-term financing, mostly for working capital. These operations offer smaller firms financing without collateral, albeit small guarantees might be charged in some cases, as the underlying credit risk of the transaction belongs to the issuer of the invoice. In addition, factoring can lower the cost of capital for SMEs, because, in many emerging markets, issuers are larger firms with lower credit risk (due, at least in part, to a better credit history) than the SMEs seeking financing.

Factoring is an expanding industry, particularly in LAC countries and emerging markets more broadly. According to the International Factors Group, the worldwide industry turnover in 2008 was estimated at €1.2 trillion (the total amount of assigned receivables), and it has been growing—worldwide volumes increased 3.75 percent in 2008 and 15 percent in 2007.[12] This expansion in factoring volumes, although slowed during the global financial crisis of 2007–08, has been concentrated mostly in emerging markets and particularly in China, Eastern Europe, and LAC7 countries. Nevertheless, factoring is typically less important in emerging markets than in developed countries. In LAC7, for example, factoring represented 2.6 percent of GDP in 2008–09 compared to about 4 percent for developed countries (figure 18a).

Chile and Mexico are notable examples in the LAC region where factoring services have developed significantly in recent years and where invoices can actually be traded on organized exchanges or online markets. Factoring in Chile, for example, is one of the largest among emerging markets. In 2009, it had an accumulated volume of €12 billion (10.7 percent of GDP) and about 14,000 users of factoring services, according to the International Factors Group and the Chilean Association of Factoring. Moreover, nonbank factoring companies represent almost 10 percent of this total, according to the Central Bank's Financial Stability Report (2008). In Mexico, total industry turnover was estimated to be almost €11 billion in 2007 (almost 2 percent of GDP). Nonetheless, factoring is still relatively small compared to bank loans or credit lines.

As an alternative to the factoring services typically offered by banks in Chile, Bolsa de Productos is a new initiative that might actually become an important source of SME financing

12 The statistics, however, were significantly influenced by a strong euro. Most notably, a large market, such as that in the United Kingdom, actually increased when expressed in British pounds, while it decreased by 4.84 percent when expressed in euros.

in the near future.[13] Although still in its earlier stages, with volumes of about US$100 million per month in 2011, Bolsa de Productos has been growing fast recently—more than 150 percent in 2010 over 2009. This exchange allows some form of reverse factoring, whereby invoices can be discounted and the credit risk borne by the investor is that of the issuers of the invoice. Moreover, no collateral is needed from SMEs posting the invoice.[14] Critical to the success of this initiative is the fact that discounting invoices in Bolsa de Productos is cheaper than factoring through banks, and it provides investors with a higher yield than they can get in money markets.

Bolsa de Productos is a well-designed initiative with clear solutions for most of the problems affecting SME financing: procedures for clearing and notification of invoices are standardized; insurance companies are active in this market and can guarantee the credit risk of smaller companies; securitization of invoices is also possible, and such "bundling" of invoices could increase the volumes, making the investment attractive to large institutional investors (pension funds, for example); and competition can be created through an open trading platform.[15] Nevertheless, many of these solutions are not yet implemented due to small trading volumes.

Since 2001, Mexico has had an online market for factoring services developed by the Mexican development bank NAFIN (Nacional Financiera), called Cadenas Productivas (Productive Chains).[16] This market provides reverse factoring services to SMEs through the creation of chains between large buyers and their suppliers.[17] This reverse factoring program is relatively large, having extended US$11.8 billion in financing in 2008, according to NAFIN; and now it represents a significant share of the factoring market in Mexico. According to Klapper (2006), as of mid-2004, the program included 190 large buyers (45 percent of which

13 Currently, main investors in Bolsa de Productos are institutional investors such as mutual funds, investment banks, and portfolio managers. Pension funds are expected be added to this list soon.

14 Issuers of invoices need to be registered with the exchange. Currently, there are about 170 qualified issuers, out of which about 90 are active, according to Bolsa de Productos. Issuers can also negotiate the extension of their own contracts, and hence Bolsa de Productos is a source of financing for both issuers and holders of invoices. There are restrictions on becoming a qualified issuer—very large firms as well as medium-sized firms on the other end can become qualified issuers. Any firm with an invoice from a qualified issuer can use the Bolsa de Productos.

15 For SMEs, discounting invoices in Bolsa de Productos is a cheaper alternative than factoring through banks for instance, and for investors, it provides a higher yield than money markets.

16 This initiative is similar in nature to Bolsa de Productos in Chile.

17 Once a supplier delivers goods to the buyer and issues an invoice, the buyer posts an online "negotiable document" equal to the amount that will be factored on its NAFIN webpage. Participant financial institutions that are willing to factor this particular receivable post their interest rate quotes for this transaction. Finally, the supplier can access this information and choose the best quote. Once the factor is chosen, the discounted amount is transferred to the supplier's bank account. The factor is paid directly by the buyer when the invoice is due.

were private firms) and more than 150,000 suppliers (about 70,000 of which were SMEs), with a turnover of about 4,000 transactions processed daily.

All transactions are carried out on an electronic platform, which allows NAFIN to capture economies of scale, since most of the costs of the system are fixed and electronic access enables a large number of firms and financial institutions to participate. In fact, all commercial banks are able to participate in this electronic market. This electronic trading also reduces transaction costs, increases the speed of transactions, and improves security. NAFIN is responsible for the development, production, and marketing costs related to the platform. It operates the system and also handles all the legal work. NAFIN does not charge a fee for the factoring services but instead covers its costs with the interest it charges on its loans.

This program has several advantages in dealing with principal-agent problems and transaction costs. First, the buyers that participate in the program, large creditworthy firms, must invite suppliers to join their chain. This reduces principal-agent problems by effectively outsourcing screening to the buyers, who have an informational advantage relative to financial intermediaries. The program is also designed to foster competition among financial institutions and increase information availability, giving transparency to the system and the same access possibility to all intermediaries.

The program has been so successful in Mexico that NAFIN has also entered into agreements with development banks in several Latin American countries, including Colombia, El Salvador, and the República Bolivariana de Venezuela, to implement similar programs, while other development banks in the region are also considering replicating this model.

6.3. Financial Cooperatives and Credit Unions

As an alternative to bank financing, financial cooperatives and credit unions are typically financial institutions owned and controlled by their members and operated with the purpose of providing credit and other financial services to them. Hence, they aim mostly at credit provision to households as well as micro, small, and medium enterprises, either formal or informal. Financial cooperatives and credit unions vary significantly in size, ranging from small cooperatives with few members to some that are as large as commercial banks. Not all of these financial institutions are regulated and supervised by central banks and financial regulators. Loans from financial cooperatives and credit unions represent only a small fraction of financial systems in LAC7 countries, particularly compared to G-7 countries.[18] Specifically, credit by

18 We consider credit unions as cooperative financial institutions that are owned and controlled by their members,

credit unions represented 5.4 percent of GDP in G-7 countries in 2008–09 and 0.7 percent in LAC7 countries (figure 18b).

6.4. Securitization

Structured finance is, in its simplest form, a process in which assets are pooled and transferred to a third party, commonly referred to as a special-purpose vehicle, which, in turn, issues securities backed by this asset pool. In other words, structured finance transactions can help convert illiquid assets into tradable securities. Typically, several classes of securities (called tranches) with distinct risk-return profiles are issued. Across LAC countries, securitized instruments have shown increasing signs of depth in different asset classes. In particular, gross issuance for LAC countries rose from US$2 billion in 2000 to US$24.4 billion in 2010, with Brazil and Mexico as the largest issuers. As a percentage of GDP, however, they declined during the 2008–10 period relative to 2005–07. Compared to developed countries, the structured finance markets in LAC7 countries remain relatively small and underdeveloped. While issuance in LAC7 countries represented less than 1 percent of GDP, gross issuance of securitized assets represented on average 6 percent of GDP per year in G-7 countries and almost 8 percent in other advanced economies between 2005 and 2007 (figure 18c). [19]

Although some of these issues are cross-border—typically between US$2 billion and US$4 billion over the past five years for LAC7 countries and mostly on futures—domestic markets represent the largest share of this market. For instance, issues in domestic markets represented almost 90 percent of total issuance in 2010 and more than 97 percent in 2009, when cross-border activity was at its lowest point in the 2000s. In addition, the securitization of different asset types has greatly developed—particularly in Brazil and Mexico, where the largest variety of securitized assets is available. The first deals in the region were cross-border futures transactions involving export receivables. Later deals involved financial receivables. More recently, the region has experienced the development of sophisticated asset-backed securitizations, such as new and used car loans, consumer loans, credit card receivables, equipment leases, and mortgage-backed securities. In 2010, most new issues were asset-backed issues (83.1 percent), followed by residential and commercial mortgage-backed securities (11.5 percent and 5.4 percent, respectively).

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providing credit and other financial services to them.

19 Net issuance includes issues sold into the market and excludes issues retained by issuing banks, while gross issuance includes those retained issues.

6.5. Credit by Retailers: The Case of Chile

Retail stores as credit providers seem to be on the rise. Chile is a notable example of this development. Retailers—and, in particular, the largest department stores in the country—have become nontrivial providers of household credit in recent years, and they have been so successful that they are exporting this experience to other countries in the LAC region. Although banks are still the main providers of household credit in Chile, representing 68 percent of total household financial debt, retailers are playing an increasingly important role. Household credit by retailers accounts for 11 percent of total household financial debt, 17 percent of total consumer debt, and 35 percent of nonbank debt (figure 19). In addition, the financing that retailers have extended to their customers is 3 percent of GDP.

This high penetration of the retail sector in Chile is related to the introduction of in-house credit cards.[20] These credit cards issued by department stores became popular in Chile because they offered consumer credit, especially to the middle-income segment of the population, when the bank credit market serving this segment was still in its early stages. Ripley was the first department store to introduce a system of credit in 1976, followed by Falabella and Paris, which launched their credit cards in 1980, and La Polar in 1989. Nowadays, retailers are shifting their focus beyond the middle class to include all segments of the population. For example, La Polar has targeted the middle- and low-income segments that typically do not have access to bank credit and thus depend largely on retailer credit. These cards are used by customers mainly to pay for merchandise purchased at these stores, and they can also be used to get cash advances and to make payments at other outlets, such as drugstores, supermarkets, and gas stations, with which the retailers have entered into alliances.

The Chilean retailer card industry now has 16.35 million valid cards—almost one card per inhabitant and about four cards per household. The main providers of credit through credit cards in the retail industry are Falabella, Cencosud, and Ripley. During the first quarter of 2010, Falabella's credit card was used for 59 percent of sales at its department stores, 28 percent of sales at its home improvement stores, and 18 percent of sales at its supermarkets.

Using this acquired expertise in providing consumer credit to households, Chilean retailers are exporting their success and presence in the financial sector to other countries in

20 In-house credit cards have been an important source of retailers' profits, and more specifically interest on credit purchases. An example of this is Falabella—operating profits from CMR (its credit card unit) were US$43.9 million in the first quarter of 2010, making the credit business one of the main sources of Falabella's profit and its most profitable area, with an operating profit margin of 37.4 percent.

Latin America. Currently, Falabella operates in Argentina, Colombia, and Peru; Cencosud has already entered the Argentinean, Brazilian, Colombian, and Peruvian markets; Ripley has stores in Peru; La Polar has started operating in Colombia in 2010. One notable example of this expansion is Falabella, which, by March 2010, had 775,000 active credit cards in Argentina, 522,000 in Colombia, and 937,000 in Peru. Peru has been the main market for Falabella's foreign credit business, where it started operating through Financiera CMR S.A. in 1997 (Banco Falabella since 2007). With US$432 million in outstanding loans, today Falabella's loans represent around 6 percent of total consumer loans in Peru.

6.6. Exchange-Traded Funds

Exchange-traded funds (ETFs) are a relatively recent and increasingly popular type of product traded on stock exchanges. They are traded portfolios composed of stocks as well as of commodities and bonds. They provide a greater scope for portfolio diversification and at the same time possess stock-like features, such as transparency, frequent pricing, and ease of trading, which are associated with low trading costs. Currently, the number of ETFs in developed countries is larger than in emerging countries, most likely because of the greater depth and liquidity of their financial systems as well as the greater sophistication of institutional investors in these markets. Nevertheless, these products have been on the rise in some LAC7 countries like Mexico. Moreover, ETFs are gaining space in secondary markets, with an increasing share of total trading in stock markets. In LAC7 countries, they accounted for 2.2 percent of the trading in 2008–09 compared to 0.1 percent during 2000–2003.

7. Players in the Financial System (Saver's Perspective)

LAC's financial systems have also become more complex from the saver's perspective. In the past, banks interacted directly with borrowers and lenders, but now there is a greater diversity of players with a broader set of institutions, such as pension funds, mutual funds, and insurance companies, that are intermediating savings, providing economy-wide credit, and offering a broader variety of products, as shown briefly in the section on financial development. In fact, in some emerging countries institutional investors have become even more important than banks. This rise of nonbank intermediaries has been a significant factor in the development of local markets across financial systems of developing countries, and particularly those in LAC, to the extent that they provide a stable demand for financial assets. Nevertheless, as argued below, LAC still has a long way to go in raising the sophistication of its institutional investors, as most of the savings are still channeled to government bonds and bank deposits.

7.1. Main Financial Intermediaries

Although banks continue to play a significant and stable role, nonbank financial intermediaries, such as pension funds, mutual funds, and insurance companies, have been gaining considerable space in LAC7 countries and in other emerging markets around the world (figure 20). For instance, pension fund assets represent 19 percent of GDP in LAC7 countries and 15 percent in Asian countries, while mutual funds and insurance companies are usually larger on average in Asian countries than in LAC7 countries. Eastern European countries have smaller but also fast-growing institutional investors. As with most other features of the markets examined so far, these intermediaries are still smaller on average in LAC7 countries than in developed countries, reflecting, to some extent the developed countries' advanced financial systems.

The size of each type of institutional investor varies among LAC7 countries, reflecting, in large part, differences in their institutional and regulatory environments. On average, pension funds in LAC7 countries are usually the largest institutional investors (20 percent of GDP), with mutual funds averaging 10 percent of GDP and insurance companies averaging 6 percent. In contrast, in Chile pension funds reach almost 70 percent of GDP, while mutual fund assets are 15 percent of GDP and insurance company assets are 19 percent of GDP. Mutual funds in Brazil are the largest institutional investors (42 percent of GDP) with significantly smaller percentages for insurance companies (8 percent) and pension funds (16 percent).

Due to data availability, we can get only a glimpse of the private equity and venture capital funds. These funds, through which investors acquire a percentage of an operating firm, are particularly important for the financing of SMEs. Unsurprisingly, however, private equity and venture capital funds are still relatively underdeveloped in LAC countries. Private equity funds raised on average US$4.9 billion per year in LAC, a strong contrast to the almost US$46 billion raised in Asia between 2003 and 2009.[21] Moreover, over the same period LAC represented only 1.1 percent of total worldwide private equity fund raisings, compared with almost 10 percent for Asian countries, with the rest taking place in the United States and in Europe. Venture capital funds are even less represented in emerging markets in general, with a total of US$12 billion per year raised on average outside the United States and Europe during

21 These statistics are from Preqin, the industry's leading source of information where country-level information is not available. Therefore, regional statistics cited include all countries geographically located within each region, making them different from the rest of this paper.

this period. Albeit smaller in absolute size, these funds have a relatively larger presence in emerging markets: fund raising outside the United States and Europe represented 25 percent over the same period. Although significantly smaller than other institutional investors, private equity and venture capital funds have been growing in the LAC region. In the first half of the 2000s, US$1.2 billion was raised on average in LAC countries, with the number rising to US$7.7 billion in the second half of the decade. Nevertheless, continuing growth for these funds in coming years will require adequate regulatory systems and rigorous disclosure standards. The latter are viewed as a particular issue in LAC countries, as accessing accurate and objective information for nonpublic firms is not straightforward. In this context, effective ex ante due diligence activities, valuation analysis, and ex post business monitoring, which are key for this industry, can be rather difficult.

7.2. The Nature of the Asset Side

Pension funds, mutual funds, and insurance companies provide a stable demand for domestic financial assets, given regulatory limits on their foreign investments, and thus have a potential role in deepening local capital markets across LAC countries. For instance, pension funds in LAC countries typically have less than 11 percent allocated abroad; Chile is the exception, with almost 45 percent allocated abroad in 2009. Surprisingly, however, institutional investors in the region, and in emerging markets more broadly, concentrate a significant fraction of their asset holdings in fixed-income instruments such as bonds and deposits and particularly in government bonds. These investment practices, which currently limit the role of institutional investors in the development of corporate bond and equity markets, are evident in figure 21a. Government securities and deposits (and other financial institution assets) accounted for more than 60 percent of the holdings of LAC7 pension funds during 2005–08. Nevertheless, as the figure also shows, this concentration by pension fund portfolios has declined.[22]

Figure 21b illustrates the heterogeneity within LAC countries. Pension funds in some countries (Argentina, Mexico, and Uruguay, for example) are heavily invested in government securities, while in others (like Chile and Peru) pension funds account for a greater share of deposits in their portfolios. Yet declines in both types of assets have taken place. At the same time, the shares of equity and foreign securities have been slowly increasing over the same period. Portfolio allocations to corporate bonds, however, have been relatively stable.

22 The numbers in figure 21 are not directly comparable to those in figure 22 due to differences in the classification of assets and the sample coverage in countries and years.

Comparable patterns are also observed in the investment structure of mutual funds in LAC countries.[23] Funds invest on average a large fraction of their portfolios in government bonds and money market instruments. Like trends in the pension fund industry, funds have been gradually shifting their portfolios toward equity investments (figure 22). In Brazil, for example, the share of public sector bonds declined from 73 percent to 48 percent between 2003–04 and 2005–09 on average. In Chile, this fraction declined from 14 percent to 6 percent, although deposits are a stable and substantial share of its portfolio, 63 percent on average over the same period. This composition of available mutual funds in the region raises the question of whether financial intermediaries or households themselves are responsible for these patterns. For instance, bond and money market funds account for 70 percent of existing mutual funds in LAC7 countries. In contrast, in G-7 and other developed countries, these funds correspond to about 35 percent of all funds. In those countries, equity funds are much more prominent, accounting for between 41 percent and 48 percent of existing funds, whereas in LAC7 countries equity funds typically account for 17 percent of available mutual funds, on average.

These trends suggest that institutional investors have not contributed to the development of local markets as much as expected in the LAC region. At the same time, one has to consider that relatively small and illiquid domestic markets can be viewed as unattractive by these investors, particularly by mutual funds that are subject to sudden withdrawals by clients. In other words, asset managers' incentives can explain, at least in part, why large institutional investors invest the bulk of their portfolios in government bonds and deposits. This current trap, where investors avoid local corporate capital markets and the markets remain underdeveloped, suggests that there is a great scope for policy actions that channel available funds to foster local markets.

8. Final Thoughts: The Road Ahead

This paper presents a systematic and detailed account of where emerging economies and Latin America in particular stand with respect to financial development. The evidence overall suggests that these countries are in a substantially better position than in the past, even along such dimensions as susceptibility to volatility and crises due to currency and maturity mismatches. In general, domestic financial systems have continued developing since the 1990s, at the same time that standard measures indicate that international financial integration

23 Data availability prevents us from providing a broader analysis.

deepened and that foreign investors continued investing in emerging economies. As a result, more resources have become available in these economies relative to their size—that is, more savings are available for use, especially for the private sector, since governments have been reducing crowding out by demanding fewer funds due to fiscal consolidation. Furthermore, financial systems are becoming more complex and somewhat more diversified. Financing does not depend as much as before on banks, as bonds and equity play a larger role. Among bonds, corporate bonds are also increasing in importance. Regarding financial intermediaries, institutional investors have become much more prominent, most notably pension funds and mutual funds. Moreover, traditional markets and institutions are no longer the sole providers of financing, as other types of financing, like retail chain credit, seem to be gaining momentum. This, in turn, suggests that consumers might be better served now. Moreover, the nature of financing also seems to be changing. Debt is moving toward longer maturities and increasingly being issued in local currencies, which reduces mismatches, while domestic markets seem to be gaining some ground. Overall, these trends suggest safer financial development in emerging economies, which is accompanying the safer international financial integration.

Despite all the improvements, one can argue that many emerging economies are still relatively underdeveloped financially. In fact, the countries that have developed the most in recent years are the advanced economies. Therefore, the gap between industrial and emerging economies in financial development has widened even further. As a result, one might expect that the financial sectors of emerging economies will continue to expand in the years to come.

There is a notable heterogeneity in the indicators of financial development across emerging economies, including Latin America. While financial development has progressed in LAC, the region lags behind not only developed countries but also other emerging economies, most notably those in Asia. This observation holds true for all sectors of the financial system—banks, bond markets, and equity markets. The only area that appears relatively developed is the institutional investor side, in particular, pension funds. But even there, the assets held by these institutions are concentrated to a large extent in deposits and government bonds. Therefore, Latin America's financial system is unfortunately less developed than might have been expected, given its intensive reform efforts and improved macroeconomic performance. Moreover, it appears that the region will need many years to overcome the relative underdevelopment of its financial sector. A couple of countries, however, seem to be doing better: Brazil in its equity market and Chile in its corporate bond market. Furthermore, there are some nascent positive changes in the nature of domestic financial markets, with their reduced currency and maturity mismatches. Nonetheless, to a large extent, only a few firms seem to be able to use capital market financing. Latin America has not become a place with finance for all, at least based on the data analyzed in this paper.

What explains the lagging financial development in emerging economies and in Latin America in particular? What explains the persistent mismatch between expectations and outcomes? In this final part of the paper, we discuss and speculate on some of the possible reasons, based on evidence from various pieces of other work. We also discuss some of the possible avenues for the future.

While it is difficult to answer the question of whether the problems lie in the supply or in the demand side of funds, the findings in this paper suggest that the insufficient financial development does not seem to be determined just by the lack of available funds. In fact, financial underdevelopment seems to coexist with a large pool of domestic and foreign funds in the economy, not least because domestic residents are sometimes induced to save in market-based instruments targeted to domestic markets only. Moreover, funds are also available from foreign investors eager to invest in emerging economies.[24] The availability of funds will naturally provide a continuing deepening of some markets. There also may be problems on the demand side, but there is not enough evidence to confirm this. Some surveys indicate that SMEs are not well served, but many owners do not want to lose the control of their firms and do not wish to subject their companies to market forces. Moreover, even when firms complain about poor access to financing, it is not clear that they have worthwhile investment projects.

The burden does not seem to rest on aggregate factors alone. The macroeconomic performance and institutional framework have likely hampered financial development in the past, but many developing countries have substantially improved their macroeconomic and institutional stances, and yet financial development has not progressed as expected. In the 2000s, there has been much less crowding out by the government in the financial sector, especially in bond markets and banking. Moreover, corporate governance and other institutional indicators have improved and are not likely to explain the cross-regional and cross-country variation in financial development.

24 One could argue that international financial markets are very volatile and that foreign investors are not reliable. But this is the case across countries, and it is difficult to explain the cross-country or cross-regional volatility. Furthermore, international investors seem to be favoring emerging economies in relative terms even in a period of global crisis, although they did pull back from all countries in the wake of the global financial crisis.

Financial globalization could, in principle, be behind the poor domestic development if financial activity (of domestic assets) moved overseas. In a world of financial integration, transactions do not have to take place domestically; that is, firms and households can transact in any market, domestic or foreign. But this does not seem to be the whole story. Some of the domestic development indicators take into account the activity that happens both domestically and abroad. Moreover, internationalization does not seem to be compensating for poor domestic development. Internationalization is positively correlated with financial development within and across regions. Thus, it complements rather than substitutes for domestic markets. Furthermore, globalization is important for many other countries and regions and thus does not explain the cross-country or cross-regional differences. And developed countries, with more domestic financial development than emerging economies, are even more globalized.

Part of the problem seems to lie in the financial intermediation process, since many assets available for investment are not purchased by banks and institutional investors. These institutions hold large resources that were expected to be invested long term and in many parts of the financial sector, not just in a few firms. However, institutional investors seem to shy away from risk, investing short term and following herding and momentum trading strategies, among other practices. Moreover, banks have moved from financing large corporations to financing standardized retail products and some specific lines of credit to SMEs that are easy to commoditize, that can be done on a large scale, and that involve relatively low risk, like leasing and collateral lending. Part of this trend might be due to a regulatory emphasis on stability. However, managers' risk-taking incentives seem to play an important role. For example, evidence from Chile on mutual funds, pension funds, and insurance companies seems to reinforce this point. In sum, while it could be the case that more assets would help those investors take more risk, the evidence and the literature indicate that the overall functioning of financial systems is not contributing to the degree of financial development envisioned by the pro-market reformers.

To the extent that part of the problem lies in the financial intermediation process, policy makers face a difficult road ahead. The role of institutional investors is emblematic in this respect. For example, it is not clear how to generate incentives for more risk taking to foster innovation and growth while preserving the stability of the financial system. This problem is particularly acute because households are often forced to allocate a substantial portion of their savings to pension funds. On the one hand, to the extent that funds invest too conservatively, they will underperform relevant benchmarks. On the other hand, generating more risk taking would put households' funds at higher risk. And riskier behavior makes monitoring of financial intermediaries more difficult. In other words, there is a strong trade-off between stability and development, and it is not clear where the socially optimal outcome lies. To complicate matters more for policy makers, the global financial crisis led to a devaluation of the international paradigms and a questioning of the international regulatory framework.

Eventually, emerging economies will need to catch up, grow their financial systems, and take more risk, as they proceed to become more like developed nations. The challenge is how to do so without undermining financial stability. Macroprudential policies that limit expansions constitute a clear example of the dilemma policy makers face. It is difficult to distinguish spurious booms from leapfrogging for the same reasons that it has been difficult to spot bubbles in the financial systems of many developed countries.

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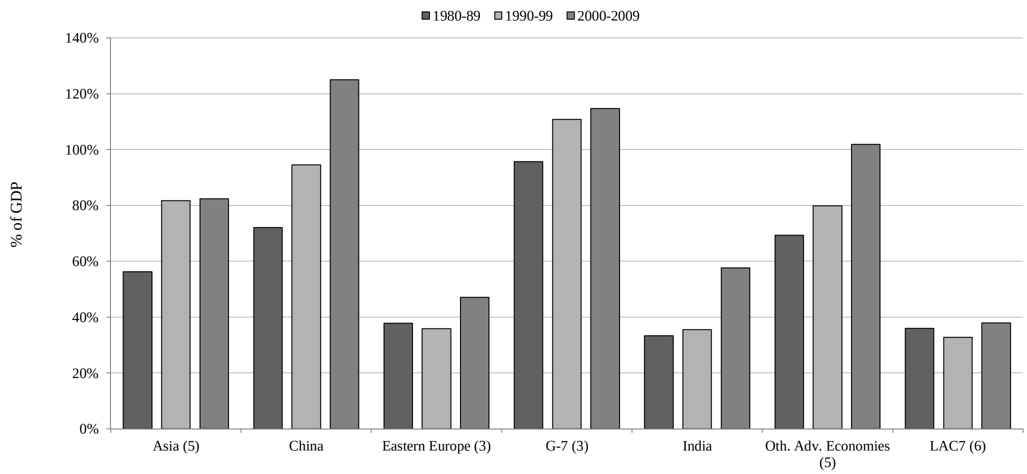
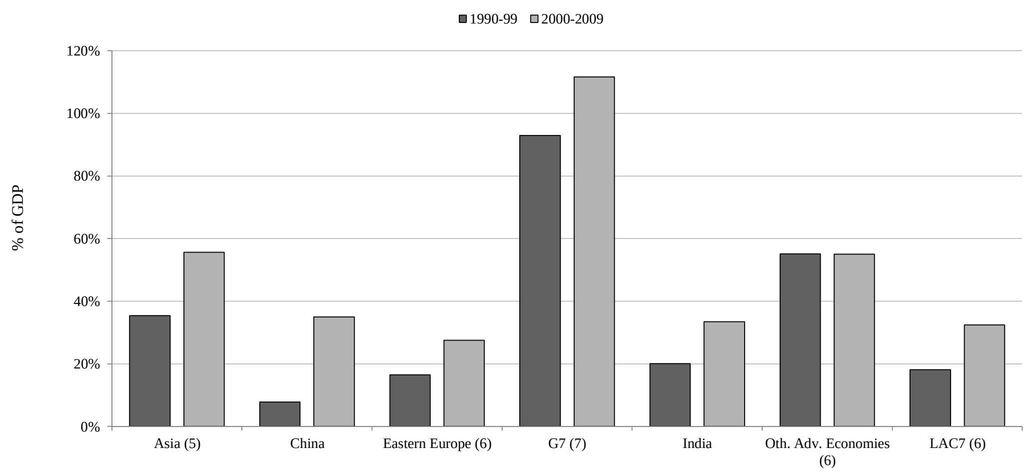
Figure 1
Market Size of Banks, Bonds, and Equities in Selected Regions and Economies, 1980-2009

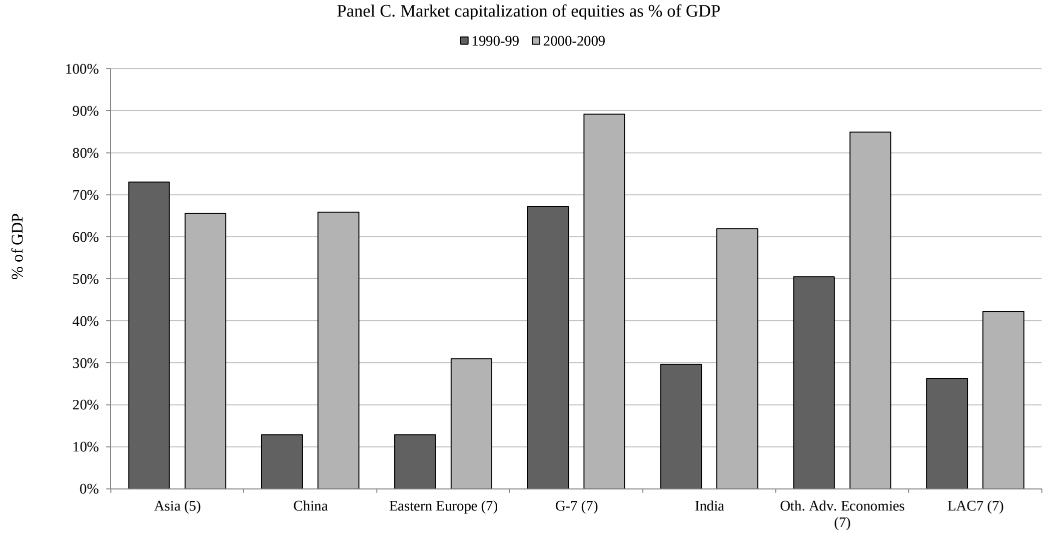
Panel A. Total assets of banks as % of GDP



Panel B. Market capitalization of bonds as % of GDP



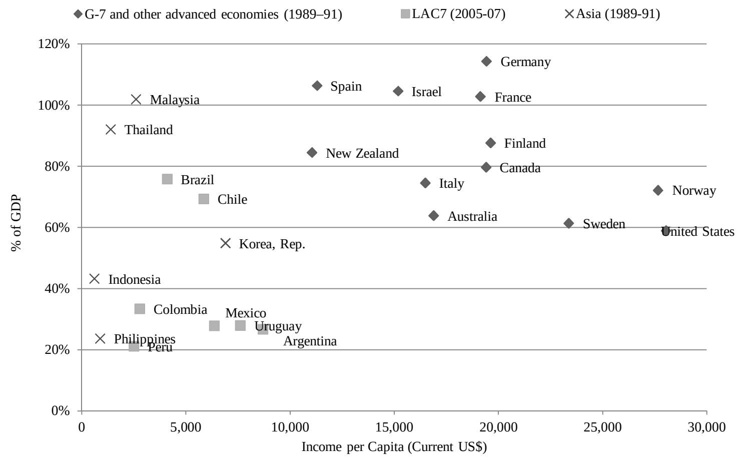
Panel C. Market capitalization of equities as % of GDP



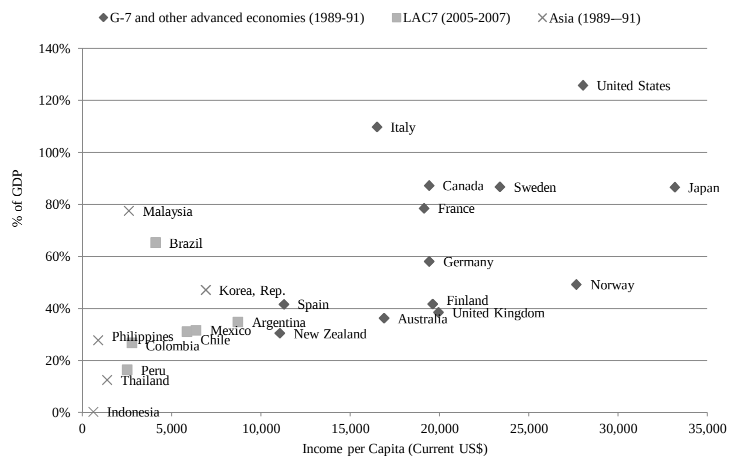
This figure shows in Panel A the average total banking claims as a percentage of GDP between 1980 and 2009. The statistics for China in the 1980-1989 period includes only banking claims to the private sector. Panel B shows the average market capitalization of outstanding bonds in domestic markets as a percentage of GDP between 1990 and 2009. Domestic bond securities are defined as those issued by residents in domestic currency and targeted at resident investors. Panel C the average market capitalization of domestic equity as a percentage of GDP between 1990 and 2009. Numbers in parentheses show the number of countries in each region. The data sources are the World Bank's World Development Indicators (WDI), Bloomberg (Panel A), the IMF´s International Financial Statistics (IFS) (Panel B), and the Bank for International Settlements (BIS).

Figure 2
Depth of Financial Systems and Income per Capita in Selected Countries

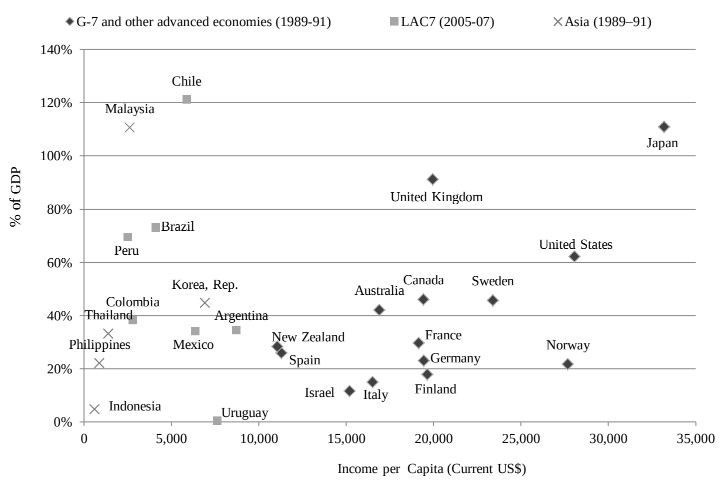
Panel A. Banks



Panel B. Bonds



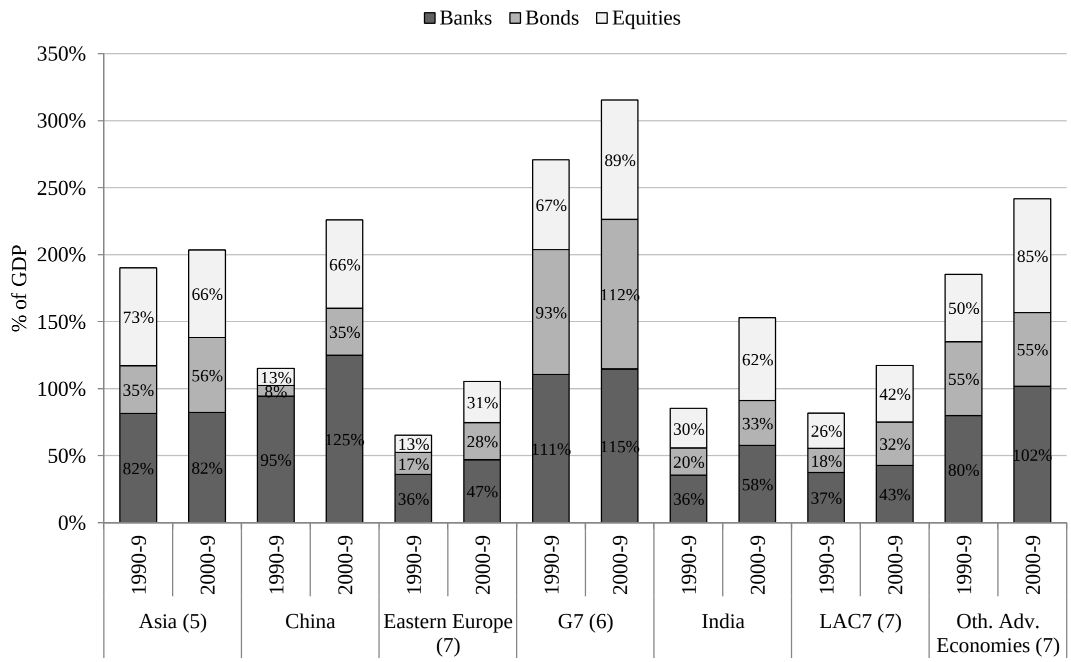
Panel C. Equities



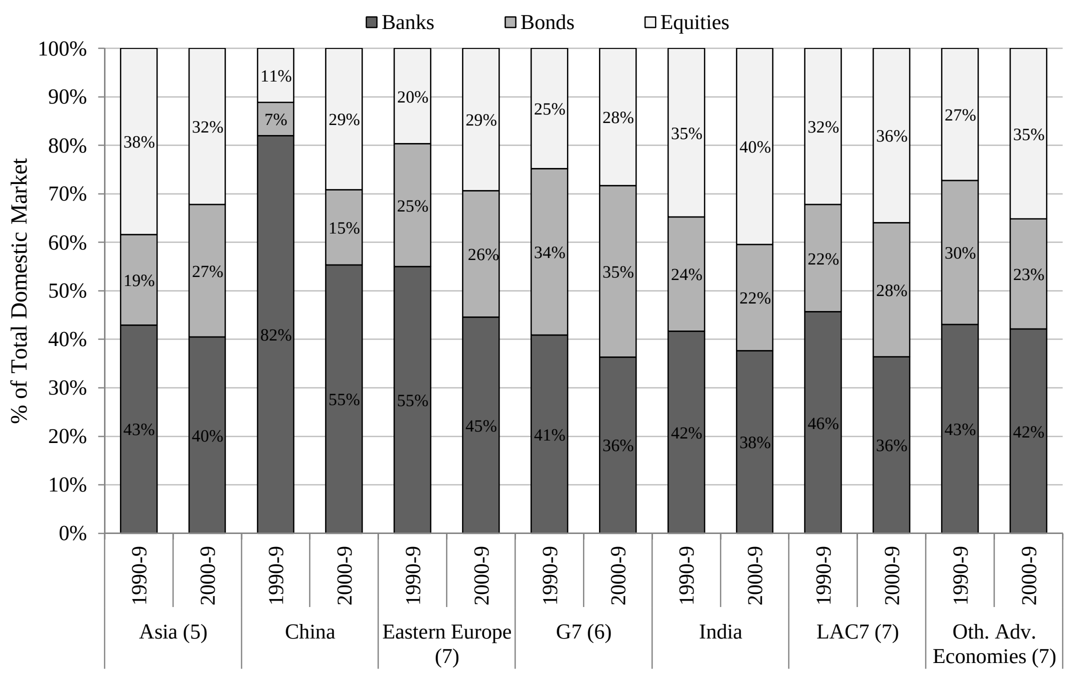
This figure shows the scatterplots of different financial development indicators and income per capita, measured in current US$. Panel A shows the average total banking claims as a percentage of GDP. Panel B shows domestic bonds outstanding as a percentage of GDP and Panel C, equity market capitalization as a percentage of GDP. "LAC7" includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. "G7" includes Germany, France, United Kingdom, Italy, and United States. "Oth. Adv. Economies" includes Australia, Spain, Finland, Israel, Norway, and New Zealand. "Asia" includes Indonesia, South Korea, Malaysia, Philippines, and Thailand. The data sources are the IMF's International Financial Statistics (IFS), Bank for International Settlements (BIS) and the World Bank's World Development Indicators (WDI).

Figure 3
Size of Different Financial Markets in Selected Countries and Regions, 1990–2009

Panel A. Size of domestic financial systems



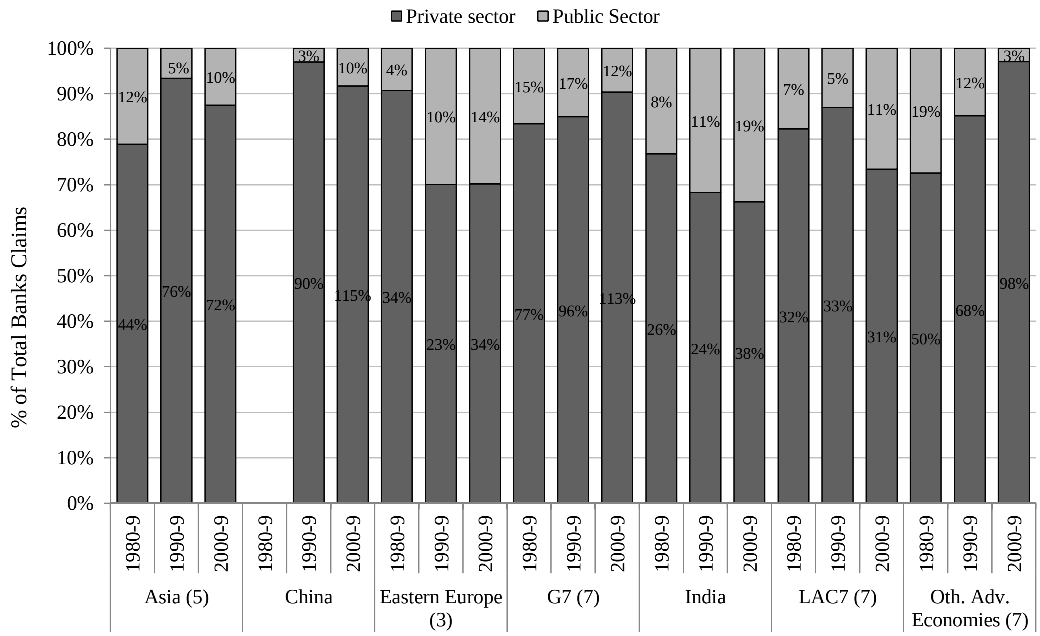
Panel B. Composition of domestic financial systems



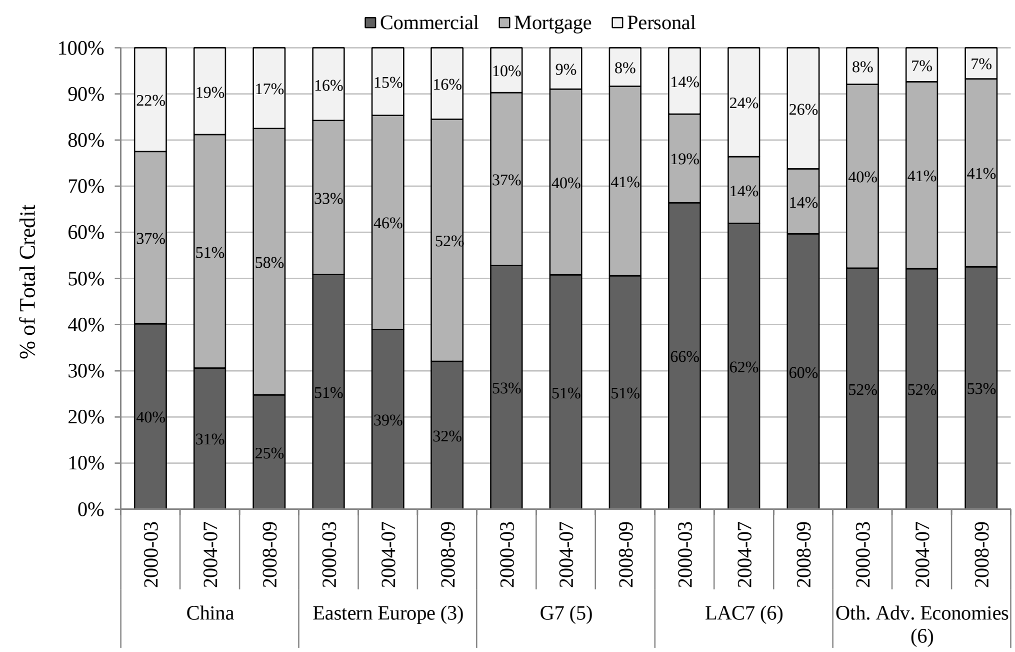
This figure shows the average size and structure of domestic financial systems between 1990 and 2009. Panel A shows total banking claims, outstanding bonds and equity market capitalization as a percentage of GDP. Panel B shows the same figures expressed as percentage of total domestic financial system. Numbers in parentheses show the number of countries in each region. The data sources are the IMF's International Financial Statistics (IFS), the Bank for International Settlements (BIS), and World Bank's World Development Indicators (WDI).

Figure 4
Nature of the Credit by Banks in Selected Countries and Regions, 1980–2009

Panel A. Lending to the private and public sectors



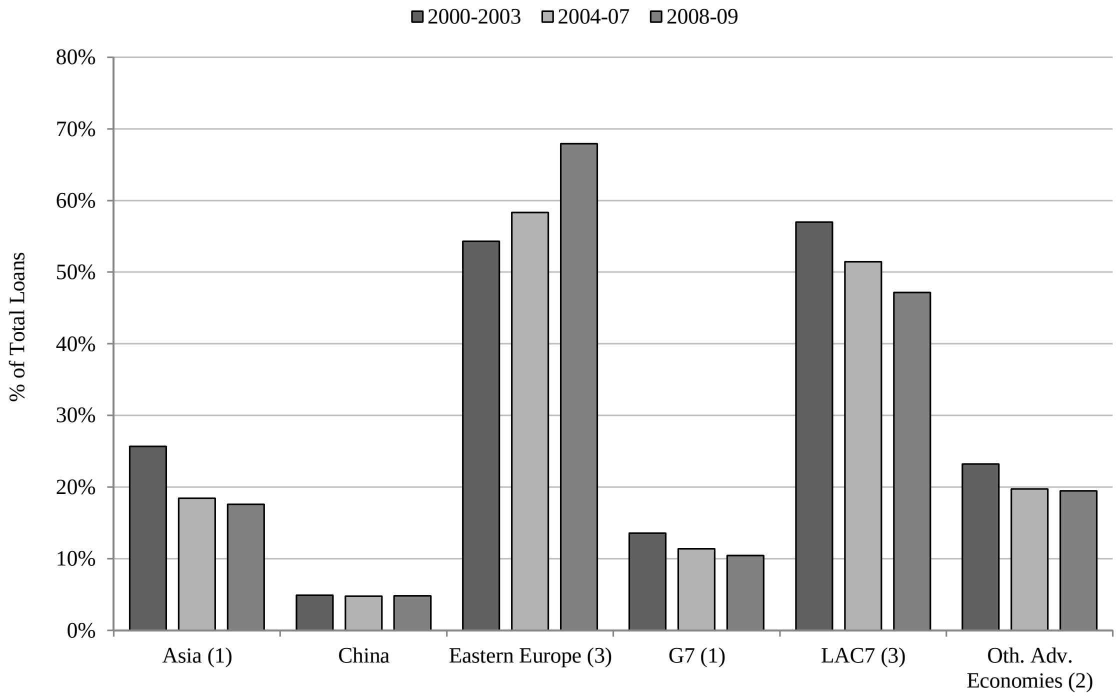
Panel B. Composition of bank credit



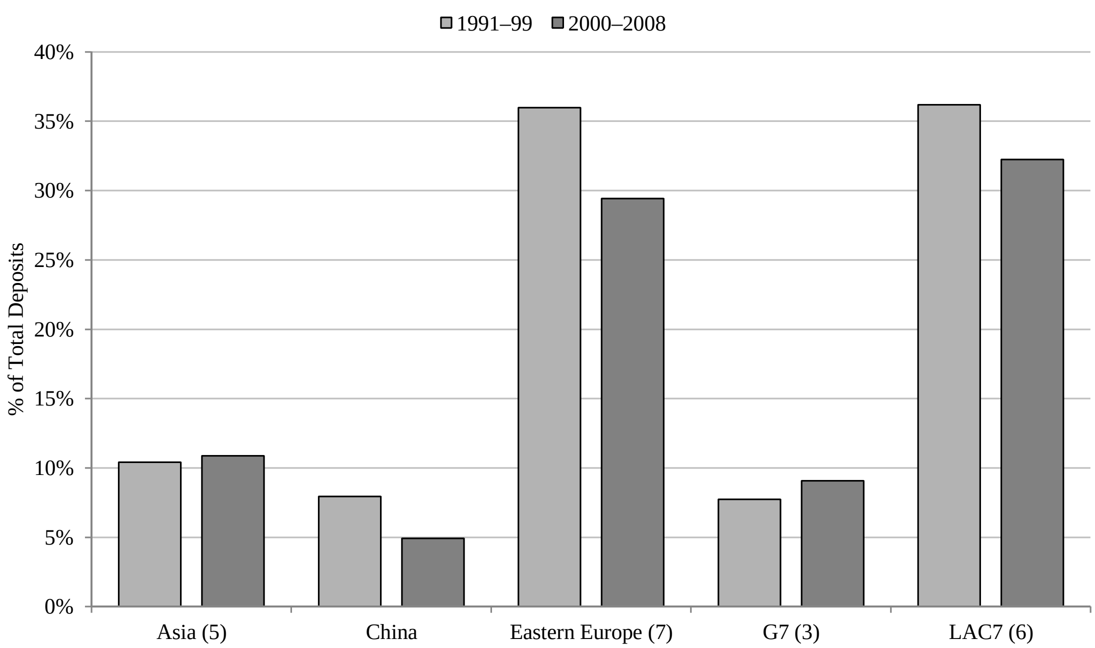
This figure shows in Panel A the average share of public sector and private sector on total banking claims between 1980 and 2009. The percentages shown within the bars represent the size of both public and private claims as a percentage of GDP. For China, the data on claims on the public sector are not available for the 1980-1989 period, hence no data is shown for this period. Panel B shows the average share of commercial, mortgage and personal credit as share of total banking credit. Numbers in parentheses show the number of countries in each region. The graphs were constructed using local sources (Panel A and B) and IMF´s International Financial Statistics (IFS) (Panel A).

Figure 5
Dollarization of the Banking System in Selected Countries and Regions, 2000–2009

Panel A. Foreign currency loans as % of total loans



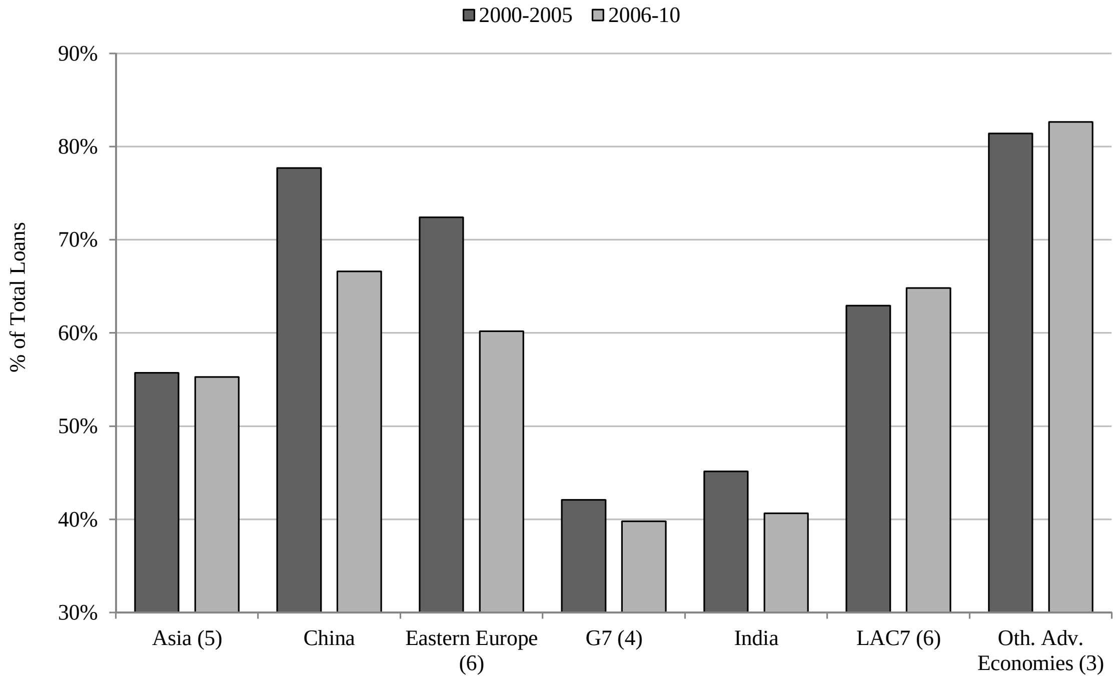
Panel B. Foreign currency deposits as % of total deposits



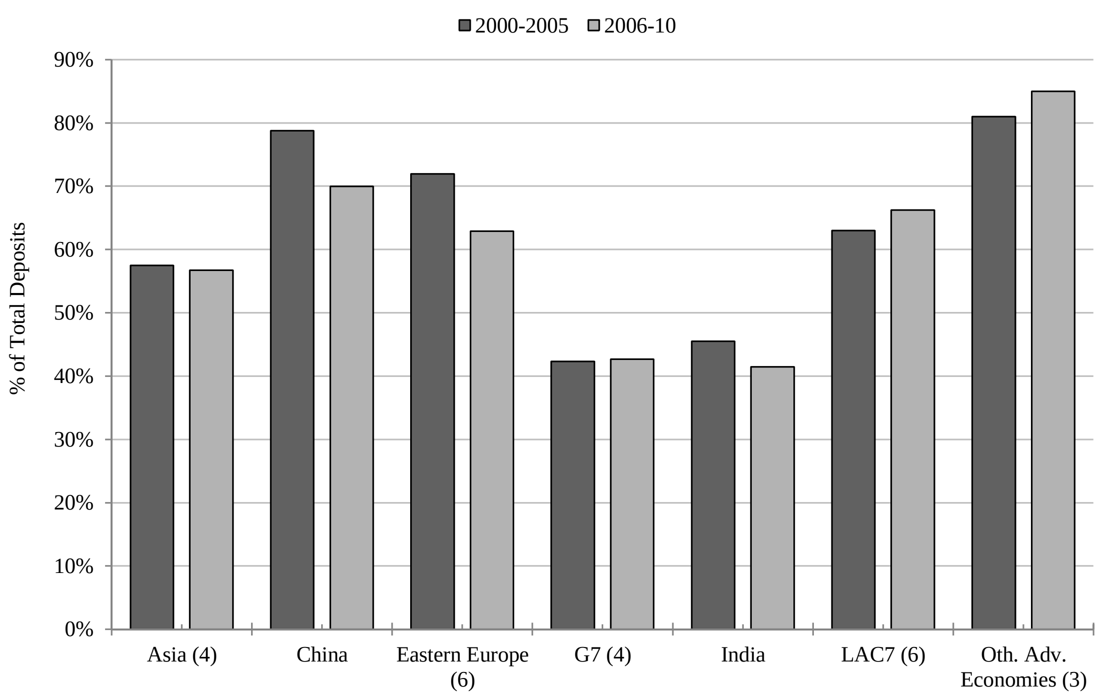
This figure shows the extent of dollarization of banking loans and deposits. Panel A shows foreign currency denominated loans as share of total loans averaged between 2000 and 2009. Panel B shows the extent of deposit dollarization as share of total deposits averaged between 1991 and 2008. Numbers in parentheses show the number of countries in each region. The data source is the IMF's International Financial Statistics (IFS).

Figure 6
Concentration of Banking Systems in Selected Countries and Regions, 2000–2010

Panel A. Loans by top five banks as % of total loans



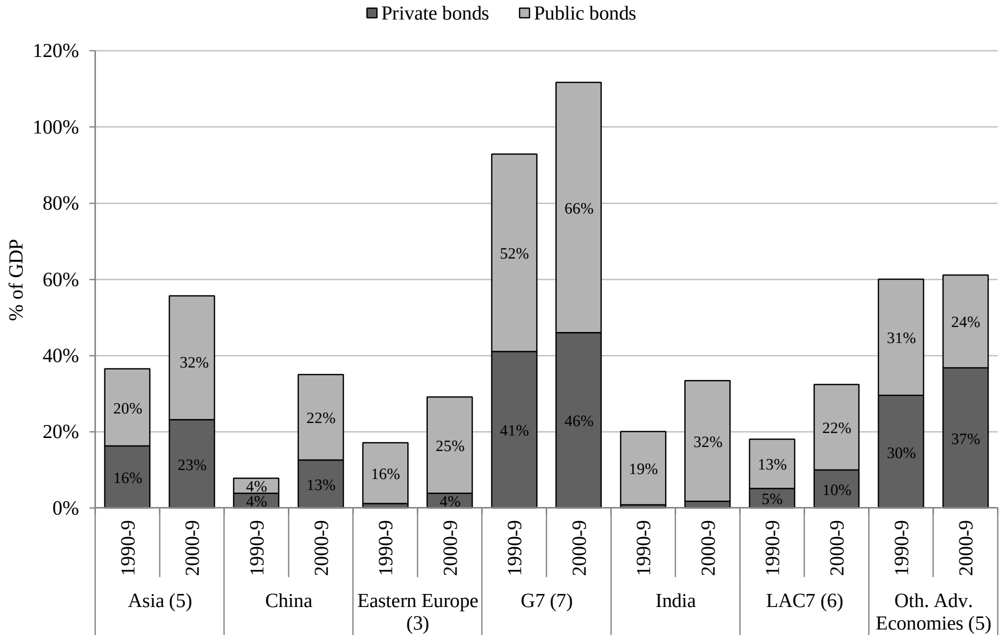
Panel B. Deposits in top five institutions as % of total deposits



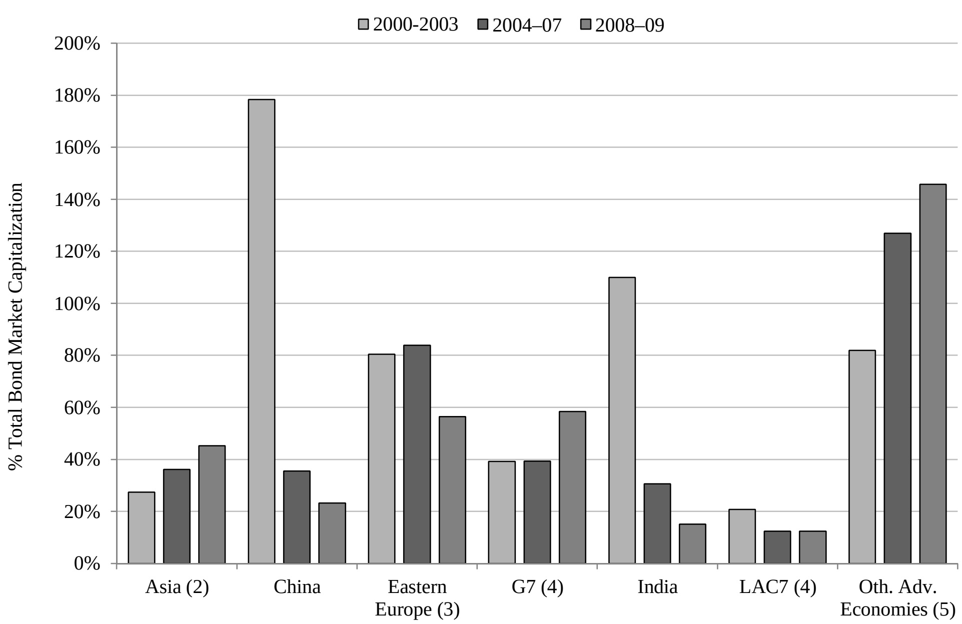
This figure shows the degree of bank concentration across regions. Panel A shows the annual average of total credit granted by the top-5 banks as share of total credit between 2000 and 2010. Panel B shows the annual average of total deposits in the top-5 banks as share of total deposits between 2000 and 2010. Numbers in parentheses show the number of countries in each region. The data source is Bankscope.

Figure 7
Bond Markets in Selected Countries and Regions, 1990–2009

Panel A. Composition of bond markets



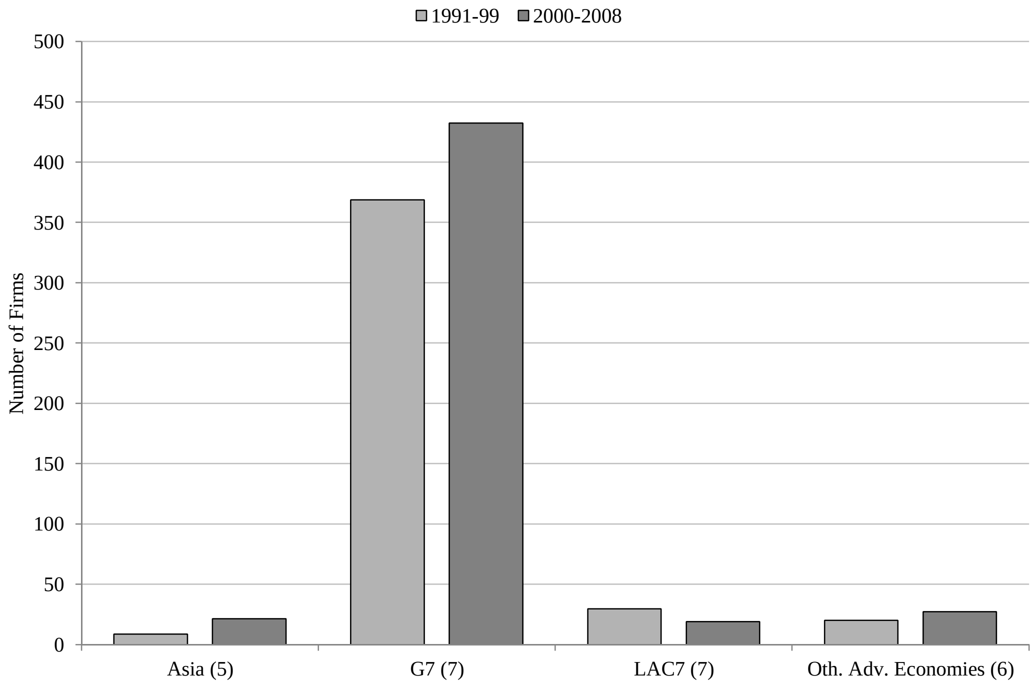
Panel B. Bond market turnover



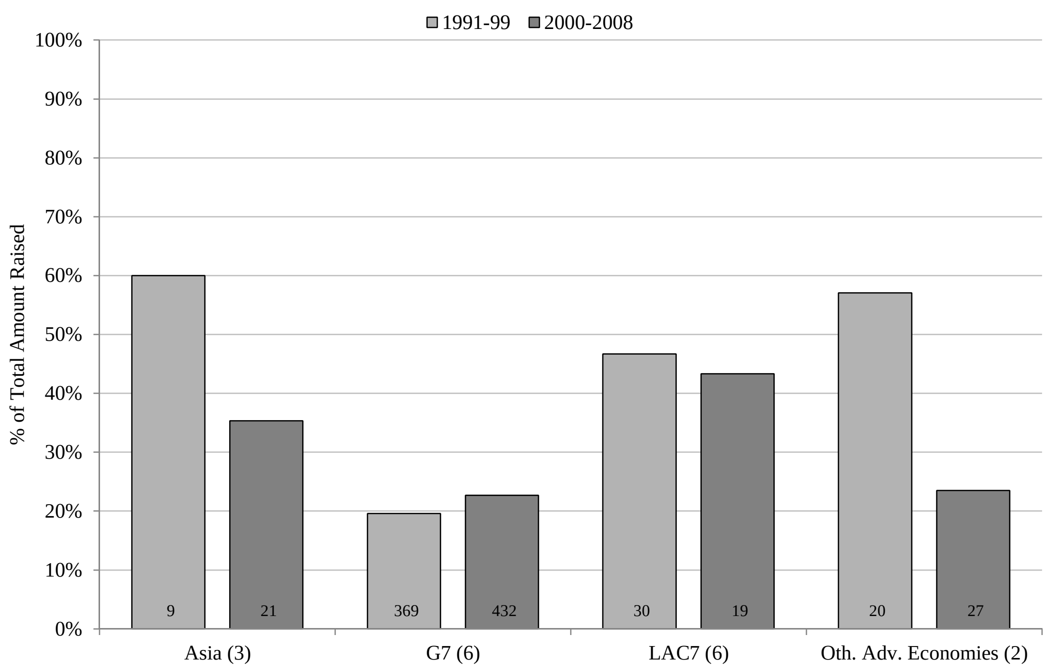
This figure shows in Panel A the average size of private and public bonds outstanding in domestic markets as a percentage of GDP between 1990 and 2009. Domestic bonds securities are defined as those issued by residents in domestic currency and targeted at resident investors. Panel B shows the average value of bond market trading as share of total bond market capitalization. Trading data includes domestic private, domestic public and foreign bonds traded in local stock exchanges. Numbers in parentheses show the number of countries in each region. The data source is the Bank for International Settlements (BIS) (Panel A), and the World Federation of Exchanges (WFE) (Panel B).

Figure 8
Participation in Private Bond Markets by Selected Regions and Economies, 1991–2008

Panel A. Average number of firms issuing bonds



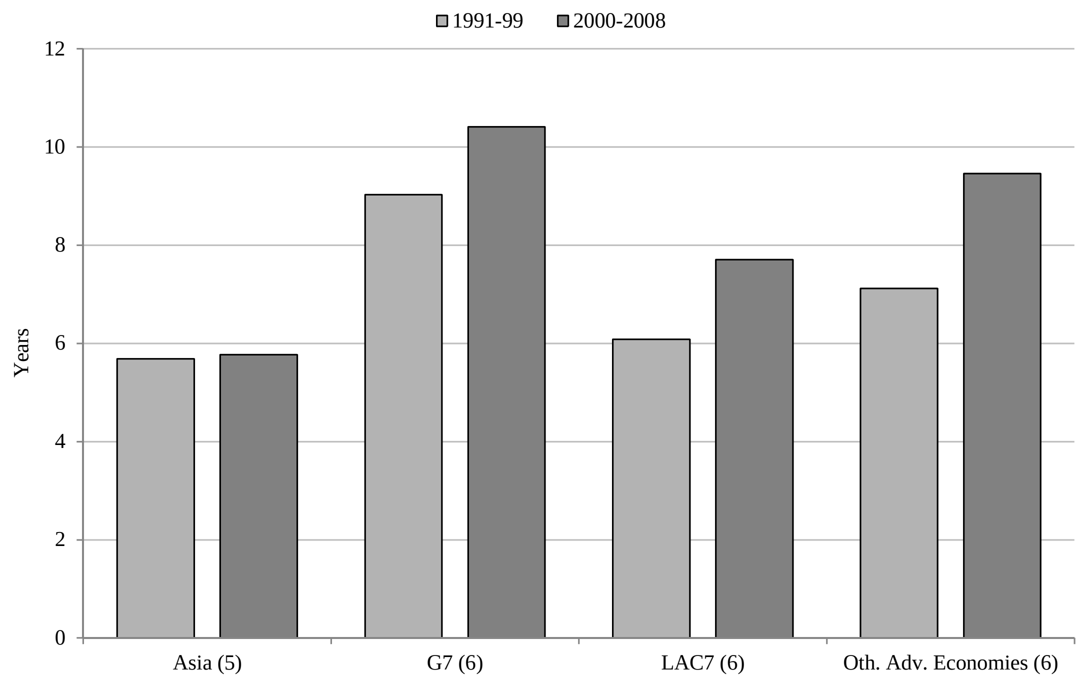
Panel B. Concentration (amount raised by top five issuers as % total amount raised)



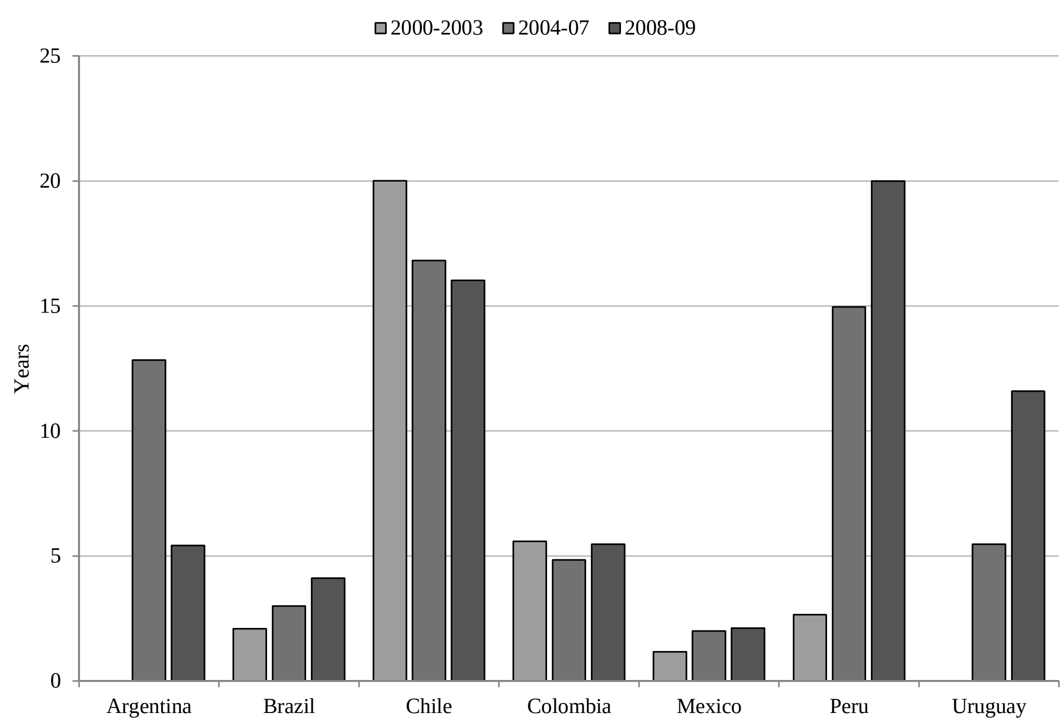
This figure shows in Panel A the average number of firms issuing bonds per year in domestic markets between 1990 and 2008. Panel B shows the average yearly amount raised by the top-5 issues in domestic bond markets as share of the total amount raised by firms in domestic bond markets. The average number of firms issuing bonds per year in domestic markets is reported at the bottom of the bars. Numbers in parentheses show the number of countries in each region. The data source is SDC Platinum.

Figure 9
Average Maturity of Bonds at Issuance in Selected Regions and Economies, 1991-2008

Panel A. Private sector



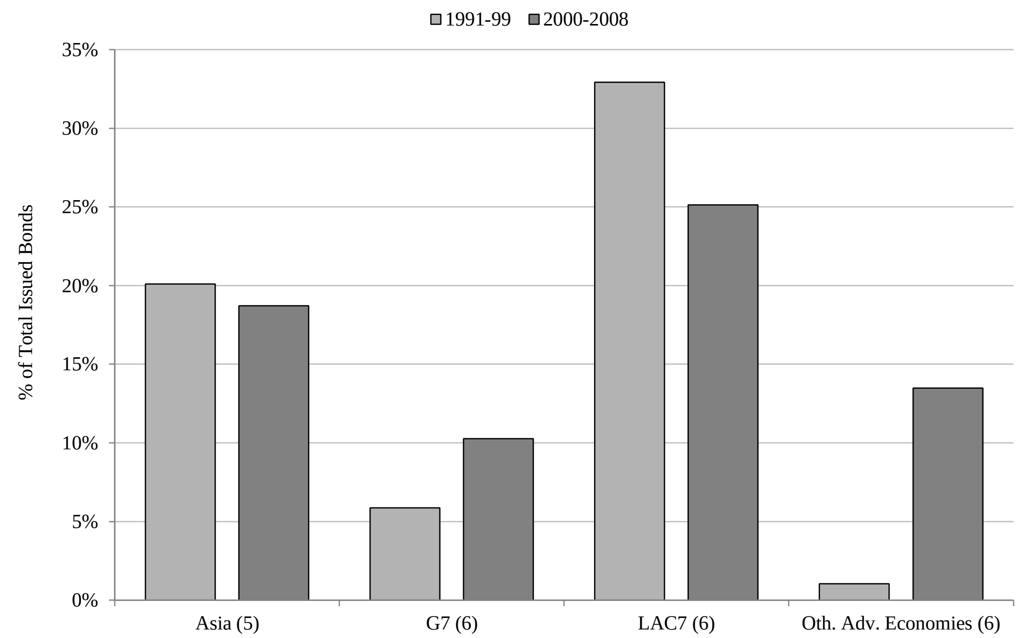
Panel B. Public sector



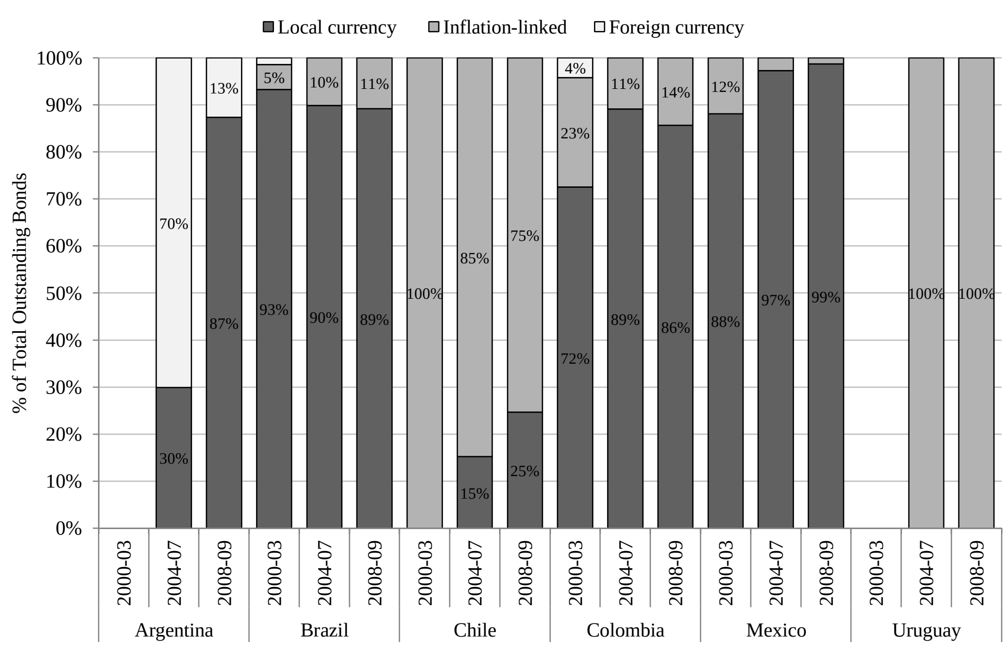
This figure shows the weighted average maturity of bond issuances per year in domestic markets, expressed in years. Panel A shows the data for the private sector for the period 1991-2009. Panel B shows the data for the public sector, for 2000-2009. Numbers in parentheses show the number of countries in each region. The data source is SDC Platinum (Panel A) and local Central Banks (Panel B).

Figure 10
Currency Composition of Bonds at Issuance in Selected Regions and Economies, 1991−2009

Panel A. Foreign currency bnonds as % of total issued bonds in the private sector

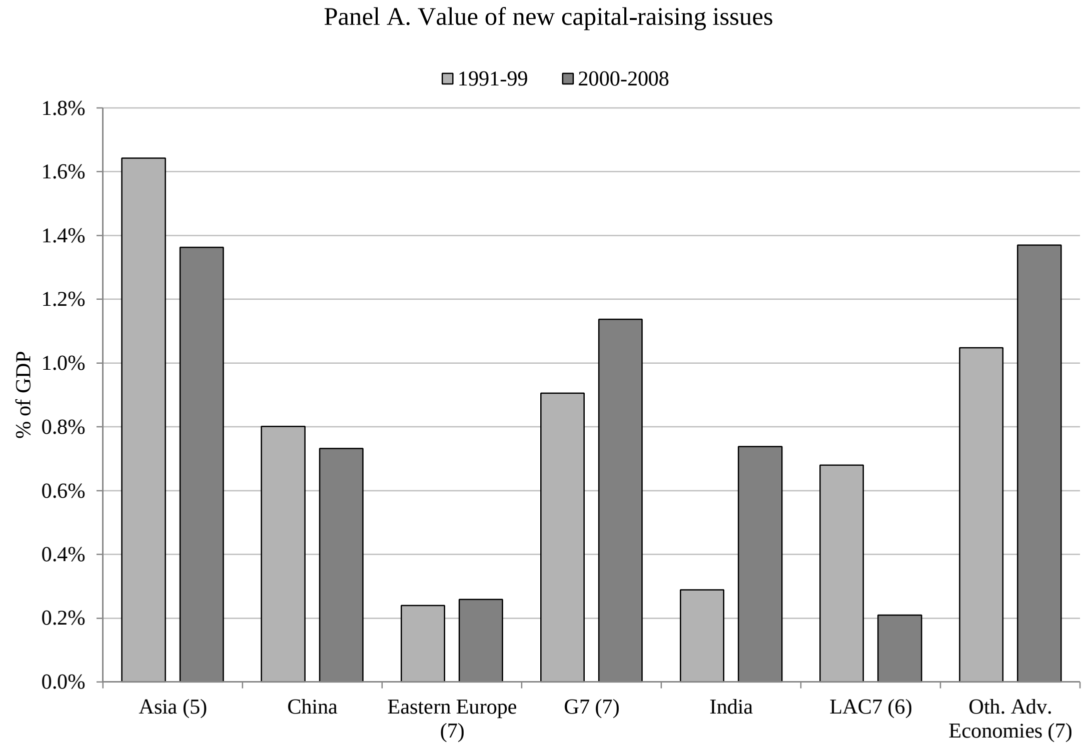


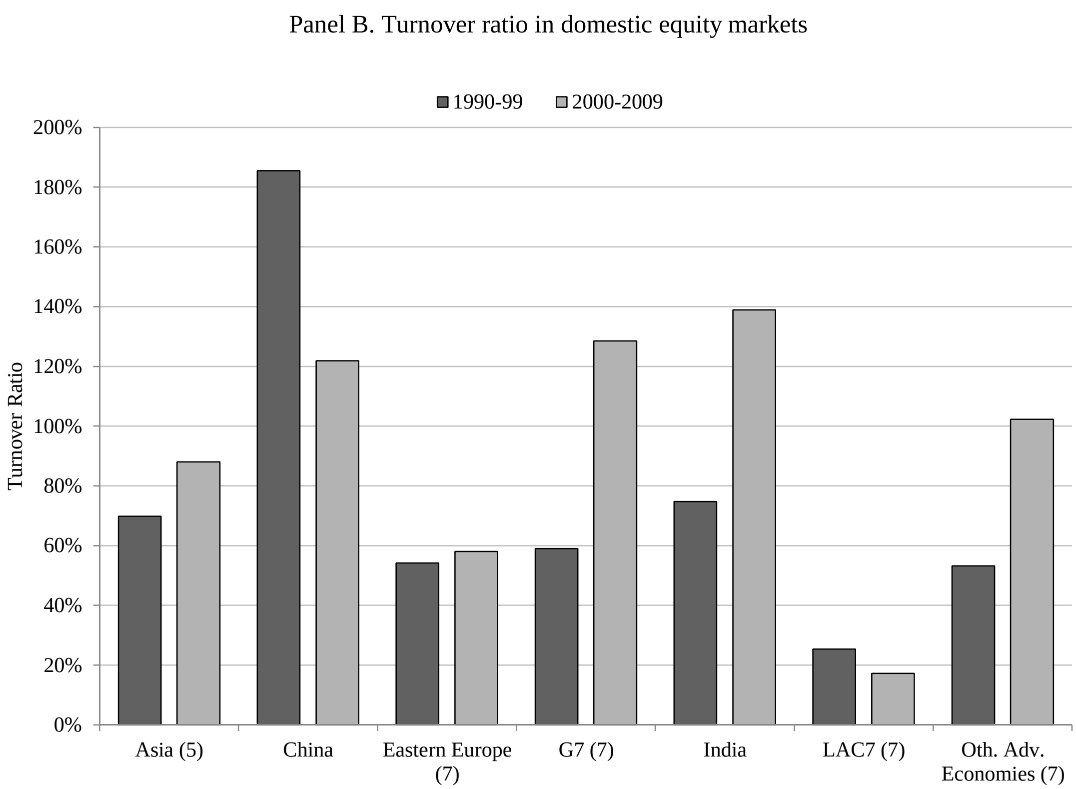
Panel B. Local currency, foreign currency, and inflation-liked bonds as a % of total outstanding bonds in the public sector



This figure shows the currency composition of domestic private and public bonds at issuance. Panel A shows the average share of foreign currency denominated bonds as a percentage of total bonds issued by the private sector in domestic markets per year between 1991 and 2008. Numbers in parentheses show the number of countries in each region. Panel B shows the composition of domestic public bond issued on average per year (between local currency, foreign currency, and inflation-linked bonds) over the period 2000 and 2009. The data sources are SDC Platinum (Panel A) and local Central Banks (Panel B).

Figure 11
Activity in Equity Markets, 1990–2009

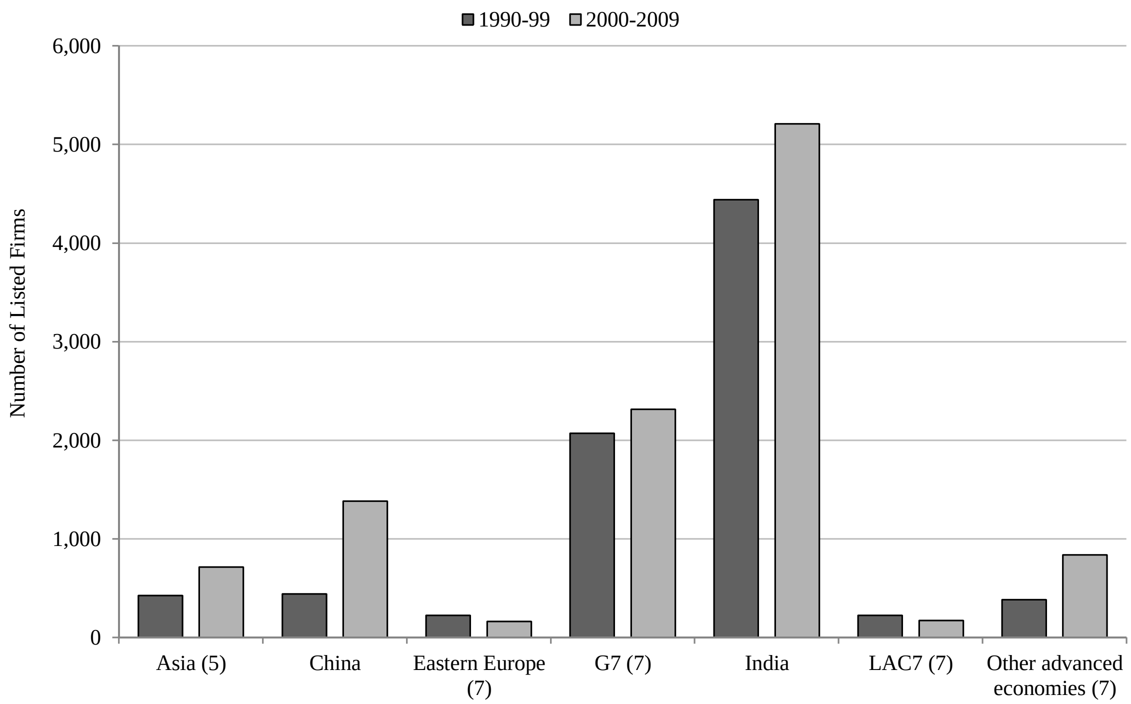




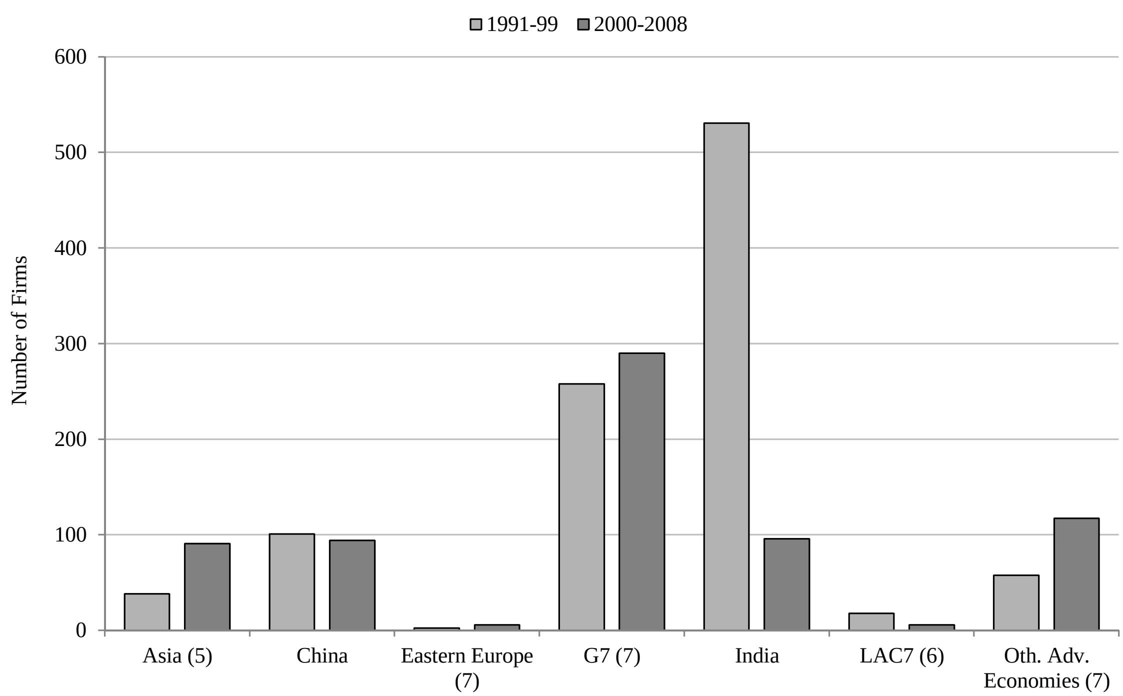
This figure shows in Panel A the average amount of capital raising equity issues as a percentage of GDP between 1991 and 2008. Panel B shows the average turnover ratios, defined as the total value traded per year in domestic markets over total market capitalization, between 1990 and 2009. Numbers in parentheses show the number of countries in each region. The data source is SDC Platinum (Panel A) and the World Bank's World Development Indicators (WDI) (Panel B).

Figure 12
Firm Activity in Equity Markets, 1990-2009

Panel A. Number of listed firms in domestic markets



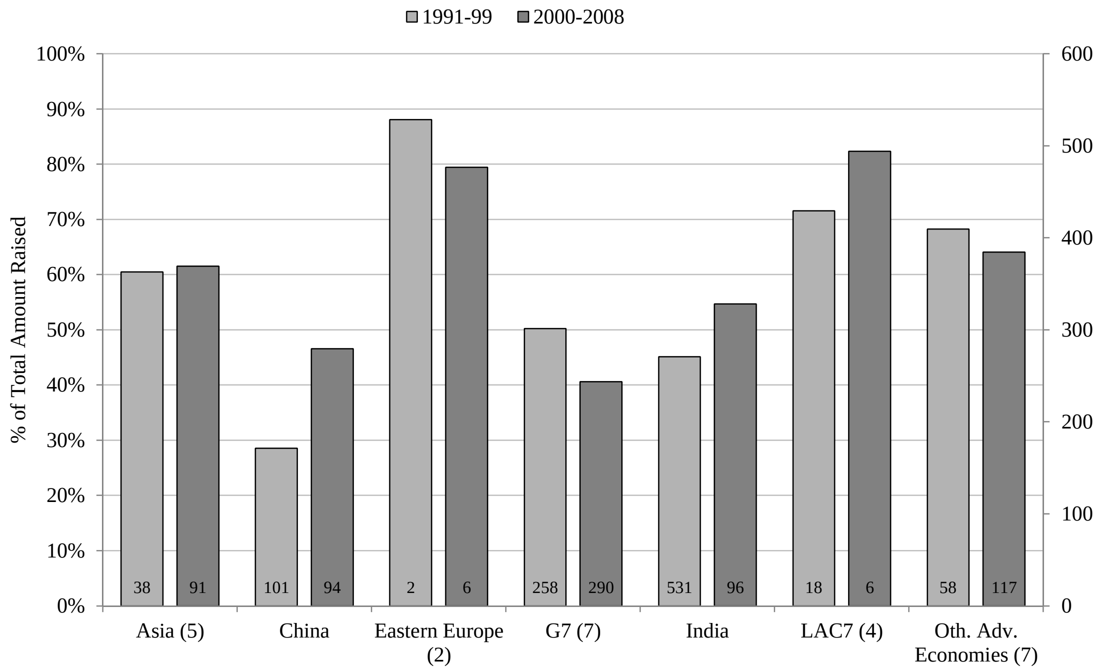
Panel B. Average number of firms raising equity capital per year



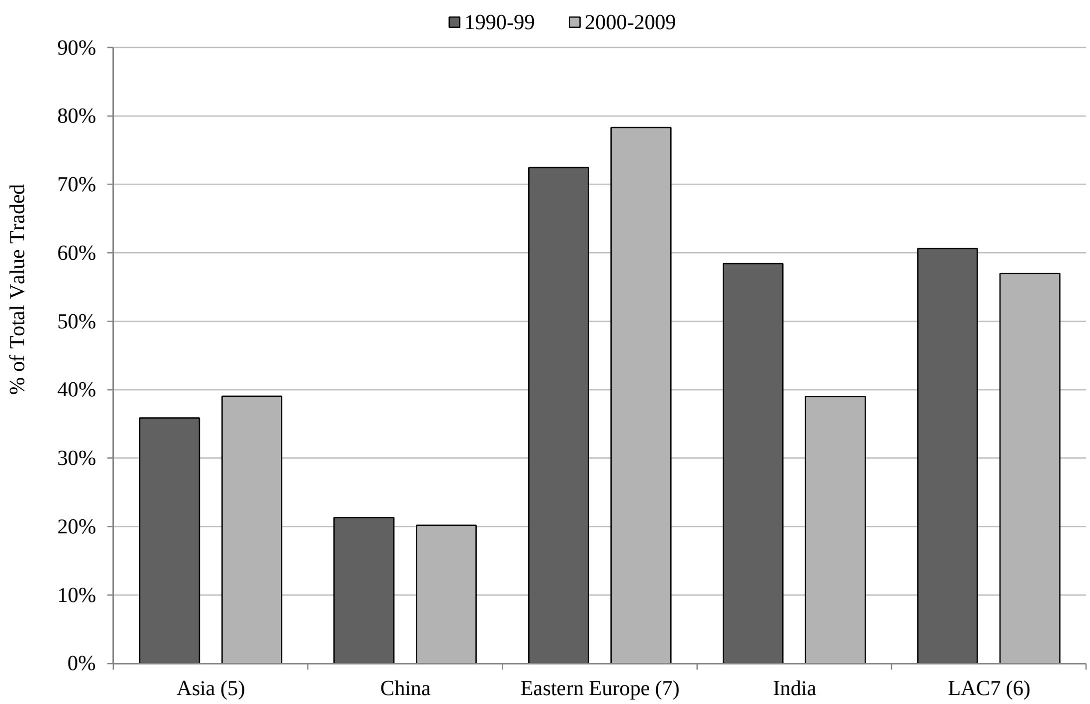
This figure shows in Panel A the average number of listed firms between 1990 and 2009. Panel B shows the total number of firms issuing equity per year between 1990 and 2009. Numbers in parentheses show the number of countries in each region. The data source is the World Bank's World Development Indicators (WDI) (Panel A) and SDC Platinum (Panel B).

Figure 13
Concentration in Equity Markets in Selected Regions and Economies, 1991-2009

Panel A. Share of amount raised by the top five issuers as % of total amount raised

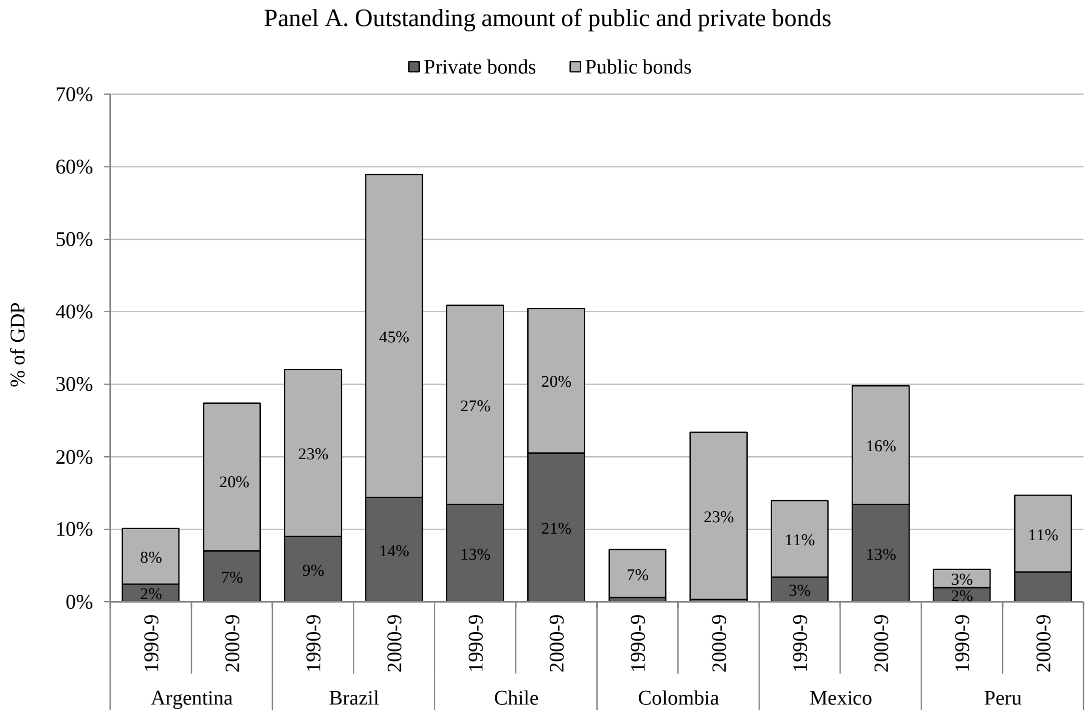


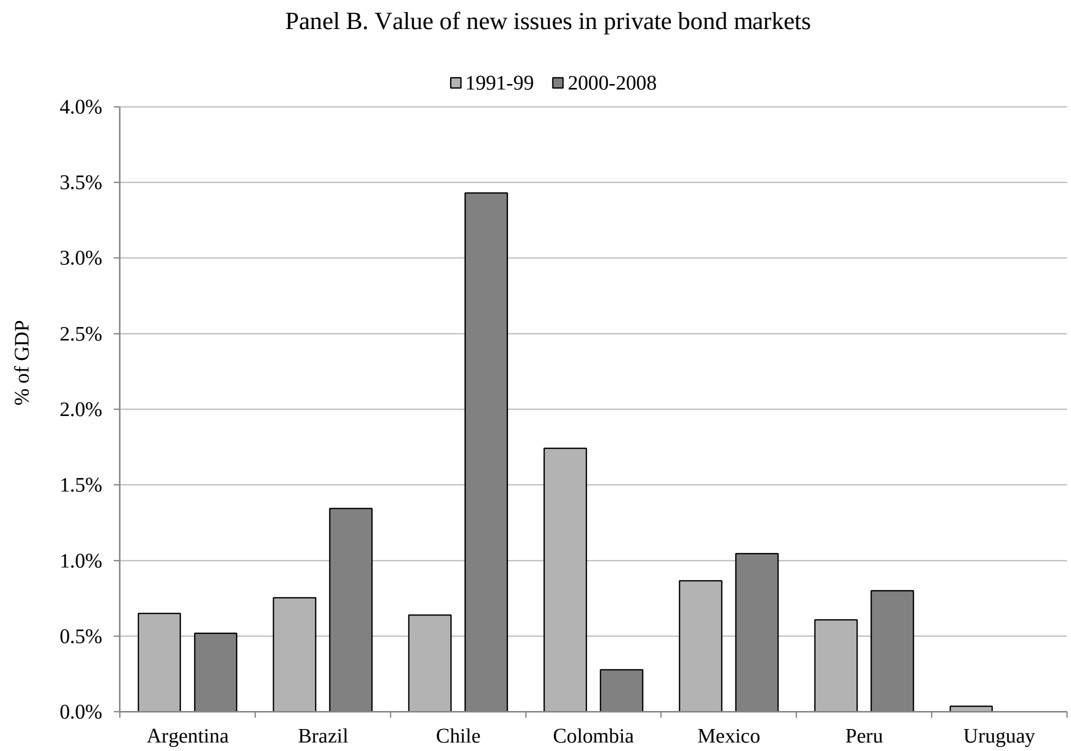
Panel B. Value traded by the top five companies as % of total value traded



This figure shows the concentration in equity market activity. Panel A shows the average amount raised per year by the top-5 issues as a share of total issues between 1991 and 2008. Numbers in the base of the bars represent the average number of issues per year. Panel B shows the average share of value traded by the top-5 companies as share of the total value traded per year between 1990 and 2009. Numbers in parentheses show the number of countries in each region. The data sources are the Emerging Markets Database (EMDB) and the World Bank's World Development Indicators (WDI).

Figure 14
Public and Private Bond Markets across LAC7 Countries, 1990-2008

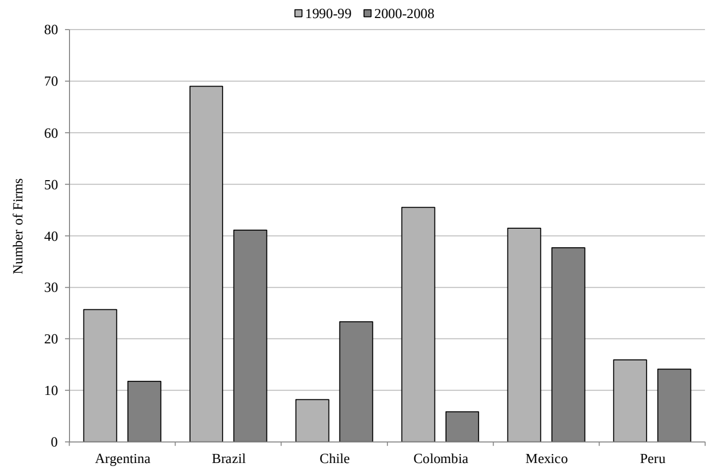




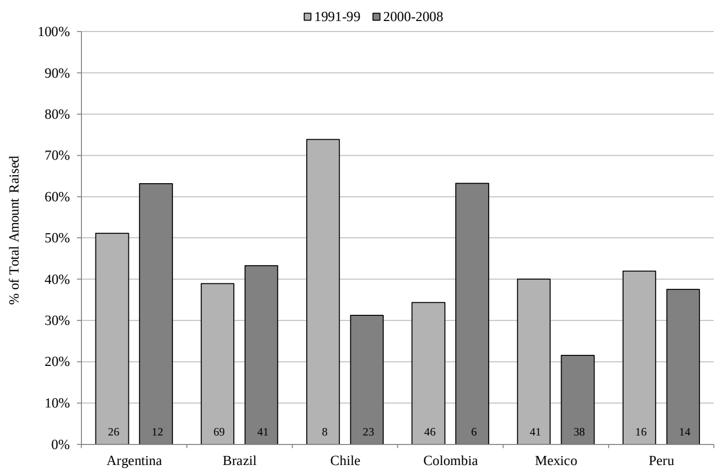
This figure shows the composition of domestic bond markets between public and private bonds. Domestic bonds are defined as those that have been issued by residents in domestic currency and targeted at resident investors. Panel A shows the average outstanding amount of private and public bonds in the domestic markets as a percentage of GDP between 1990 and 2009. Panel B shows the average amount of new private bond issues per year as a percentage of GDP between 1990 and 2008 in LAC7 countries. The data sources are the Bank for International Settlements (BIS) and SDC Platinum.

Figure 15
Activity in Private Bonds Markets in LAC7 Countries, 1990-2008

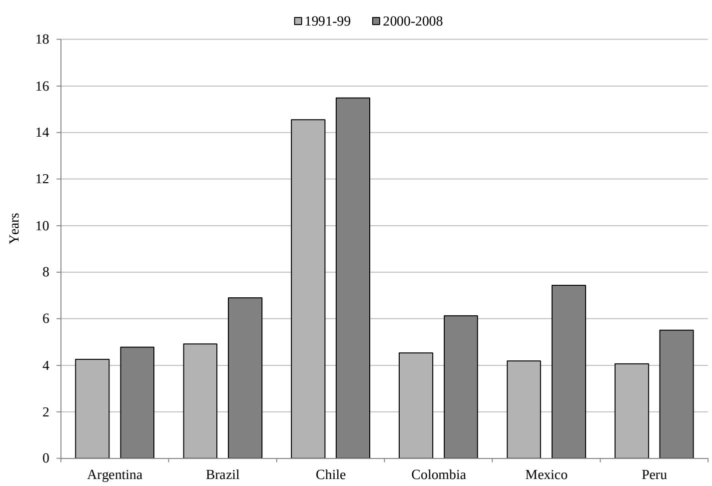
Panel A. Total number of firms issuing bonds per year



Panel B. Value raised by top five issuers as % of total value raised

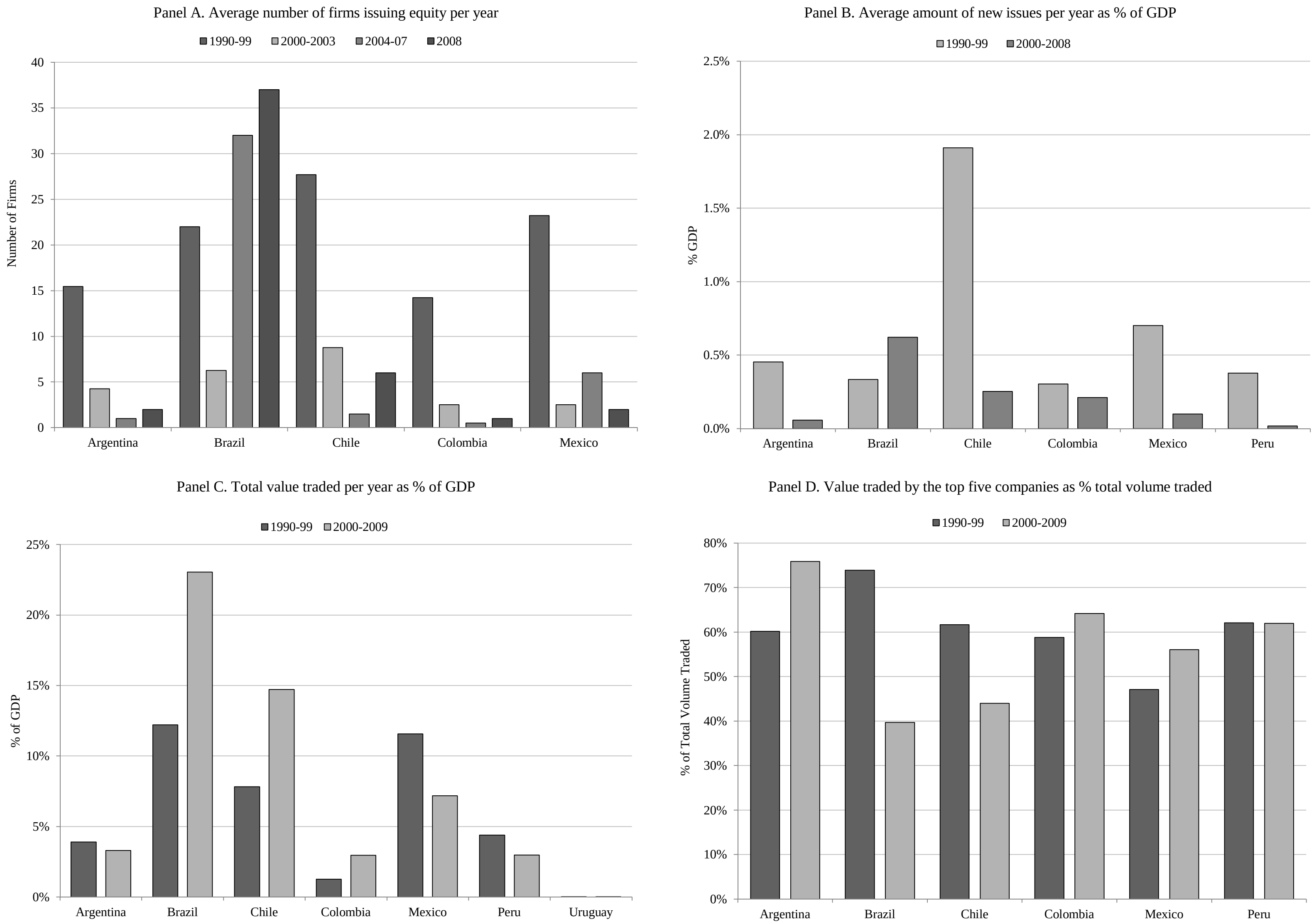


Panel C. Average maturity at issuance in years



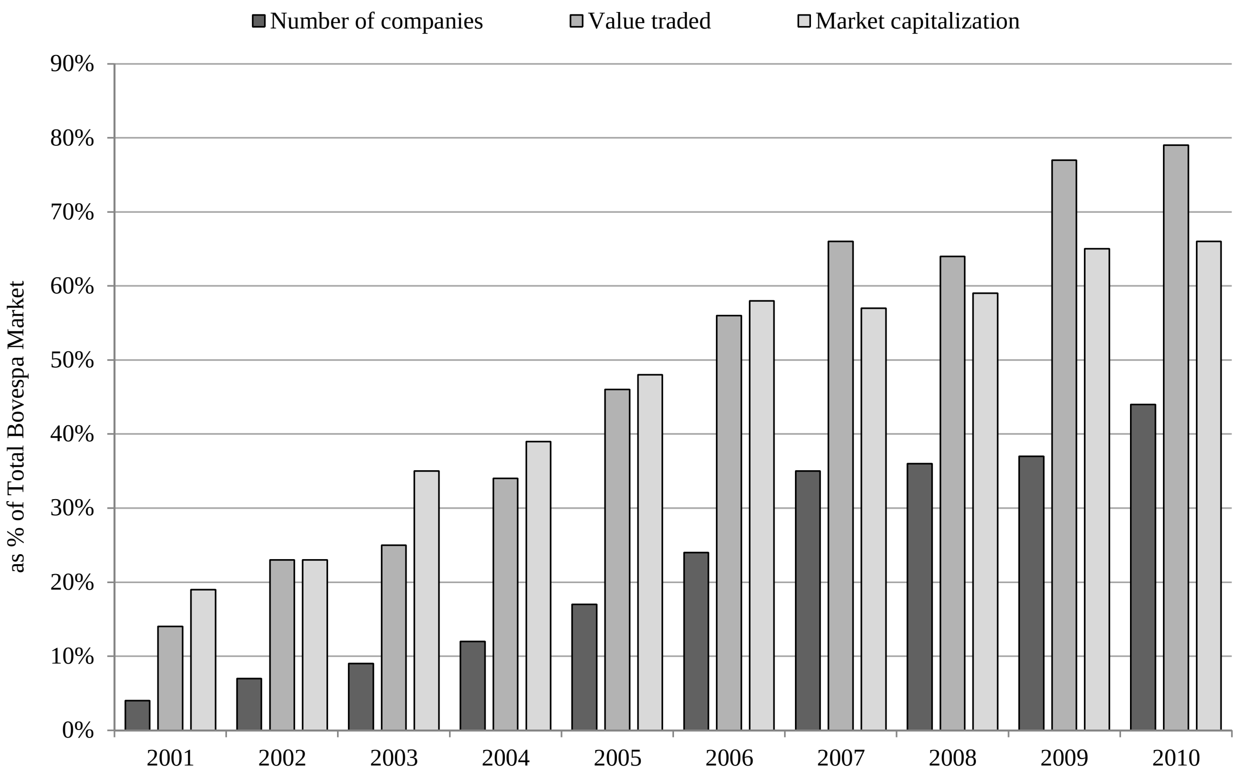
This figure shows in Panel A the average number of firms. Panel B shows the amount raised by the top-5 issues as share of the total amount raised on average per year between 1991 and 2008 in "LAC7" countries. Numbers at the bottom of the bars represent the average number of issues per year. Panel C shows the average maturity of private bonds at issuance between 1990 and 2008 in “LAC7” countries. The data source is SDC Platinum.

Figure 16
Activity in Equity Markets Selected LAC7 Countries, 1990-2009



This figure shows the activity in equity markets across LAC7 countries. Panel A shows the average number of firms issuing equity per year between 2000 and 2008. Panel B shows the average amount of new equity issues per year as a percentage of GDP between 1990 and 2008. Panel C shows the total value traded in equity markets per year as a percentage of GDP between 1990 and 2008. Panel D shows the average share of the value traded by top-5 companies as share of total value traded in domestic equity markets between 1990 and 2008 among LAC7 countries. The data sources are SDC Platinum, World Bank's World Development Indicators (WDI), and Emerging Markets Database (EMDB).

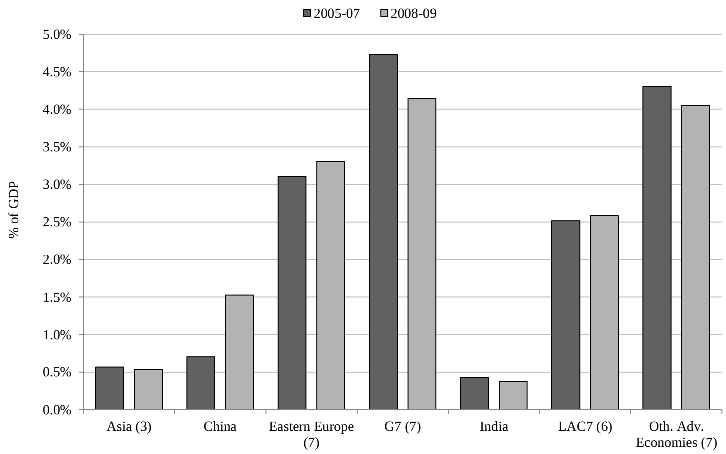
Figure 17
Corporate Governance Segments as Percentage of Total Bovespa Market, 2001-2010



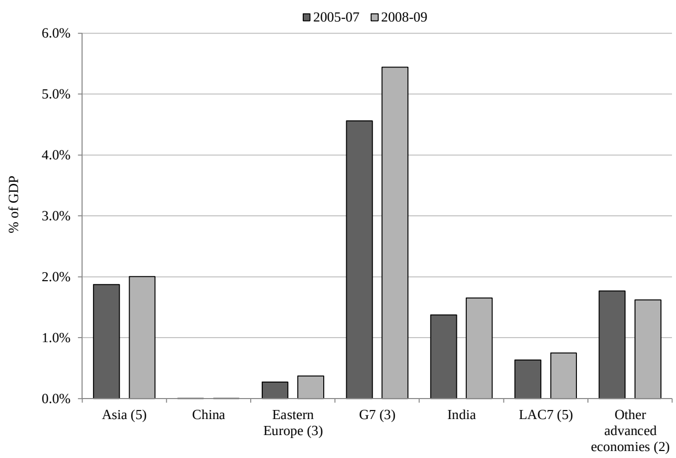
This figure shows the participation of the new corporate governance segments of Bovespa as a percentage of Bovespa in terms of the number of companies, value traded, and market capitalization. The data source is Bovespa.

Figure 18
Alternative Markets and Products in Selected Regions and Economies, 2005-10

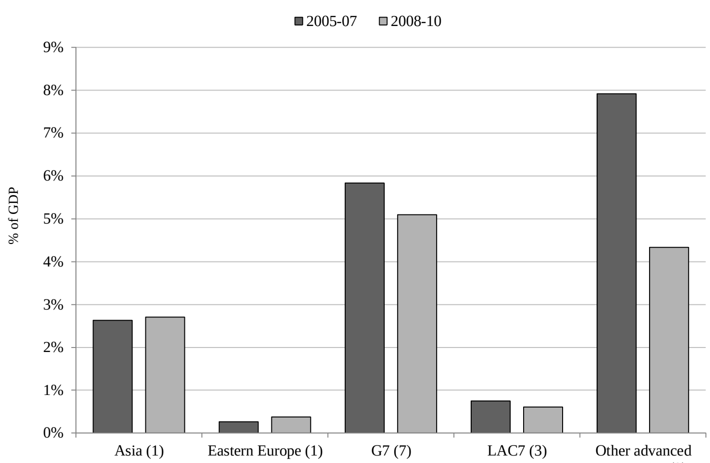
Panel A. Total annual volume of factoring



Panel B. Total annual credit provided by financial cooperatives and credit unions



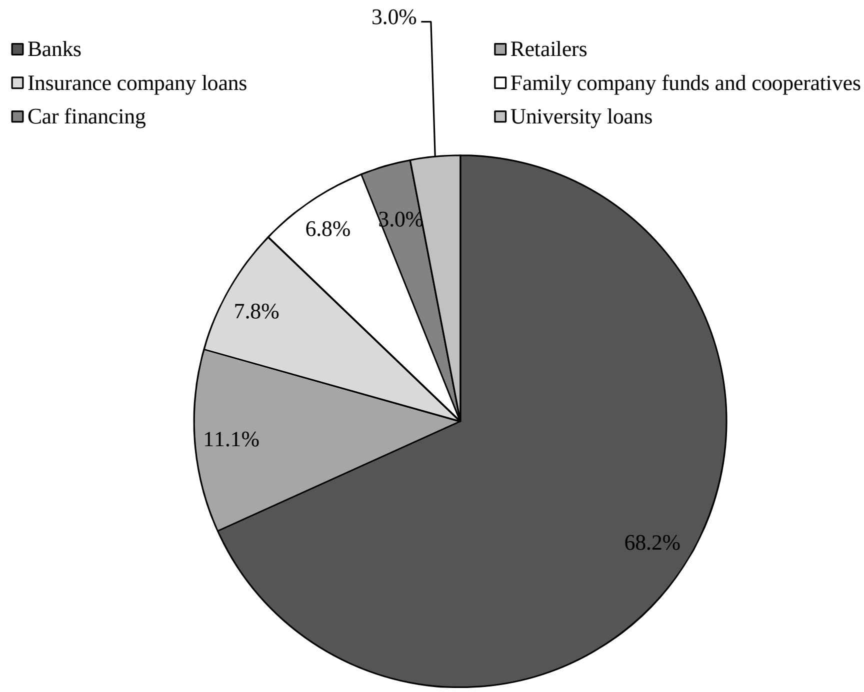
Panel C. Annual gross issuance of securitized assets



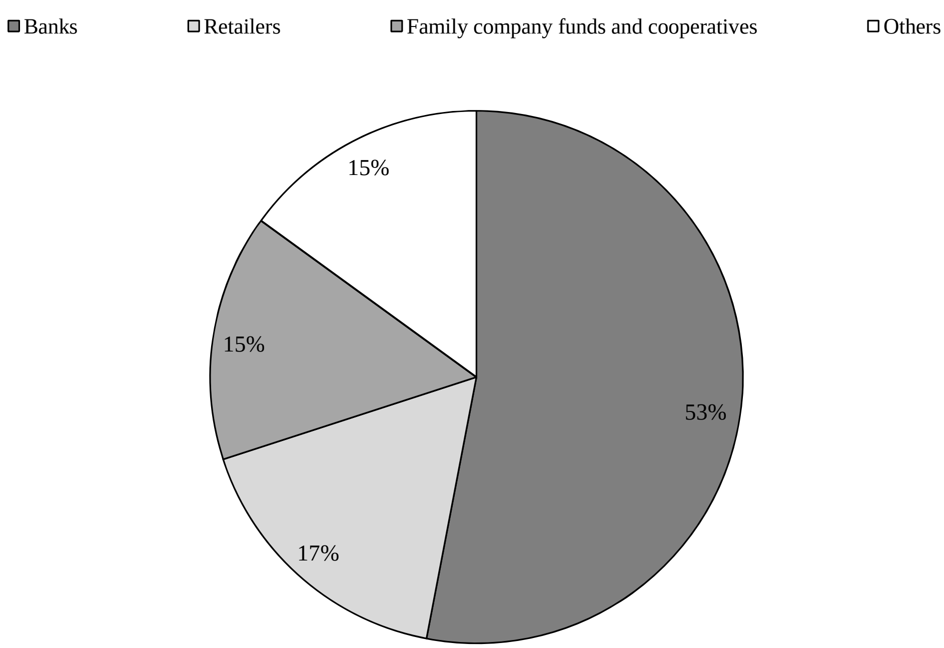
This figure shows in Panel A the average yearly turnover as a percentage of GDP in factoring markets between 2005 and 2009. Panel B shows the credit provided by not-for-profit cooperative institutions as a percentage of GDP. The number of institutions are reported at the bottom of the bars. Panel C shows the average annual gross securitization issuance between 2005 and 2010 as a percentage of GDP. Numbers in parentheses show the number of countries in each region. The data sources are Factors Chain International (FCI) (Panel A), World Council of Credit Unions (Panel B), the Reserve Bank of Australia, The Bank of Canada, Fitch Ratings, Thomson Reuters, TheCityUK Securitization, SIFMA, and Moody's Investors Service (Panel C).

Figure 19
Providers of Household and Consumer Credit in Chile, 2008

Panel A. Household debt



Panel B. Consumer debt

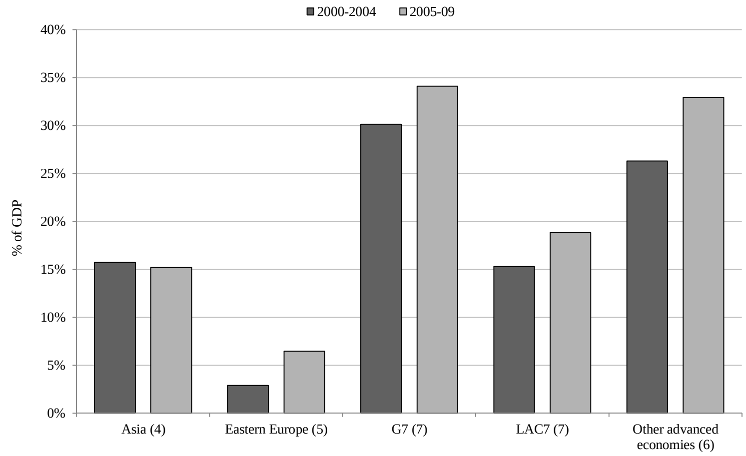


This figure shows credit by retailers in Chile in December 2008. Panel A shows the total household debt. Panel B shows the total consumer debt. The figures where constructed using local sources.

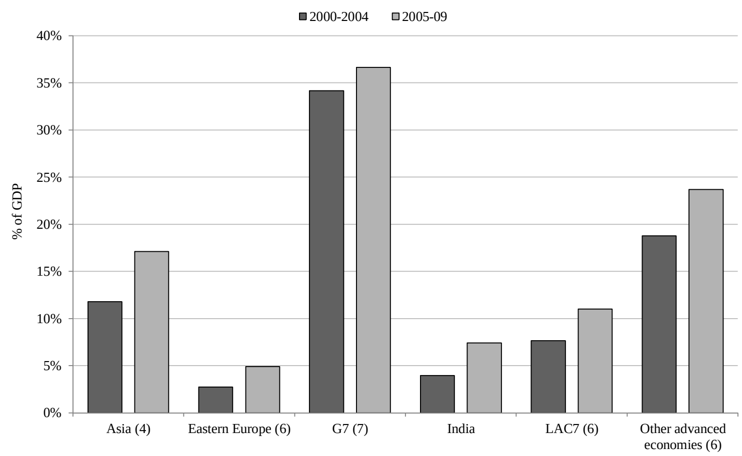
Figure 20

Assets of Pension Funds, Mutual Funds, and Insurance Companies in Selected Regions and Economies, 2000-2009

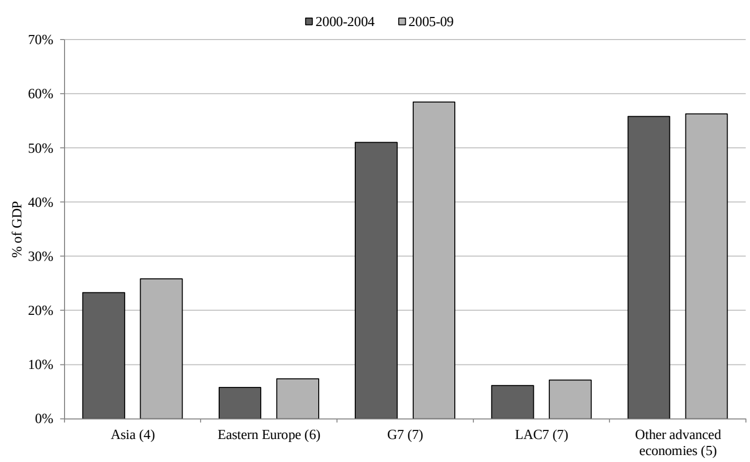
Panel A. Pension funds



Panel B. Mutual funds



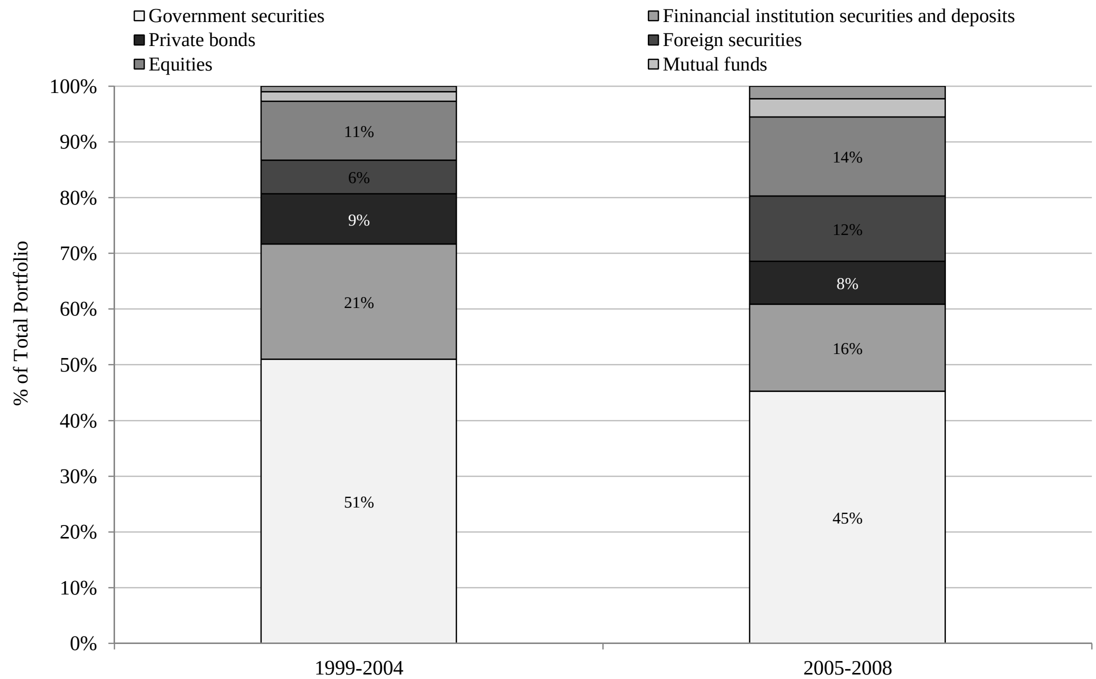
Panel C. Insurance companies



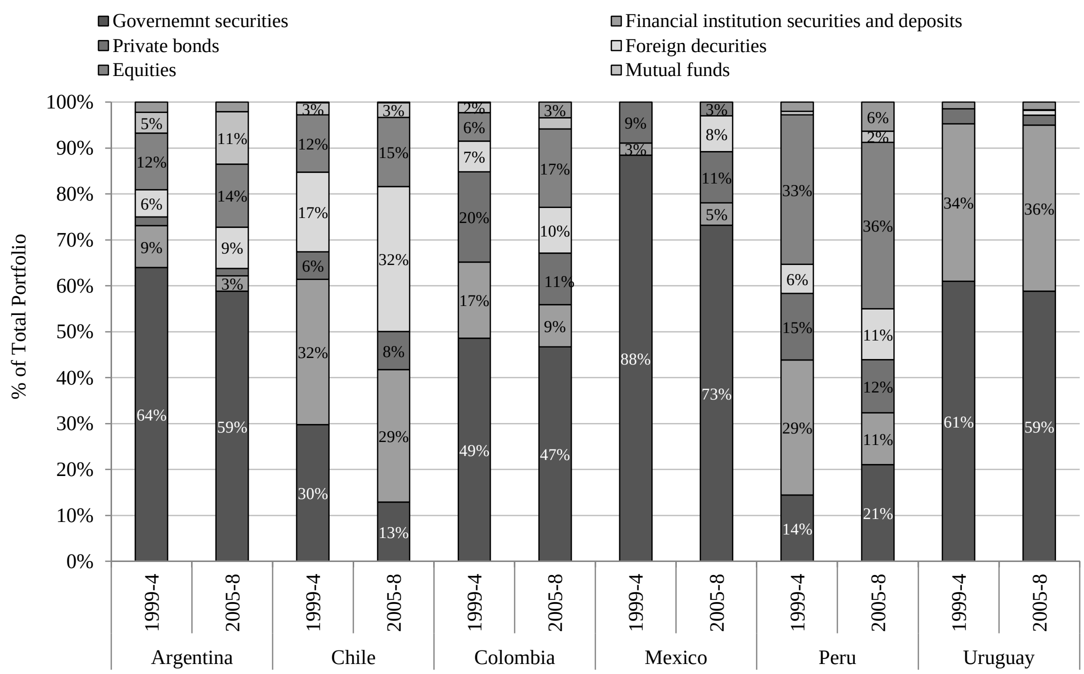
This figure shows the total assets of domestic institutional investors, namely pension funds (Panel A), mutual funds (Panel B), and insurance companies (Panel C). Panel A shows the average pension funds assets as a percentage of GDP between 2000 and 2009. Panel B shows the average mutual fund assets as a percentage of GDP between 2000 and 2009. Panel C shows the average insurance companies assets as a percentage of GDP between 2000 and 2009. Numbers in parentheses show the number of countries in each region. The data sources are the Asociación de Supervisores de Seguros de Latinoamérica (ASSAL), OECD, local sources, the Investment Company Institute (ICI), and the Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones (AIOS).

Figure 21
Composition of Pension Fund Portfolios in Latin America, 1999-2008

Panel A. Average for LAC7 countries

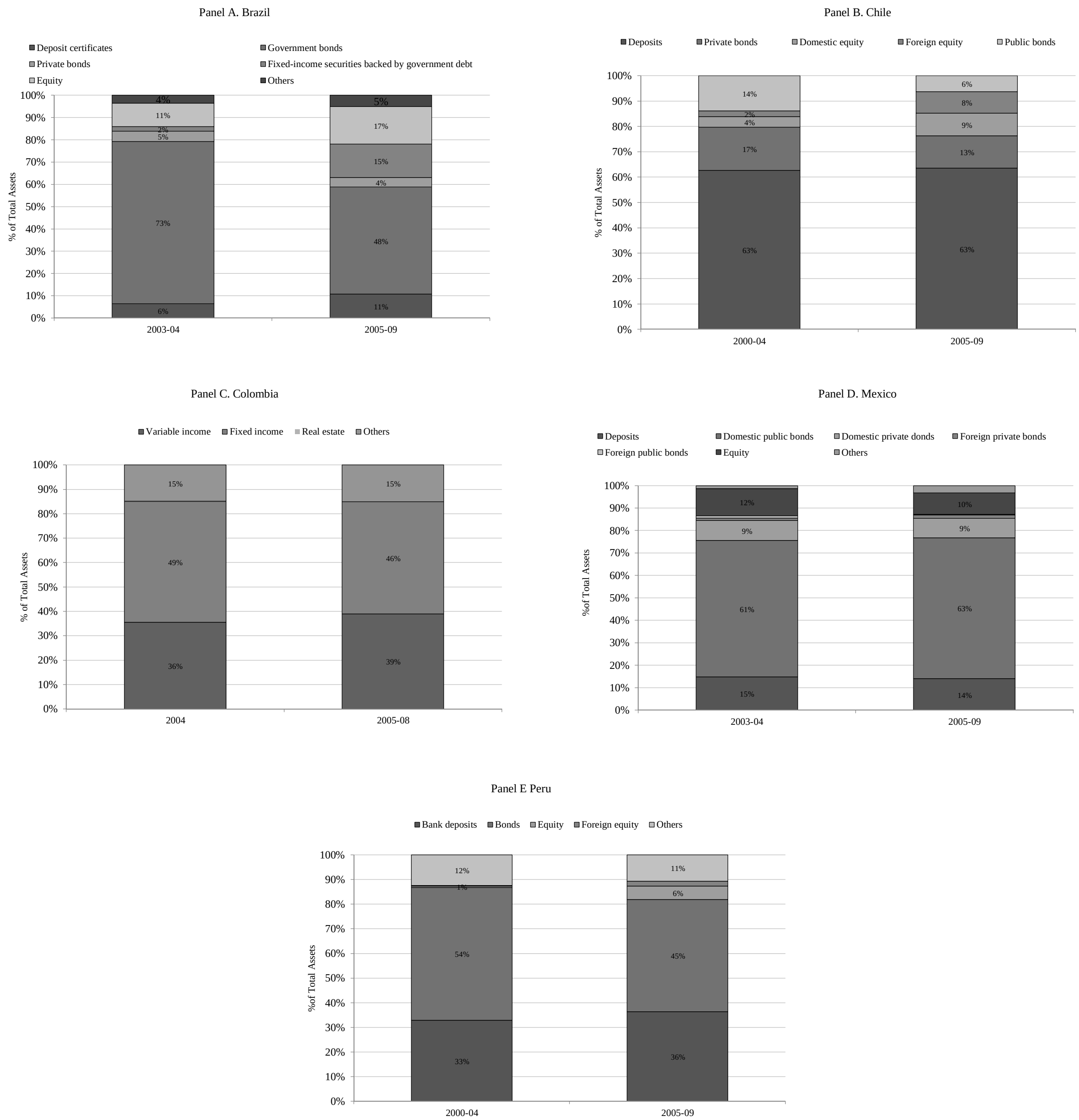


Panel B. Individual LAC7 countries



This figure shows the average composition of pension fund investments as share of the total portfolio between 1999 and 2008. Panel A shows the average composition for LAC7 countries, while Panel B shows the data for individual countries. The data sources are OECD, AIOSFP, FIAP, and local sources.

Figure 22
Composition of Mutual Fund Portfolios of Five Countries in LAC, 2000-2009



This figure shows the composition of the mutual funds portfolios, in LAC7 countries. For Peru, we consider "Fondos Mutuos" and "Fondos de Inversiones". Equity includes "acciones de capital" and "acciones de inversion" for fondos mutuos, while in the case of Investment Funds, equities are composed by "acciones de capital", "fondos de inversion", and "otras participaciones" until 2002, and "Derechos de participacion patrimonial" from 2004 onwards. In the case of Colombia, "Fondos Vigilados" and "Fondos Controlados" are reported in different tables for 2002. Period averages are calculated using simple averages. The data sources are IMF's IFS for the exchange rate, and FGV-Rio for the Brazilian IGP-M; Conasev, Superfinanciera, Andima, and Banxico for the holdings data.