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FINANCIAL DEVELOPMENT, GROWTH AND EQUITY IN BRAZIL

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FINANCIAL DEVELOPMENT, GROWTH AND EQUITY IN BRAZIL¹

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SINOPSE

Os mercados financeiros são um importante instrumento para acelerar o crescimento e a produtividade devido ao seu papel na mobilização de poupanças, seleção e monitoramento de projetos de investimento, diversificação de riscos, e pelo fato de permitirem que o investimento e a produção sejam efetuados segundo a escala e duração mais produtivos. O desenvolvimento desses mercados é uma das áreas em que as reformas estruturais mais avançaram na América Latina desde o começo das reformas nos anos 1990, mas não no Brasil.

O trabalho em epígrafe estuda as inter-relações entre desenvolvimento financeiro, crescimento econômico e equidade utilizando a experiência brasileira recente como exemplo, mas com a finalidade de contribuir para uma discussão mais ampla acerca do papel dos mercados financeiros na promoção do desenvolvimento econômico na América Latina. A análise avalia: *a*) os aspectos comuns entre o crescimento do Brasil e da América Latina no que diz respeito ao ritmo e às fontes de crescimento desde os anos 1990; *b*) mudanças na intermediação financeira na região, enfatizando o papel do setor público na absorção de poupança privada; *c*) as interfaces entre crescimento e desenvolvimento do setor financeiro; *d*) o tema do acesso aos serviços financeiros, uma questão fundamental na vinculação entre desenvolvimento financeiro e equidade; e *e*) as limitações que a ausência de aprofundamento financeiro trazem à inclusão social, a partir da experiência do Brasil.

ABSTRACT

Financial markets help to foster growth and productivity through their role in mobilizing savings to finance investment and production, selecting and monitoring investment projects, diversifying risks, and allowing investment and production to be carried out in the most productive scale and time frame. This paper examines the links between financial development, growth and equity. The focus is on the Brazilian case, but we also aim at contributing to a broader discussion on the role of financial markets in fostering economic development in Latin America. The analysis discusses: a) Brazil's recent growth record, which resembles Latin America's average regarding pace and sources of growth; b) recent changes in financial intermediation in the region, stressing the role of the public sector in absorbing private savings; c) the interface between growth and finance; d) the issue of access to financial services; and e) the impediments to financial deepening and inclusion drawn from the Brazilian experience.

Among its conclusions we highlight the relatively small contribution the Brazilian financial system has had towards promoting growth and equity in the following sequence: *a*) the incomplete macroeconomic adjustment of the economy, which lead to high interest rates, market volatility, and a preference of savers for liquid, short-term financial investments; *b*) the high tax burden and the associated high degree of informality and fiddling with company accounts, which lower the quality of the information disclosed to financial institutions and capital markets; *c*) the central role of the state in mobilizing and allocating savings, largely an inheritance of the pre-1990s development model, which dampens the impact of financial intermediation on capital productivity; and *d*) the low protection of minority shareholders and especially creditors against expropriation by the state and private parties create a highly uncertain and risky environment that raises the cost of capital, discourages financial intermediation and raises the preference for short-term and liquid financial assets.

1 INTRODUCTION

Criticism to the Washington Consensus has increased in Latin America since the mid-1990s owing to the frustration with the region's slow Gross Domestic Product (GDP) growth—a mere 2.4% p.a. in 1995-2004—and the failure to promote equity and reduce poverty. Although growth in the past decade accelerated vis-à-vis the annual average of 1.7% in 1981-1993, the gain was less than expected and pales down when compared to the region's performance from the post-WW II period to 1980. The same applies to the comparison with the recent expansion of China and India, which have accomplished high growth while apparently disregarding—or even confronting—the Consensus's recommendations [Hausmann and Rodrik (2002) and Lindauer and Pritchett (2002)].

Inasmuch as the diagnosis that motivated first-generation reforms remains valid, it seems correct to ascribe to the insufficient depth of reforms at least some of the responsibility for Latin America lackluster performance in the last decade. In particular, most countries in the region failed to reform their labor markets to rebalance relative factor prices, favoring unskilled workers, or to pursue a property rights agenda [Williamson (2003)]. But this seems to be an insufficient explanation. Lindauer and Pritchett (2002) noted that reforms are rarely fully or perfectly implemented and, if anything policies were much better in the 1990s than in previous decades. This has reinforced the view that the insufficient breadth of reform has been another cause for the small gains with respect to output growth. Reforms originated in the Consensus were positive and necessary, but failed to yield the expected acceleration in GDP growth due to the lack of support from a second set of reforms, geared to create, strengthen and improve institutions.¹

Critics also blame the attempt to implement a single set of policies to all developing countries, irrespectively of their individual characteristics and stage of development, for the poor growth record and fear that institutional reforms are about to repeat the same mistake. According to this view, each country should pursue its own development strategy, tailored to its own characteristics, although respecting a set of "universal laws" such as macroeconomic stability and the rule of law [Rodrik (2002)].

How does financial sector reform fits into this discussion as a means to promote growth and equity in Latin America? It is acknowledged that financial systems are not sufficiently developed in most countries of the region. There is also a large literature stressing that financial development and growth are associated [Levine (1997) and Watchel (2003)]. Burki and Perry (1998), for instance, list the laws and organizations that regulate the financial system among the key institutions to be subjected to a second round of reforms in the region [see also Aghion (2004)]. Indeed, according to the World Bank (2004b, p. 2):

"It is increasingly accepted that greater financial system *depth* and *soundness* contributes to broadbased economic growth with poverty reduction. Deep and efficient financial markets promote investment and TFP growth through their role in selecting and monitoring projects, diversifying risks,

^{1.} Lora and Panizza (2002), for instance, show that the structural reforms of the 1990s were more successful in accelerating growth in countries with better institutions.

reducing asymmetries of information, improving resource allocation, and encouraging the optimization of scale, time frame and technology."

Last but not least, the use of a "growth diagnosis" approach advocated by Hausmann, Rodrik and Velasco (2004) also indicates that financing constraints are a main impediment to growth, at least in Brazil, and possibly elsewhere in the region. As advanced by Rodrik (2004, p. 11):

"All the indications are that this (Brazil) is an economy that is bumping against a financing constraint. Real interest (rates) are extremely high despite a reasonable investment rate, and the current account balance is driven by the willingness of foreign creditors to lend. (...) Brazil, therefore, is a high-return country where the domestic financial system and external capital markets constrain the equilibrium level of investment. The solution therefore lies in improving financial intermediation and in increasing Brazil's external creditworthiness (in part by tight fiscal policies)."

This diagnosis is consistent with the view that financial market has been one area in which reform progressed the least in Brazil—although the country's overall reform process² was no less significant than in Chile, which is usually seem as a regional benchmark on economic reforms [Lora (2001)]. In particular, the volume of credit to the private sector is small, expensive and concentrated on short-term operations. With the country's high marginal productivity of capital, more and less expensive credit would help to spur growth. As noted by Watchel (2003), however, "the observed association between financial sector deepening and growth does not" warrant (...) "a simple prescription to encourage the unrestricted growth of financial intermediaries". Indeed, these expanded very significantly during the high inflation period without doing much financial intermediation or promoting growth or equity. What is needed, then, is to promote the "specific institutional characteristics and financial sector channels that contribute to growth" and equity. And these, as well as the barriers that prevent the expansion of credit and capital markets activities in most of LA, are far from being perfectly understood.

This paper examines the links between financial development, growth and equity focusing on the Brazilian case, with the objective of contributing to a broader discussion on the role of financial markets in fostering economic development in LA. The next section discusses Brazil's recent growth record, which resembles the region's average regarding pace and sources of growth. Section 3 highlights recent changes in financial intermediation in the region, stressing the role of the public sector in absorbing private savings. Section 4 analyzes the interface between growth and finance. Section 5 evaluates the issue of access to financial services, including mechanisms directed at small and medium enterprises (SME). Section 6 concludes on the impediments to financial deepening and inclusion drawn from the Brazilian experience, which we believe may apply to other countries in LA as well.

^{2.} For a comprehensive account of reforms in Brazil, see Pinheiro, Bonelli and Schneider (2004).

2 GROWTH, SAVINGS AND INVESTMENT: SOME STYLIZED FACTS

As mentioned, the outcomes of the market-oriented reform process in Latin America during the 1990s were in general positive, but less than initially expected. Until the mid-1990s, it was estimated that, although only partially implemented, the reforms had increased the long-run growth rate of Latin America's GDP by 2 percentage points. More recent studies revised these estimates down and showed that a part of this impact was transitory, reflecting once and for all gains with implementation of the reforms:

"Contrary to what we found in the 1997 study, we now find that the reforms had only a temporary effect on growth. Our estimates imply that in the period of fastest reform, 1991-93, reforms accelerated annual growth by 1.3 percentage points. However, when the reform process started decelerating, the growth effect dropped substantially, and in the period from 1997 to 1999 it accounted for only 0.6 percentage points of additional growth." [Lora and Panizza (2002, p. 17)].

Not only the impact on growth was low and transitory, but also it was mostly due to the acceleration of TFP growth, with reforms having no significant effect on capital accumulation. Thus, they resulted in an improved productivity performance. A similar process took place in Brazil (Table 1). In 1981-1993 GDP growth rates dropped to almost a fifth of those observed in 1946-1980. This decline resulted essentially from: *a*) a slowdown in the rate of capital accumulation (that is, lower investment rates), *b*) a substantial drop in annual TFP growth, reflecting a decline in both labor and capital productivity; and *c*) a slower expansion in employment, partly as a result of demographic transformations that are still unfolding.³ The reforms of the 1990s succeeded in accelerating GDP growth only modestly. Moreover, all this acceleration resulted from a rise in TFP growth, whose contribution to output growth increased by 1.8 percentage point (thus, in excess of the 1.1 percentage point rise in GDP growth). The contributions of capital and labor, on the other hand, declined.

Comparing the 1946-1980 and 1994-2004 periods, we observe that 78% of the fall in GDP growth were due to the slower expansion of the capital stock: it was the failure of reforms to bring the rates of capital accumulation back to the levels observed before the debt crisis that explains their inability to raise per capita GDP growth to a pace similar to that observed in 1930-1980.⁴ This implies that the problem of slow growth in Brazil is due to the low investment rates: the country is not investing enough to increase its capital stock at the pace necessary for GDP to grow faster. This naturally raises the issue of how savings rates behaved in the long term (Figure 1).

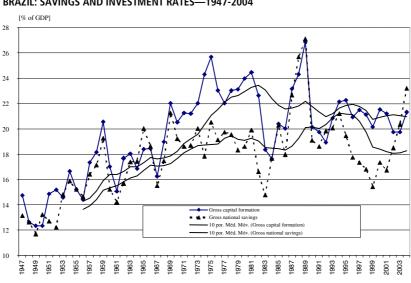
^{3.} A fourth factor usually included in supply-side decompositions of this kind is the growth of human capital. Measuring human capital by average schooling, Pinheiro *et al* (2001) show that this has historically given a very low contribution to GDP growth in Brazil, essentially on account of the low growth of the average schooling of working-age Brazilians. Abreu and Verner (1997) reach similar results.

^{4.} This result is consistent with the findings of Bacha and Bonelli (2004). Even the low growth of employment in 1994-2004 can probably be partly blamed on the low level of capital accumulation, on account of the imperfect substitution between labor and capital.

| Period | GDP growth A=B+C+D | Contributions to GDP growth of (a) | | | | | |
|--------------------------|-----------------------|------------------------------------|-----------|-------------------------------|--|--|--|
| | | Capital (B) | Labor (C) | Total Factor Productivity (D) | | | |
| 1931-1945 | 4.3 | 1.7 | 1.0 | 1.7 | | | |
| 1946-1980 | 7.4 | 4.6 | 1.4 | 1.4 | | | |
| 1981-1993 | 1.6 | 1.3 | 1.1 | -0.7 | | | |
| 1994-2004 ^(b) | 2.7 | 1.0 | 0.6 | 1.1 | | | |
| Change from | | | | | | | |
| 1981-1993 to 1946-1980 | -5.8 | -3.3 | -3 | -2.1 | | | |
| 1981-1993 to 1994-2004 | 1.1 | -0.3 | -0.5 | 1.8 | | | |

BRAZIL: GDP GROWTH AND THE CONTRIBUTIONS OF CAPITAL LABOR AND TEP-1931-2004

Sources: Pinheiro et al (2001), updated using IBGE data (a) Using a typical solow decomposition, with constant returns to scale and capital and labor output elasticities of 0.5 (b) For labor, average 1994-2003.



BRAZIL: SAVINGS AND INVESTMENT RATES-1947-2004

TABLE 1

FIGURE 1

Source: IPEADATA and IBGE, System of National Accounts (SCN).

Although financial reform is expected to affect savings, the sign of this effect is ambiguous [Edwards (1995) and Loayza, Schmidt-Hebbel and Servén (2000)]. There is no systematic assessment, to the best of our knowledge, of how changes in financial sector regulations or reforms in general, for that matter, have affected the savings rate in Brazil. What the evidence shows is that total savings rate, approximated in Figure 1 by the gross capital formation rate,⁵ has remained relatively stable since the early 1990s, despite significant fluctuations in its breakdown in foreign, public and national private. Figure 1 also shows that total savings oscillated since price stabilization in 1994 in a range-20% to 22% of GDP-that is above the mean threshold observed in the 1950-1968 period and not that much lower than in the 1970s.⁶ This suggests that the growth slowdown has not been the result of a sharp decline in savings.

^{5.} A small part of total savings finances inventory change, but we do not consider this aspect here.

^{6.} The abnormally high savings rates in 1988-1989 have been associated to: a) defensive behaviour of economic agents during hyperinflation; and b) measurement errors, given the way investment—and thus savings—are measured in the National Accounts.

There have been, though, significant shifts in their composition. Foreign savings measured in Figure 1 as the distance between capital formation and national savings were not important prior to the late 1960s and gained relevance between then and the early 1980s (debt crisis). After that they became negligible again, only to expand once more after price stabilization in 1994. They finally fell again in the aftermath of the 1999 macroeconomic policy mix change, with the floating of the Real and the significant adjustment in the primary fiscal accounts: in 2004 the current account surplus reached 2% of GDP, a performance that is expected to be repeated in 2005. The 10-year moving averages superimposed on the graph help us to visualize these shifts more clearly, and to see that long-term savings have remained fairly stable, between 18% and 20% of GDP during most of the last four decades.⁷

The available statistics do not allow us to break down long-term national totals between public and private savings. But past research has shown that: the rise in national savings in the late 1960s, which was sustained in the 1970s, was due to higher public savings; these declined substantially in the early 1980s; recovered somewhat with the acceleration of inflation, notably in the early 1990s; fell again in 1995-1998; and recovered in 1999-2004 [Giambiagi and Montero (2005)]. This latter reversal highlights the almost one to one relation between the shifts in foreign and public savings in the last decade: in 1995-1998, foreign savings increased by 3.9% of GDP, while public savings declined by 8.1% of GDP. In 1999-2004 the former dropped by 6.2% of GDP and the latter increased by 6.5% of GDP. Thus, contrary to what was observed in the late sixties and early seventies, foreign savings crowded out public savings, rather than boosting investment. This suggests that in 1995-1998 the financial system concentrated on transforming these additional funds into public debt.

To some, the recent upsurge in public savings may be enough to put Brazil back on a path of rapid sustained growth, once the country can again rely on positive foreign savings, thus reverting the current status as a capital exporter [Giambiagi and Montero (2005)]. We have a less sanguine view, one that stresses the role of financial markets in funneling these savings into investment, rather than just substituting for public savings. Furthermore, the relative price of investment goods has risen substantially since the 1970s, so that the same pool of savings generates less real investment. As we discuss below, Brazil's underdeveloped financial system can be blamed for part of this rise in investment goods prices: with little financial intermediation going on outside the acquisition of public bonds, firms and households have to rely on own generated funds to finance investment. This usually means that investment projects are implemented little by little, foregoing the gains from scale and specialization, and implying higher costs with unproductive capital due to longer implementation periods.

Poor households and small business are more affected by these processes, because of their greater difficulty in accessing financial markets and self-accumulating resources implying less equality in the access to finance than otherwise. Finally, the recent upturn in public savings was accomplished through a major rise in the tax burden, currently at

^{7.} The average national savings rate for 1995-2004 is 18.3% of GDP. Averages over long-term periods have been strikingly similar: both the means (18.7% in 1963-1982 and 18.8% in 1983-1904) and the medians (18.7% and 18.6%, respectively) of the distributions display very similar values in a long-term perspective.

36% of GDP, well above the average 25% of GDP in the 1970s. This too has important implications for the economy as a whole and the financial sector in particular.

3 BARRIERS TO FINANCIAL DEEPENING

In most dimensions, financial markets in LA are relatively underdeveloped, compared to both developed and Asian countries. Except for Chile, in most countries in the region the volume of bank credit to the private sector is low and has not increased in recent years. Brazil is no exception.⁸ At the end of 2004, bank credit to the private sector amounted to 24.4% of GDP, compared to multiples of that in developed and Asian countries. The bond market in LA (as in Brazil) is dominated by the public sector, which accounts for 81% of the total value, with financial institutions answering for another 14%. For the average of developed and emerging economies, the share of company bonds in the market is significantly higher, ranging around 14%. Although the stock of bonds issued by LA companies increased by 1% of GDP from 1995 to 2001-from 0.5% to 1.5% of GDP-the volume of government bonds rose by 10% of GDP in the same period. As for stock markets, Table 2 shows that the market capitalization of LA's main exchanges is relatively small compared to their counterpart in the US, Germany and Asia. Chile and, to a lesser extent, Brazil are the exceptions.9 The number of listed companies and liquidity (measured by the turnover ratio) in LA also compare unfavorably to Asia, the US and Germany. LA's exchanges are not, though, abnormally concentrated, regarding both market capitalization and traded volumes.

The market size for insurance in Brazil is relatively small as well. Per capita consumption of insurance in Brazil is only a fraction of that in Organisation for Economic Co-operation and Development (OECD) countries, notably the US and Japan, and lower than in other middle-income countries such as South Africa, Chile and Mexico; but similar to that in Argentina, Uruguay and Costa Rica (Table 3). The share of life insurance in total premium revenues is also lower in Brazil than in OECD countries, although among these countries this share also varies considerably. Compared to other middle-income countries, the share of life insurance on total premium in Brazil is not out of range. The Brazilian private pension fund industry, in turn, is reasonably large for developing country standards, with the assets of closed (individual company) pension funds alone mounting to 18.2% of GDP in 2003, up from 3.3% of GDP in 1990.¹⁰

^{8.} There has been a substantial increase in bank credit over the past two years, though, mostly aimed at the acquisition of consumer durables. But it remains to be seen whether it is sustainable over a longer term.

^{9.} In Brazil, following stabilization firms stepped up their effort to raise finance in the stock and bond markets, but this movement was not sustained. The value of shares and bonds issued peaked in 1998, but declined afterwards. Not even the 2003 stock market recovery motivated firms to tap domestic capital markets for finance. The total value of new issues of shares and private bonds, which had peaked at 2.9% of GDP in 1998, fell to a mere 0.5% of GDP in 2003.

^{10.} The open pension fund industry also expanded remarkably after stabilization, with its share in the industry's total reserves jumping from 5% in 1996 to 14% in 2002. This expansion is closely linked to the various changes implemented in the second half of the 1990s in the social security systems of private and public sector workers, as well as the establishment of tax incentives for workers investing in those funds (through the postponement of tax payments until retirement).

TABLE 2 STOCK MARKET INDICATORS—2004

| | Market | Number of listed | Turnover | Concentration | |
|----------------------------------|------------------------------|------------------|-----------------|---------------|------------|
| | capitalization (% of GDP) | companies | velocity (%) | 5% market | 5% trading |
| Buenos Aires Stock Exchange (SE) | 26.8 | 107 | 12 | 64 | 69 |
| Colombia SE | 25.9 | 106 | 10 | 33 | 24 |
| Lima SE | 26.3 | 224 | 8 | 55 | 53 |
| Mexico Exchange | 25.4 | 326 | 30 | 56 | 63 |
| Santiago SE | 124.2 | 240 | 13 | 49 | 57 |
| São Paulo SE | 54.6 | 388 | 43 | 62 | 61 |
| Korea Exchange | 57.3 | 683 | 147 | 75 | 60 |
| Bursa Malaysia | 154.2 | 959 | 34 | 65 | 41 |
| Jakarta SE | 28.4 | 331 | 45 | 68 | 67 |
| Mumbai SE | 55.8 | 4.730 | 43 | 89 | 91 |
| National Stock Exchange India | 52.5 | 957 | 101 | 67 | 69 |
| Philippine SE | 33.1 | 235 | 14 | 68 | 74 |
| Thailand SE | 70.6 | 463 | 111 | 61 | 47 |
| Deutsche Börse | 44.0 | 819 | 134 | 73 | 77 |
| Nasdaq | 30.3 | 3.229 | 250 | 59 | 75 |
| NYSE | 108.9 | 2.293 | 90 | 56 | 38 |

Sources: World Federation of Exchanges and World Bank.

TABLE 3 INSURANCE: CROSS-COUNTRY COMPARISON—2002

| | Per capita premium revenue (US\$) | Life as % of total premium revenue | | | |
|------------|-----------------------------------|------------------------------------|--|--|--|
| Colombia | 48.3 | 25.9 | | | |
| Argentina | 62.9 | 31.3 | | | |
| Brazil | 72.2 | 37.7 | | | |
| Uruguay | 80.8 | 22.1 | | | |
| Venezuela | 81.3 | 3.1 | | | |
| Costa Rica | 86.7 | 3.8 | | | |
| Mexico | 126.7 | 46.8 | | | |
| Panama | 127.3 | 35.0 | | | |
| Chile | 165.6 | 62.5 | | | |

Source: Fenaseg, based on Swiss Re, and World Bank.

There are at least two complementary explanations for the shallowness of financial markets in most of LA. One hinges on the region's traditionally high levels of macroeconomic instability and the crowding out effect of large public deficits. Some evidence in this regard is presented in Padilla and Requejo (2000) and Galindo and Micco (2001). The other attributes the underdevelopment of financial markets to a poor institutional environment, with weak creditor and minority shareholders rights, and a low respect for contracts and the rule of law in general. This comes up quiet evidently in La Porta et al (1998) analysis of law and finance, with further empirical evidence supporting this view being presented in Pinheiro and Cabral (2001), Beck (2000) and Galindo and Micco (2001).

The Brazilian case illustrates well both the changes experienced by financial markets since stabilization in the 1990s and the little impact these had on financial depth. It also exemplifies the interplay of macro and institutional determinants in limiting the size of the market. Pronounced market instability, high real interest rates, large public deficits, high taxes, high reserve requirements on sight deposits, poor borrower screening, and insufficient creditor protection are factors that add up to make finance scarce and expensive to firms and individuals.

Even so, Brazil has a well-developed financial infrastructure inherited from the high inflation period, when banks tried to maximize their floating income by speeding up financial transactions as much as possible. Since the 1970s Brazil has also had relatively large public bond and stock markets, these last ones largely geared towards trading state-owned enterprises (SOE) shares. For these reasons, it was expected that with the lowering of inflation, the privatization of public banks, a jump in the market share of foreign financial institutions, improved prudential regulation, the enactment of a new bankruptcy law and other macro, structural and institutional reforms adopted since the mid-1990s, financial markets would experience a large expansion. This did not happen, in part because of the adjustment processes associated to the end of high inflation.¹¹ Even so, the country's financial system experienced significant change since the mid-1990s, in good measure adapting itself to a low inflationary regime after the Real stabilization plan was implemented in mid-1994:

"High inflation prior to the Real plan ... provided incentives for banks to compete for deposits because of the profits banks earned by investing the resources in inflation-protected government securities. The inflation profits ... induced banks to expand, open new branches, offer 'free' bank services and develop a high degree of technological progress, especially aimed at enhancing the speed of processing financial transactions... The end of high inflation induced a rapid revamp of the system... Consolidation was the order of the day, as offering deposits was less profitable. ...The end of the inflation tax and implicit government guarantee led also to the restructuring and privatization of banks owned by Brazil's state governments." [Goldfajn, Hennings and Mori (2003, p. 5-6)].

^{11.} In 1994-2002, 46 banks were sold, while 57 were simply closed down. When two of the top ten banks went into distress (Banco Bamerindus and Banco Nacional), the Central Bank feared a systemic crisis and responded by launching the Program of Incentives for Restructuring and Strengthening the National Financial System (Proer). Similar programs were adopted to deal with the issue of state and federal banks in distress.

After 1994, the share of foreign banks in total credit increased, the opposite happening with public banks. Both processes resulted from the restructuring of the financial system, with the Brazilian Central Bank (BCB) creating incentives for foreign institutions to acquire national banks in distress. Foreign entry started essentially in 1996, peaked in 2001 and has since been followed by the exit of some institutions that failed to generate a profitable business in Brazil. Meanwhile, the share of public banks, after peaking at 62% in 1995, dropped to a mere 25% in 2001, recovering to 33% in 2003.¹²

Stabilisation and increased foreign participation stimulated the adoption of more sophisticated credit-risk appraisal and management systems. Several large-scale retail banks organised databases containing time-series data of credit-bureaus and behaviour scores, as well as statistics of late-payments, losses and recoveries [Arcoverde (2002)]. Yet, the volume of credit made available to the private sector has not changed much since then, with the exception of the very recent (since 2003) increase. Banks also became more efficient [Bevilaqua and Loyo (1998) and Arcoverde (2002)]. The public banks, the largest retail banks and some of the highend retailers showed the largest gains, with mid-sized and small retail banks also improving, although less remarkably. The absorption of failed private and public banks by foreign institutions and the best-run private banks was an important driving force behind this process. Possibly, the fear of an even greater entry of foreign institutions, as in Argentina and Mexico, may have encouraged private national banks to become more efficient. The threat of privatisation, by the same token, probably did the same for public institutions.

As suggested, the large public sector deficits since 1995 have been one of the main reasons why low inflation and changed bank ownership failed to generate a greater expansion of the financial sector. This can be seen from the numbers in the next table, which shows the structure of the financial sector from the point of view of different sources of credit to the public and private sectors. The figures highlight that credit has expanded since the mid-1990s, but entirely on account of the rise in the public debt: the (net) domestic debt of the public sector more than doubled between 1994 and 2003. Private sector debt, on the other hand, increased after price stabilization, largely through increased foreign borrowing, but declined afterwards.¹³

^{12.} The ownership structure of the banking industry varies considerably among countries. Thus, while some countries have no public banks (e.g., the US and Australia), others have no foreign institutions (Korea, for instance). Yet, to the extent that one can talk about an international standard, the structure of the Brazilian bank sector in 2002 was not at odds with it [Beck and Levine (2003)].

^{13.} Part of these ups and downs was due to exchange rate fluctuations and the cleaning up of non-performing debts, as part of the restructuring process described above. This exerted a downward effect on the volume of loans to the private sector. Stronger statements about what happened to the volume of credit would require a separation between changes resulting from the piling up and then the reclassification of bad loans and actual changes in credit activity. Note that the table shows only the structure of formal credit. It does not account for the increase in informal lending that took place after stabilization, notably through the use of the so-called pre-dated checks.

TABLE 4 BRAZIL: SOURCES OF FINANCE—1994-2003 [selected years, end of period, % of GDP]

| | 1994 | 1996 | 1998 | 2000 | 2002 | 2003 |
|----------------------------------|------|------|------|------|------|------|
| Public sector (net) | 30.0 | 33.3 | 41.7 | 48.8 | 55.5 | 58.7 |
| Domestic (net) | 21.3 | 29.4 | 35.5 | 39.1 | 41.2 | 46.7 |
| NFS credits (gross) | 5.5 | 5.5 | 2.3 | 1.1 | 0.9 | 1.0 |
| Foreign (net) | 8.7 | 3.9 | 6.2 | 9.6 | 14.3 | 12.0 |
| Private sector (gross) | 44.4 | 42.2 | 50.0 | 53.3 | 50.2 | 45.0 |
| Domestic | 38.4 | 33.1 | 32.2 | 30.6 | 27.4 | 28.9 |
| Private bonds | 2.0 | 2.1 | 2.5 | 2.6 | 3.1 | 2.8 |
| Debentures | 2.0 | 2.1 | 2.2 | 2.3 | 2.9 | 2.7 |
| Promissory notes | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.0 |
| Banks | 30.9 | 25.5 | 27.4 | 26.9 | 23.4 | 25.1 |
| Firms (non-financial) | 20.2 | 16.8 | 17.9 | 16.8 | 16.7 | 17.5 |
| Non-directed loans | | 7.3 | 6.6 | 9.0 | 8.7 | 8.7 |
| Directed loans | | | | 7.9 | 8.2 | 8.7 |
| BNDES | | | | 4.9 | 5.3 | 5.8 |
| Individuals | 10.8 | 8.7 | 9.6 | 10.1 | 6.7 | 7.7 |
| Non-directed loans | | 1.3 | 1.5 | 4.5 | 4.9 | 5.6 |
| Directed loans | | | | 5.7 | 1.9 | 2.0 |
| Foreign | 6.0 | 9.1 | 17.8 | 22.7 | 22.8 | 16.1 |
| Memo | | | | | | |
| Total bank credit | 36.4 | 31.0 | 29.7 | 28.0 | 24.3 | 26.1 |
| Leasing | | | | 1.2 | 0.6 | 0.6 |
| Federal government bonds | 14.9 | 21.8 | 35.0 | 44.2 | 39.3 | 45.8 |
| Bovespa's market capitalization | | 27.9 | 21.0 | 38.2 | 27.6 | 42.4 |
| Primary stock issuance (Bovespa) | | 1.1 | 0.4 | 0.1 | 0.1 | 0.0 |
| Exchange rate (R\$/US\$) | 0.85 | 1.04 | 1.21 | 1.96 | 3.53 | 2.89 |

Sources: Central Bank, Câmara de Custódia e Liquidação (Cetip) and Rocca (2001). Notes: *a*) For 2000-2003, ratios to GDP obtained directly from Central Bank. For 1994-1999 these were derived using GDP figures inflated to end of December prices using the centered IGP-DI, as calculated by the Central Bank. *b*) Total credit by the Sistema Financeiro Nacional (SFN) to the private sector equals directed and non-directed credit plus leasing. *c*) Assumes all loans by Banco Nacional de Desenvolvimento Econômico e Social (BNDES) are awarded to firms. *d*) Stock of Federal government bonds excludes those held by Central Bank.

a) The private sector relies relatively more on foreign creditors, although, like the public sector, its debt is mostly domestic. The importance of bank loans to the public sector declined after 1996, on account of both the privatisation of large SOE, the sale and closing down of local state banks, and the measures taken to limit the indebtedness of the public sector as part of the fiscal adjustment process. Also important was the "federalisation" of state and municipal debts (some of which owed to financial institutions), which were transformed into public bonds. b) The public sector borrows mostly by issuing bonds, whereas private bonds represent just about one tenth of the domestic private debt. The importance of the latter increased after the Real Plan.

c) Roughly two-thirds of the bank loans to the private sector are granted to firms and one-third to individuals. For the former, about half consists of the so-called "directed" or "targeted" loans, that is, loans that are targeted to specific uses or that are funded with compulsory savings. Of these, BNDES answers for over one half, accounting alone for about a third of all credit extended by banks to firms.¹⁴ The non-directed, or freely allocated loans have gained importance since 2000, partly on account of a decline in reserve requirements on sight deposits and a lowering of the Imposto sobre Operações Financeiras (IOF), a tax on financial transactions. The same happened in the case of non-targeted loans to individuals.

4 GROWTH AND FINANCE

A recent survey by Watchel (2003) on the large literature researching the link between financial development and growth concludes that, despite methodological reservations "there is ample empirical evidence to make a convincing case that financial sector development promotes economic growth". As noted by Watchel, though, financial development cannot be equated to a large financial sector, as evidenced by the expansion in the number and size of financial institutions in LA during the high inflation period, despite a concomitant reduction in financial intermediation. It is the expansion and sophistication of growth-augmenting financial activities that matter.

There are two complementary approaches to analyze the financial sector institutions and channels that stimulate these growth-augmenting activities. The traditional approach, adopted by Levine (1997), stresses the role of financial systems in reducing information and transaction costs, and in that way fostering investment and productivity growth. Levine emphasizes five functions played by financial systems: "facilitate the trading, hedging, diversifying, and pooling of risk; allocate resources; monitor managers and exert corporate control; mobilize savings; and facilitate the exchange of goods and services". This functional approach is also adopted by Stiglitz (1994, p. 23), who argues that "enforcing contracts; transferring, sharing and pooling risks; and recording transactions, (are) activities that make them [financial markets] the 'brain' of the entire economic system, the central locus of decision making".

Pagano (1993), on the other hand, adopts a production function approach, departing from a simple endogenous growth model to look at how the financial system affects capital productivity, the cost of financial intermediation and the savings rate. Financial development enhances capital productivity by: a) fostering riskier, less liquid and larger investment projects, which also tend to be more productive; b) better screening projects and monitoring their implementation, thus alleviating problems of adverse selection and moral hazard. More developed financial systems also consume fewer resources to intermediate savings, and thus make a higher

^{14.} BNDES stands for Banco Nacional de Desenvolvimento Econômico e Social, the federal development bank.

proportion of them available to investors. Finally, the financial system affects the savings rate. The sign of this effect is, as noted above, ambiguous: the greater availability of financial services helps mobilizing savings, because it allows savers to invest in more profitable and less risky projects; but to the extent that they are able to insure themselves in the financial market, their precautionary savings tend to decline. Moreover, an increase in the supply of credit to financially constrained agents, such as low-income consumers, should reduce savings, as they anticipate their consumption (as was the case with the credit bubble that followed price stabilization in Brazil in 1994). On the other hand, greater investment lending, including greater access to housing finance, could help to boost savings, to the extent that it lowers the relative price of these assets.

The relatively small contribution of the Brazilian financial system to long-term growth can be examined using either approach. Of the functions highlighted by Levine, only the last is reasonably well performed by financial institutions, thanks to the large and sophisticated payment system and physical infrastructure inherited from the high inflation period. Banks have a large number of branches, which are complemented by hundreds of bank correspondents. Transactions are completed reasonably fast even by those who do not have a bank account, because they can use the system to pay their bills. This reduces transaction costs and increases efficiency, but otherwise the financial system's impact on productivity is small.

In part, this is a consequence of the limited role of financial institutions in mobilizing and allocating long-term savings. We can usefully differentiate three types of savings that are intermediated by the financial system in Brazil: compulsory, contractual and fully voluntary. The first consists of funds controlled by the government and financed by quasi-tax revenues, the most important being the *Fundo de Amparo ao Trabalhador* (FAT), Fundo de Garantia do Tempo de Serviço (FGTS) and the Regional Development Funds. These funds finance the operation of public federal banks engaged in supporting sector or regional development activities, and it is often the case that projects are selected and monitored with an eye on politics as much as on economic fundamentals. This is particularly serious because these are essentially the only domestic sources of long-term credit available to firms and housing finance. Some of these banks are also active in capital markets.

Contractual savings encompass the funds held by pension funds and insurance companies. These institutions are in principle well placed to provide long-term and illiquid finance, since their liabilities are also long-term and predictable. But in Brazil they invest most of their assets in Treasury bonds. At the end of 2003, 95% of the reserves of insurance companies were invested in fixed income assets, mostly government bonds, against 57% in the case of closed pension funds and 91% for open pension funds. Only closed pension funds have significant resources invested in stock (19% of total assets), part of which as partners in controlling blocks of large companies. But this is mostly the case of pension funds linked to SOE, in which political interference is common, hampering their incentives to exert corporate control and improve the allocation of resources. Thus, these institutions play a limited role in improving resource allocation through the screening and monitoring of investment projects.

By fully voluntary savings we mean sight and time deposits and investments in mutual funds, which are also managed by banks. Like other institutional investors, mutual funds concentrate their assets on Treasury bonds, playing an equally limited role in raising the economy's capital productivity. Part of the savings mobilized by banks as sight and time deposits is sterilized by the BCB as reserve requirements; part is compulsorily used to finance housing, rural and micro-credit activities; and the remainder is left for the banks to allocated as they wish. Together with part of the banks' own capital-the other part is largely invested in Treasury bonds-and funds borrowed abroad by banks, these resources are used to fund the so-called "freely allocated loans" ("empréstimos com recursos livres"). At the end of 2004, loans to the private sector amounted to 24.4% of GDP, of which 14.7% of GDP freely-allocated loans and 9.7% of GDP were directed (targeted) loans. It is through these freely allocated loans that banks could in principle contribute more directly to improve resource allocation and monitor managers. But, in practice, these loans are geared mostly to finance household consumption (6.5% of GDP) and firms' working capital (7.2% of GDP), having maturities of less than ten and six months, respectively.

Thus, the impact of financial intermediation on capital productivity is constrained, on the one hand, by public meddling with the funds that go into investment finance, and on the other by the concentration of freely allocated loans on financing consumption and working capital. Capital markets also play a limited role in investment finance: companies issued an average 1.4% of GDP in stocks and bonds in 1999-2003, and not all of these reached the market. Moreover, only a small number of large companies have access to finance at reasonable terms. Claessens, Klingebiel and Lubrano (2000) show that the proportion of funds external to the firm remained highly concentrated in the largest firms.¹⁵ Firms in the highest quintile obtain about 70% of all finance. Companies in the first three quintiles, in turn, secure less than 10% of total funds, depending mostly on retained earnings. Therefore, small firms and households rely almost entirely on internally generated funds to finance housing and commercial investments. Overall, more than two-thirds of firms' capital comes from retained profits.

A share of the savings that go into the financial system remain in the system in the form of bank spreads, fees and commissions paid to investment banks, security brokers and dealers, etc., paying for services provided, taxes, delinquency losses and, in some cases, abnormal profits. In Brazil, this share is relatively high: McKinsey (1998) estimates that just the waste caused by low productivity in the financial system subtracts 2% of GDP from the resources made available to investors. This helps to explain why in 2001-2004 the interest rate spreads on freely allocated bank loans ranged between 27% and 32%, with averages of 51% and 16% on loans to individuals and firms, respectively (Table 6).¹⁶ Transaction costs in stock markets are also significant: commissions are not high compared to other Latin American countries, but the spread is, as are the costs of underwriting and compliance with regulations applying to public companies (auditing, public notices, obligatory reports etc.).

^{15.} This is based on a sample of 156 to 170 open-capital firms, grouped in five quintiles for the period 1994-1998.

^{16.} Afanasieff, Lhacer and Nakane (2001) show that bank spreads in Brazil are among the highest in Latin America and are a multiple of those found in developed countries.

| | | 2001 | 2002 | 2003 | 2004 |
|-----------------------|-------------|------|------|------|------|
| Bank's borrowing cost | | 7.2 | 1.1 | 6.4 | 5.0 |
| | Total | 27.0 | 30.0 | 31.9 | 28.1 |
| Bank spreads | Firms | 11.8 | 14.5 | 14.7 | 13.5 |
| | Individuals | 48.9 | 51.4 | 55.6 | 46.5 |

TABLE 5 BRAZIL—INTEREST RATES AND SPREADS ON NON-GOVERNMENT-DIRECTED BANKS LOANS [% p.a.]

Source: Central Bank.

Bank spreads can be decomposed into net margin, administrative expenses, losses with default, and taxes/reserve requirements, with the actual breakdown being somewhat different for public and private banks: as expected, in the latter a lower proportion of the spreads is due to administrative costs and default losses, and proportionately more goes to profits. A cross-country comparison by Demirgüç-Kunt and Huizinga (1999), with averages for 1988-1995, shows that Brazilian banks had the fifth largest net interest margin among banks of 76 countries, reflecting high ratios of overhead costs (the highest among the 76 countries), taxes (5th largest), loan loss provisions (13th largest) and net profits (24th highest) to total assets.¹⁷

Insufficient bank competition is deemed a possible explanation for both high profits and low productivity—Demirgüç-Kunt, Laeven and Levine (2003) show, for instance, that bank margins tend to be associated with concentration. Belaisch (2003) shows that although the sector's industrial structure is not particularly concentrated—the largest 10 banks answer for 70% of total assets—rivalry among banks is weak. Competition was expected to increase with increased openness of the financial market to foreign institutions in the second half of the 1990s, but although the quality of credit-granting analysis has improved, and administrative expenses fallen, net margins have stayed high by international standards [see Banco do Brasil and Reis and Valadares (2004), passim].

TABLE 6 BRAZIL: DECOMPOSITION OF SPREAD

| | Total | Private Banks | Public Banks |
|---------------------------------|-------|---------------|--------------|
| Cost of deposit insurance (FGC) | 0,2 | 0,3 | 0,3 |
| Administrative cost | 28,3 | 22,5 | 38,3 |
| Cost of reserve requirements | 8,3 | 9,8 | 7,2 |
| Taxes | 12,3 | 12,8 | 11,8 |
| Losses with default (%) | 27,3 | 25,4 | 30,4 |
| Bank net margin (%) | 23,5 | 29,4 | 12,0 |

Source: Costa and Nakane (2004). Two tentative complementary explanations for the market power of financial institutions are a noncompetitive conduct (e.g., a tacit cartel), (tacitly) led public banks, whose costs are particularly high and lack a profit maximizing orientation [McKinsey (1998)]; and the segmentation of credit markets, that creates monopolistic banking relationships between the banks and part of the borrowers. The problem is further composed by the lack of a clear mandate to the BCB and anti-trust agencies to foster competition in the sector. Competition is also weakened by financial regulations that raise the cost of migration from one bank to another.

^{17.} See also the data bank kept by Thorsten Beck and Ross Levine (http://econ.worldbank.org/view.php?type=5&id=607).

High reserve requirements on sight and time deposits and income and transaction taxes on loans are another major component of interest rate spreads. According to Troster (undated), if no costs nor any coverage for default are imputed to a loan, for every R\$100 of interest paid by a debtor, the saver is paid (net of taxes) R\$25.3, the bank profits R\$24.4, R\$0.8 is paid as deposit insurance premium and the government collects R\$49.5! Transaction taxes were also at some stage levied on stock market transactions, with significant negative consequences. Narita and Novaes (2003) estimate that the Contribuição Provisória sobre Movimentação Financeira (CPMF), a tax on checks and other withdrawals, levied on stock market transactions in the Bovespa by 19%.

The problems caused by the high tax burden on financial operations are compounded by the frequent change in tax rules, which raises risk substantially. This instability stems partly from a "cat and mouse" game between financial intermediaries and the tax authority: given the high tax burden, the former are especially motivated to find and explore loopholes, while the latter follows behind closing them. Constant changes in taxation contribute to shorten maturities and increase the preference for liquid assets.

High taxes, not necessarily on financial intermediation, also compromise financial intermediation by fostering informality and encouraging companies not to go public in order to keep murky accounts and in this way "lower" their tax burden—public companies have to abide to more stringent rules of disclosure.¹⁸ This happens in spite of the lower cost of capital faced by public companies. Rocca and Carvalho (1999) estimate that the cost of capital for open-capital firms ranges from 23.5% p.a. for large firms to 35.5% p.a. for small ones, against 26.1% to 39.5% p.a. for companies with closed capital (estimates based on 1997 balance sheets). The impact of tax evasion on the quality of accounting information is particularly serious in the case of informal firms, whose access to financial markets is expensive and very limited. In particular non-transparent accounts makes much of the relevant information on borrowers private to the bank with which companies keep a relationship, making borrowers "informationally" captured and allowing banks to extract monopoly rents [Pinheiro and Moura (2003)].¹⁹ For small and medium companies, in particular, the opportunity cost of more transparent accounts seems a critical obstacle in the way of using external funds to finance investment, and most do not pass basic due diligence processes.

High default rates are another reason for high bank spreads in Brazil. In 2004 the average default rate on (freely-allocated) loans to individuals was 13.2%, almost four times as much as that for firms (3.6%). These high delinquency rates are a result of high interest rates (a circular effect), the poor quality of information available to select borrowers, and weak creditor rights. The poor institutional set up is an oft-

^{18.} In a sample of 143 public companies selected from the 500 largest companies in Brazil, the median tax burden amounts to 49.3% of value added [Rocca (2001)].

^{19.} The asymmetry of information created by this effort to avert taxation affects differently the access to capital markets and bank credit. The bank in which the company keeps its checking account and discounts its receivables is able to infer its financial health despite the opaque accounts. But minority shareholders or debenture holders do not have access to this information and are thus unable to infer or monitor the risk involved in investing in the company. Neither are outside banks.

cited cause for the lack of financial depth in LA, as well as in Brazil. A number of indicators of protection of minority shareholders and creditors are presented in Table 7. They show that the rights and information given to creditors and minority shareholders and the cost and speed of judicial contract enforcement and bankruptcy procedures are roughly at par with that of emerging countries, but generally less favourable than in industrialized and best-practice developing countries (Chile).

The main complaint of creditors in Brazil is not the lack of legal protection, but its improper enforcement by the courts.²⁰ The slowness of the judiciary is perceived to be the main problem not only for credit operations but also for the workings of justice in general. According to a survey of the Brazilian businessmen, 91% of them think that the judiciary performs poorly or very poorly concerning the speed with which cases are solved [Pinheiro (2003 and 2004)]. Notifying a large borrower can take three years, a cognisance action five to seven years, and an execution action five years. Furthermore, judicial decisions on credit disputes are perceived to be prodebtor. Judges themselves acknowledge that fact. This pro-debtor attitude is often the reflex of a certain degree of judicial activism that causes jurisprudence and patterns of judicial behaviour to play a role as or more important than the law itself in regulating credit disputes. Therefore, creditors are usually unwilling to rely on laws or legal instruments until there is a well-established jurisprudence for them. This explains why chattel mortgage (fiduciary alienation) is so well accepted for car financing but not house financing, while also making it very difficult to repossess most types of assets given as collateral, which then have a low impact in reducing risk and spreads.²¹

The legal and judicial protection of minority shareholders is also perceived to be weak, which helps to depreciate share values and raise the cost of equity capital. Nenova (1999) estimates that company values in Brazil are at least 20% lower than they should be due to weak property rights. Shareholder rights are also weakened by the mismatch between cash-flow and voting rights and the high ownership concentration of voting shares. Of a sample of 723 companies analysed by Rocca (2001), only 11% did not issue preferential (non-voting) shares, against 27% that issued the limit 2/3 of total equity capital in preferential shares. On average, preferential shares made up 46% of the equity capital of those firms. For large companies, this proportion is even higher. The high concentration of ownership and voting rights is another problem. In two-thirds (67%) of the companies, the share of ordinary shares owned by the controlling shareholders with at least 5% of these shares is above 90%; with 16% in the 80% to 90% bracket and 7% in the 70% to 80% interval. An indicator of weak minority shareholder rights is the high premium on voting rights. In Brazil, this premium is 23% (correcting for differences in liquidity,

^{20.} Pinheiro and Cabral (2001) show that differences in the quality of local judiciaries are as important as in per capita income in explaining cross-state differences in the ratio of credit/GDP, with states that have better judiciaries showing larger credit to GDP ratios.

^{21.} The relevance of good collateral is well illustrated by the difference between spreads in the finance of a car sale (19% in 2004) and in consumer loans for the acquisition of other durable consumer goods (46% in 2004). Because there is a well-established jurisprudence that, in case of default, allows for a rapid repossession of vehicles, compared to other types of guarantees, they are much better collateral. Other features of cars as a collateral are also important: there is an active secondary market for cars, and good registries in which ownership and legal status can be easily checked. But the same features apply to the mortgage market, which in principle should post the lowest interest spreads, and in practice is almost nonexistent due to the impossibility to effectively use real state as collateral.

dividend policy and share preference), compared to 18% in Germany, 9% in the UK, 3% in the US and 1% in Hong Kong. This high premium is associated with the high concentration of ownership in Brazil [Claessens, Klingebiel and Lubrano (2000)].

Judicial activism is part of what Arida, Bacha and Resende (2005) dubbed jurisdictional uncertainty, defined as the "risk of acts of the Prince changing the value of contracts before or at the moment of their execution", which, as is the case with court rulings, "manifests itself predominantly as an anti-saver and anti-creditor bias". Examples include the freezing of financial assets, the purging of price indices to lower monetary correction and the non-enforcement of dollar indexed leasing contracts by the Judiciary. The authors ascribe to this sort of uncertainty the non-existence of a voluntary domestic long-term credit market and argue that it fosters financial disintermediation, raises short-term interest rates and the preference for liquid assets, reduces overall savings due to the increased risk of postponing consumption, and induces savers to transfer their wealth offshore.

The poor quality of the information available to creditors and minority shareholders also discourages financial intermediation. Galindo and Miller (2001) show that, as a rule, the more and the better the credit information made available to lenders, the greater tends to be the access to credit. In particular, firms in countries with better Credit Information Registries (CIRs) tend to rely more on debt than in those in which credit information is scarce and of poor quality.

Brazil has a large and well-established credit bureau industry, with private and public CIRs. These keep mostly black information on borrowers, which is used when deciding about small loans, usually to individuals or small businesses. They also function as enforcement mechanisms, since borrowers included in black lists are usually denied credit. But their use in larger and longer-term operations is much more limited, in which case creditors suffer with the poor quality of accounting and disclosure rules, which also affect minority shareholders. Only in the corporate segment, comprising large firms, several of which borrow or have their shares trade in foreign markets, is information deemed of relatively good quality. For small and medium firms, informality, as discussed above, is a major factor worsening the quality of financial information. According to Rocca (2001, p. 102), based on information collected from managers of private equity funds, 70% of the companies selected for investment are discarded at the due diligence stage, given the inconsistency of accounting registries and effective revenues and due to tax contingencies stemming from this. The poor quality of information disclosed to investors is also the result of the inadequate enforcement of disclosure norms, with a large proportion of listed companies failing to send the required information to Comissão de Valores Mobiliários (CVM).

Comparing public CIRs in Brazil to those in other countries, according to the type of information made available to lenders, one sees that there is a substantial scope for improvement. The major challenge is to make more positive information on potential borrowers available. In this regard, the progress in Brazil's CIR industry since monetary stabilisation has not been substantial. One of the major changes in this period has been, though, the improved capacity of lenders to use the information available in CIRs, previously a major shortcoming in Brazil's banking industry.

| Country | Creditor | | Judicial contract enforcement | | Bankruptcy process | | Rights of | Disclosure |
|---------------------|----------|----------------|----------------------------------|----------------|----------------------|-----------|--------------------------|------------|
| | rights | Time (days) | Costs (% of debt) | Time (days) | Costs (% of debt) | practices | minority shareholders | index |
| Developed countries | 7 | 165 | 9.0 | 2.0 | 7 | 6.4 | 3.0 | 5.6 |
| Emerging, average | 4 | 395 | 16.0 | 4.0 | 15 | 3.8 | 2.8 | |
| Regional averages | | | | | | | | |
| Emerging Asia | 5 | 286 | 22.0 | 4.0 | 17 | 6.5 | | |
| Emerging Europe | 3 | 465 | 12.0 | 3.0 | 14 | 5.1 | | |
| Emerging LA | 3 | 435 | 16.0 | 5.0 | 13 | 5.2 | | |
| Brazil | 2 | 566 | 15.5 | 10.0 | 8 | 5.4 | 3.0 | 5 |
| Chile | 4 | 305 | 10.4 | 5.6 | 18 | 5.2 | 5.0 | 6 |
| Mexico | 2 | 421 | 20.0 | 1.8 | 18 | 6.0 | 1.0 | 5 |

TABLE 7 INDICATORS OF PROTECTION TO CREDITORS AND MINORITY SHAREHOLDERS—2004

Sources: World Bank, Doing Business 2005 and López-de-Silanes (2002).

The above highlights as the main barriers to financial deepening the distortions caused by the poor situation of the fiscal accounts and state interventions in mobilizing, draining and allocating savings. A large part of the financial wealth in Brazil is held in short-term, highly liquid and well-remunerated public bonds, which crowd out private bonds and stocks. The difficulty faced by the government to elongate the maturities of its debt also limits the capacity of firms to issue long-term securities, making them unwilling to seek external finance. The high tax burden induces firms to become informal and mask their accounts and increases interest rate spreads, while at the same time making tax rules volatile and uncertain. Macroeconomic instability is also a hindrance to stretching maturities due to high market risk, as reflected in the high volatility of the stock market. Breaches of financial contracts involving the public sector are often motivated by the effort to prevent the public debt from entering into an explosive path.

5 EQUITY AND FINANCE

Much of the criticism to first-and second-generation reforms in LA is linked to their apparent lack of impact on inequality and social conditions in the region. The empirical evidence on this impact is mixed. Morley (2001) concludes that reforms tended to cancel one another, causing inequality to change little. Birdsall and De La Torre (2001) make a favorable assessment of the social impacts of the Washington Consensus reforms and conclude that without them social conditions would probably be worse. But they also stress that per capita income in the region grew a mere 1.5% per year, unemployment rose, poverty remained widespread and "a sharp rise in crime and violence undermined the quality of life everywhere in the region" (p. 7). Brazil, in particular, showed improvements in infant mortality, illiteracy, basic education coverage and life expectancy in the last two decades. But it still displays worse social indicators than countries with similar per capita income.²²

Can financial development reduce inequality and poverty in LA and, in particular, in Brazil? Our view is that it should help, although the link between finance and social conditions is more likely bi-directional than one way. Financial deepening, as discussed above, should accelerate GDP growth. The literature is not consensual as to the extent to which growth benefits the poor, but it does not dispute the fact that it is beneficial.²³ Dollar and Kraay (2000) estimate that income of the poor (defined as the bottom quintile of the population) rises proportionately one-for-one with per capita GDP. Ravillon (2001) also obtains that on average there is no significant correlation between per capita growth and inequality, but concludes that, while on average this correlation is close to zero, it varies considerably from one country to the other. Foster and Szekely (2002) conclude, though, that income of the poor grows less than proportionately with average income increases. Menezes-Filho e Thomas (2001) derive a similar result for Brazil by comparing the growth of average household income and the average income of the bottom quartile of the population in 1982-1998.²⁴

A possible explanation of why the impact of growth on inequality and poverty is not uniform across countries is that this impact depends as well on the factorintensity of growth and on who owns those factors.²⁵ The factor of production owned by the poor is (unskilled) labor, and normally they lack, or have no access to, human, fixed (including land) and financial capital.²⁶ This explains why policies aimed directly at alleviating poverty and improving the distribution of income that are not directly based on income transfers, which have serious limitations, usually focus on either redistributing capital or tilting the factor intensity of growth towards labor. Examples of such policies include offering universal pre-university education; reducing the cost and risk of hiring workers through a well-targeted labor-market reform and changes in the way Labor Justice operates; supporting small enterprises, through greater access to credit and a substantial reduction in corporate regulation;

^{22.} Brazil's illiteracy rate is similar to Bolivia's, its infant mortality parallels that of Ecuador and is over three times that of Chile, life expectancy is five and a half years less than in Argentina, and the proportion of university students in the population is half of El Salvador's and a third of Panama's. The population's average years of schooling is not only well below that in East Asia and in some Latin American countries, but has also increased slowly in the last 20 years.

^{23.} Barros, Henriques and Mendonça (2000*a*) argue, though, that relying solely on economic growth to reduce poverty may result on sustained high poverty for decades to come. They estimate that in Brazil a 3% annual increase in per capita GDP reduces the poverty rate by roughly one percentage point, so that it would take 25 years of annual 3% growth in per capita income to reduce the poverty rate below 15%, down from a rate of 34% in 1999.

^{24.} With inequality essentially unchanged, growth in per capita income, albeit low, has been the main driving force behind poverty alleviation in Brazil. According to Barros, Henriques and Mendonça (2000*a*), since 1977 the decline in poverty has resulted essentially from economic growth.

^{25.} Adelman (2000, p. 15) notes that "When the main thrust of development is based on a factor whose ownership is concentrated, development is unequalizing. More specifically, when ownership institutions for the primary factor of production, or when the institutions for access to the factors that are complementary to it are concentrated, or when the policies adopted to induce that type of growth depress the prices of the main factor of production owned by the poor, growth in unequalizing."

^{26.} Moreover, as noted by De Soto (2000), even this scarce physical capital generates less income than it should due to titling problems. In societies marked by judicial activism, they are also unusable as collateral for they are not, in practice, executable by creditors.

land reform; giving technological, financial and infrastructure support to small rural properties; encouraging housing construction; and extending micro-credit to informal workers and firms.

The effect of asset ownership on the income of the poor is discussed by Barros et al (2000) and Neri (2000), and is central to the analysis of De Soto (2000). But the Brazilian literature on this issue is relatively scarce. On the other hand, there is plenty and solid evidence that differences in years of education are the main explanation for income differentials in Brazil [Ramos and Vieira (2000) and Bonelli (2002)].

Financial development should benefit the poor more than proportionately because they are the ones who pay most for financial services and have least access to the financial system. A lower cost of consumption and investment finance will mean a direct income gain to the poor, and the opportunity to enhance physical and human capital accumulation, increasing their productivity and becoming better positioned to gain from growth. Better access to financial services should reduce their transaction costs, allow them to keep their savings at a safer and better-remunerated place, and even consume insurance and private social security services. Currently, outside the very expensive consumer loans extended by traditional financial institutions, their only options are the relatively small micro-credit segment.

The market power of banks in fixing differentiated interest rates to small borrowers depends less on oligopoly conditions and more on access conditions. High interest rates are charged in operations such as personal and small-scale enterprises loans. Access to credit lines is limited and the cost is very high compared to alternatives to large firms and rich households. Thus, for instance, when available, services charged on bank customers with small balances are much more expensive than to customers with large balances and many transactions. Micro-finance (see next) is more expensive too. Indeed, lending rates presently charged by public and private agents in Brazil are substantially higher than rates charged by BNDES, for instance. Even the recently operated micro-finance line available in this development bank is more expensive than regular (automatic/indirect or direct) operations to large clients.

Despite micro-credit activities having existed in Brazil since 1973, and the country offering a fertile environment for micro-finance²⁷—a large and entrepreneurial low-income population that lacks access to regular banking services and a favourable stance from public authorities—only in the past decade the system of micro-credit and the activities of micro-finance started to received some attention. This occurred with the establishment of the *Comunidade Solidária* program and encouraged by the creation two new types of micro-finance institutions (1999) that

^{27.} The supply of micro credit in Brazil is made through a diversity of institutions under different regimes Micro credit can be assessed by formal and informal entrepreneurs. Typical loan values amount up to R\$ 5,000 (approximately US\$ 2,000) and interest rates charged reach approximately 4%-4.5% per month (yearly consumer price inflation in Brazil is currently around 5.5%). Requirements include a clean record (at least one year) and a guarantor. Alternative mechanisms are joint guarantees and credit cooperatives [Expósito da Silva (2003, p. 100-102)].

gave the industry more flexibility regarding both funding and lending. Currently, different types of organizations provide micro-finance:²⁸

a) Non profit-seeking institutions, such as (a.1)NGOs, which are subject to the Usury Law; and (a.2) Public interest civil society organizations (Oscip), established under Law 9,790/1999, duly registered with the Ministry of Justice, and which are not subject to the Usury Law.

b) Profit-seeking institutions, such as: (b.1) SCM, properly authorised by the BCB, which may be controlled by any individual or organization, including private financial institutions and Oscip; and (b.2) any conventional financial institution.

Substantial progress form a very low credit-base has been made in recent years, though.²⁹ Nonetheless, despite expanding considerably over the last decade, micro-finance in Brazil has flourished less than in other Latin American countries [World Bank (2004*b*)]. Moreover, it remains highly dependent on the public sector, either directly, as with Banco do Nordeste's Credi Amigo program, or indirectly, by way of financial support from BNDES to NGOs providing micro-finance. Autonomous micro-finance institutions (such as ABN-Amro's "*Real Micro-Crédito*") are few and small.

Brazil also has a large credit cooperative industry that operates in a loan range similar to that of the micro-finance institutions. It is, though, more skewed towards individuals and less active in the informal business segment, which is the prime target of micro-finance. Credit cooperatives, which have existed in Brazil for over a century, account for a larger volume of credit, are less dependent on public support and have expanded more rapidly than the micro-finance institutions. Both micro-finance institutions and credit cooperatives have greatly expanded over the last years.³⁰ More importantly, their share in total lending by the banking system more than doubled between 1977 and 2002. The World Bank (2004*b*) estimates that the credit cooperatives have about 2 million members. The number of SCMs also expanded vigorously since they were allowed to operate in 1999, but these are still very few when compared to the cooperatives. Moreover, they account for a small share of the micro-finance industry in Brazil, which is dominated by the Oscip and NGO. As noted by the World Bank (2004*b*, p. 52):

"Many microfinance institutions are largely beyond the purview of formal financial system supervision, but estimates suggest that the total number of clients served increased from around 3,000 in 1995 to around 160,000 by end-2001, while the active loan portfolio grew to some R\$140 million. This is small compared to the credit cooperative system, and also small compared to other countries in the region, once adjusted for country size. Peru and Bolivia had estimated microfinance clienteles of

^{28.} For a detailed account of micro-finance and credit cooperatives in Brazil see World bank (2004*b*) and Banco Central (2003*a* and 2003*b*). According to Darcy and Soares (undated), 47% of the micro-finance institutions are Organização da Sociedade Civil de Interesse Público (OSCIP), 31% Non-Governamental Organizations (NGO), 12% Supply Chain Management (SCM) and 10% funds.

^{29.} One of the mechanisms adopted, salary-backed loans, has been responsible for a substantial credit increase because the collateral for the loan is the very wage, salary and retirement payments.

^{30.} The number of credit cooperatives increased by 50% between 1994 and 2003.

around 185,000 and 380,000 at end 2001, respectively, while small countries such as Nicaragua and El Salvador also had over 80,000 microfinance clients."

As to the SCM segment, despite the increase in the number of these societies and the rise in the value of its financial indicators, their total lending at the end of 2002 amounted to 0.0007% of GDP, only. Still, it is significant that the number of such organizations in activity showed a seven-fold increase between 2000 and 2003 and that concentration in the Southeast Region declined somewhat, although still being very high (70% of the SCM were located in the Southeast in 2002).

The poor should also benefit from financial development if the access of SME to finance increases. Small firms have a much more limited access to credit and finance than medium firms—despite the fact that the size limits of medium firms are flexible, depending on the investigator (usually up to 50 employees is small; from 50 to 5000, medium-sized). But, however defined, SME represent a sizeable proportion of firms, employment and output in both developing and, especially, in the developed countries. In LA they represent 50% of formal employment in Mexico, almost 60% in Ecuador and Brazil, around 70% in Argentina, Colombia, Panama and Peru. In a sample of developed countries the figures are: 60% in Germany and the United Kingdom, 70% in France and 80% in Italy and Spain [BID (2005, p. 195)].

Lack of access to credit is the most important obstacle to the development of SME,³¹ and especially so among the small firms (38.7% of all small firms in the World Business Enviroment Survey (WBES sample). In LA, however, the first impediment to the growth of small firms is urban crime. It is followed by access to financing, inflation, exchange rate, corruption, organized crime, political instability, tax and regulation, and infrastructure. The list is nearly the same for medium-sized firms, with little change in the ordering of causal factors. Only 28.8% of the small firms have access to bank credit, compared to 42.8% for medium and 54.5% for large firms. The figures for bank credit from local commercial or foreign banks are much slower than those: 10.8% (small), 17.2% (medium) and 24.0% (large). This indicates that state-owned banks account for the remaining shares, which are larger than the shares of local commercial and foreign banks.

Small firms in LA and the Caribbean are among the ones for which financial restrictions are the most important growth impediment, surpassed only by South Asian firms. In contrast, small firms in LA present comparatively high levels of access to bank credit, on a level similar to firms in OECD. However, the similarities disappear when one considers the broader frame of financing structures in the two regions. While small firms in the OECD countries count on other forms of formal financing (leasing and equity, for instance), small firms in LA rely on informal sources (family members and informal lenders). Financing restrictions to small and medium firms in LA have four main causes: *a*) fixed costs of loans (related to evaluation, supervision and repayment of loans, which increase the cost of loans to small borrowers; micro credit is not a solution here because the amounts are likely to

^{31.} The data mentioned in the text come from the World Bank's WBES, which covers approximately 10,000 firms in 81 countries (20 in LA, 2,000 firms) in 1999-2000. *Apud* BID (2005).

be large); b) difficulty to repossess collateral; c) bankruptcy costs; and d) asymmetric information, which causes moral hazard and adverse selection problems.

The empirical analysis of financing constraints conducted in the BID (2005) study classifies the main restrictions faced by firms as follows: *a*) enforcement of credit contracts (effective compliance reduces financing restrictions perceived by firms); *b*) credit information registry (private registry has a positive impact; and public registry has no impact); *c*) dislocation, or crowding out effect (high public domestic debt increases financing restrictions and reduces access to bank credit); *d*) bank concentration and bank ownership (high concentration increases financing restrictions to SME; there is some evidence that state property reduces restrictions to SME and foreign penetration reduces restrictions overall, and not just to SME); and *e*) GDP volatility.

Because SME are more labor intensive than large firms, this could make growth more labor intensive. In this case, SME could possibly play a larger role in enhancing entrepreneurship and alleviating poverty, thereby potentially contributing to reduce inequality. The conclusions of recent research, however, cast doubt on the idea that SME positively influence growth or contribute to reduce inequality: Beck, Demirgüç-Kunt and Levine (2005) explored the relationship between the relative size of the SME sector, economic growth, and poverty alleviation using a new database on the share of SME labor in the total manufacturing labor force and concluded that:

"Using a sample of 45 countries, we find a strong, positive association between the importance of SMEs and GDP per capita growth. The data do not, however, confidently support the conclusions that SMEs exert a *causal* impact on growth. Furthermore, we find *no evidence that SMEs alleviate poverty or decrease income inequality.*" (Emphasis added).

Financial development also lowers the cost of financial capital and physical investment in the economy as a whole. This will raise investment and labor productivity, lifting wages of employed workers. On the other hand, higher labor productivity would have a negative impact on employment, unless output is to expand sufficiently. In particular, there is a risk that the less skilled workers suffer most, if they are the ones capital can most easily substitute for. This stresses the importance of financial reform accelerating growth for its social impacts to be positive. To the extent that growth is indeed constrained by the lack of investment finance, the benefits to the poor are uncontroversial. But this could not be the case in countries in which other factors constrain growth.

Inasmuch as different market segments and/or participants are unequally affected by the disincentives provided by weak creditor protection, reforms in this area could have particularly important implications regarding the access of certain economic agents to credit. That is, the rationing of credit resulting from debtororiented laws can disproportionately affect certain types of borrowers, restricting their access to credit or penalizing them with especially large spreads. This point is illustrated by the results of Gropp, Scholz and White (1997), who find that in American states with debtor-oriented bankruptcy laws, credit tends to be channeled to high-asset households, with a reduction in the availability and amount of credit extended to low-asset households, indicating that "bankruptcy exemptions redistribute credit toward borrowers with high assets." Moreover, they find evidence that low-asset households are charged higher interest rates on automobile loans in high bankruptcy exemption states. Pinheiro (2002) shows that in Brazil small borrowers are especially harmed by the difficulty of creditors to enforce loan contracts through collateral repossession or other types of judicial collection.

Thus, financial reform will also contribute to reduce inequality for it will require solving problems that affect the poor and small businesses disproportionately: for instance, better defined property rights, less informality, more macroeconomic stability and competition. Dollar and Kraay (2000) find that fiscal discipline, and in particular low inflation and good rule of the law benefit the income of the poor as much as average income.

Informality is one of the main areas in which the needs of financial reform and social policies coincide. Alongside the relative scarcity of jobs in the corporate sector, particularly "formal" jobs, a new trend has been observed since the early 1990s in LA countries: the emergence of new employment opportunities in micro-business, cooperatives and self-employed, largely based on informality. This widespread emergence of informal labor relations, which is closely related to small businesses, poses powerful barriers to economic growth and productivity change. A recent study argues forcefully that informal labor is also a powerful obstacle to productivity growth in Brazil [McKinsey&Company (2004)]. The McKinsey study defines informality as the performance of licit activities in irregular forms, through the noncompliance of regulations (concerning evasion of taxes and duties and falsifications of instruments of fiscal control; non-payment of social security, inexistence of wage legislation and undeclared employment in labor markets; evasion of requirements on product quality, property rights, environment, etc. in product markets regulations) that imply substantial hidden costs to the economy. The costs associated with complying with the law are an inducement to less competitive firms to turn to informality as a survival strategy.³²

Once turned informal, there is little incentive for firms to invest in physical and in human capital. Access to credit markets is made more difficult. Informal operations have no incentive to grow because they would become more visible if they did. Relationships tend to concentrate in other informal firms as well. The study by McKinsey (2004) concluded that increasing the formal economy relatively to the informal, or shadow economy will have an important impact on Brazil's GDP and productivity growth. Thus, for instance, the lower than otherwise use of capital relative to labor—a typical feature of informal activities, and one often associated with lower productivity levels follows from the tax evasion of labor costs. These and other barriers to the formal economic activities are barriers to productivity growth.³³

^{32.} The productivity gap between informal and formal firms in Brazil is estimated at about 50%. This is due to the difficulty to access financial market mechanisms, reduced access to judiciary in order to enforce contracts, disincentive to grow due to fears of being caught by government agencies in charge of enforcing tax and other legal norms and procedures, and insertion in productive chains formed by informal firms as well.

^{33.} A recent document from the World Bank (2004*a*) estimates that the shadow economy accounts for 40% of Brazil's gross national income and for 50% of the non-rural labor force.

From the McKinsey (2004) report we have also learned that informal labor activities have been approximately constant in the decade 1992-2002 (56.6% of the employed population in 1992 and 55.0% in 2002). Informality has been nearly stable only because agriculture's share in total employment has decreased. In fact, from the Brazilian household surveys [Pesquisa Nacional por Amostra de Domicílios (PNAD)] we learned that the share of informal labor in agriculture is estimated at 90% (91.5% in 1992 and 89.9% in 2002). In the non-farm sector as a whole informal labor increased from 42.9% of the employed population in 1992 to 46.0% in 2002. This reflects migration from rural to urban areas, as will be further explored below. As to the within-manufacturing sector composition of informal labor activities, the report states that it is concentrated in sectors such as clothing and accessories (where 62% of employment is informal),³⁴ textiles (56%), food products and beverages (40%), metal products (38%).

Informality in Brazil has several causes, the most important of which being: *a*) high costs implied by formalization: can be divided into those arising from rigid rules such as the ones for creating and closing down businesses,³⁵ rules governing labor relations; excessive tax burden on formal firms and high contributions to social security; ³⁶ and *b*) low enforcement capacity from the authorities, often associated with a slow judiciary and a disproportionate judiciary burden.

McKinsey (2004) also presents estimates of output and productivity gains that can be achieved by reducing informality. After fitting an equation to data on productivity growth rates and informality rates data of 26 manufacturing industries, a significant and strong negative association was found. The equation results were then used to predict productivity growth in 1996-2001 under two assumptions on informality reduction (20% and 40%) in all sectors, simultaneously. Manufacturing output would then increase by an additional percentage between 1.5% and 3.0%. Labor productivity would be increased from observed 1.4% p.a. to 2.8% or 4.6% per year, depending on the informality reduction achieved. The study also suggests that for the economy as a whole the additional productivity increase would be on the order of 1.5% p.a. This is a rather powerful effect.

Finally, financial reform can improve income distribution if it entails making the distribution of financial incentives less skewed towards large farms and firms and more pro-poor. The Brazilian financial system is also a means to transfer subsidies to specific sectors, firms and social groups. Agriculture is the most conspicuous case, but other sectors also benefit. Farmers benefit from concessional credit, which is channelled mainly through three federal banks, notably Banco do Brasil (BB). Funding for rural credit comes mainly from mandated credit and compulsory savings funds.³⁷ A relatively high proportion of its population still lives in rural areas.

^{34.} Defined as non-contributing to social security.

^{35.} The World Bank (2004a) estimates that on average it takes 152 days to establish a business in Brazil, and 10 years to close it down; that Brazil has the third less flexible labor legislation in the world.

^{36.} Of the tax rate of 34.1% of GDP collected in 2001, 11.0% came from employer social security contribution and 12.1% were from indirect taxes [McKinsey (2004, p. 28)].

^{37.} First, there is a 25% reserve requirement on sight deposits in the banking system, which can either be deposited with the Central Bank without remuneration or used for lending to agriculture at controlled interest rates. This answers for over half of the rural credit funds. Second, there is an array of off-budget taxes, compulsory savings, and constitutional funds, managed by public banks. These also have exclusive access to the "equalisation of interest rates" instrument,

Therefore, the potential clientele for rural credit mounts to approximately 35 million people and an estimated 4.8 million rural establishments, or farm units. But land distribution is highly skewed, with the wealthiest 1 percent of farmers accounting for 45 percent of landholdings and the poorest 50 percent of farmers holding just 2 percent of agricultural land. And it is the wealthiest farmers who benefit the most from government subsidies, in this way emptying any distributive goals of such programs, while at the same time bringing into question the need of subsidies due to market failures—large farmers have various means to deal with risk and other problems inherent to rural production. Thus, as noted in World Bank (2004b, p. 192):

"[A] large part of this directed credit fails to meet intended targets, however, with better-off farmers, for example, capturing much of the subsidies, rather than the poorer groups for whom the subsidies are intended. In agriculture the largest 2 percent of the borrowers receive 57 percent of the loans, while the smallest 75 percent of borrowers receive only 6 percent of credit."

As in agriculture, it is the large firms in industry and other sectors that receive most of the subsidies intermediated by public banks and regional development funds. Historically, the better-off segments of the population also benefited the most from housing finance subsidies.

6 FINAL REMARKS

Compared to other countries of LA-especially Chile, Mexico, and Argentina-, market reforms in Brazil came later and were implemented more gradually and flexibly. Overall, Brazil lagged behind the regional average until 1999, but eventually caught up and even surpassed it in the case of privatization. Indeed, in 1999 Brazil's overall index of structural reform matched Chile's. And after a difficult start, with a contraction of GDP in 1990-1992, the economy expanded vigorously in 1993-1995. It was then expected to begin a cycle of rapid growth afterwards. Actually, Brazil grew on average only 2.4% p.a. in 1995-2004. Moreover, after a substantial decline in poverty with the end of high inflation in 1995, little progress was accomplished in reducing the serious social inequalities in Brazil, with no significant progress being achieved in improving income distribution or reducing poverty incidence since that date. The reforms of the 1990s succeeded in raising productivity growth, but not investment rates: capital accumulation proceeded even more slowly in 1994-2003 than in the so-called "lost decade". The high cost of investing is one of the underlying causes; lack of proper finance is one of the factors that pushes investment cost up. In some sectors there is no long-term finance available to private investors on adequate terms, other than that provided by public banks. Given Brazil's high marginal productivity of capital, facilitating the access to external (to firms and households) finance and lowering its costs is a sure way to accelerate growth.

which supports the 'Programa Nacional de Agricultura Familiar' (Pronaf, a credit program aimed at rural households). As noted by the World Bank (2004*b*), "public sector programs and institutions play a predominant role in the national rural credit system, and these have 'crowded out' the private provision of credit at market rates".

The financial sector is one of the areas in which reform progressed more in LA, but also the one in which Brazil lagged most behind. Through its role in mobilizing savings to finance investment and production, selecting and monitoring investment projects, diversifying risks, and allowing investment and production to be carried out in the most productive scale and time frame, financial markets help to foster growth and productivity. This has prompted in recent years initiatives to improve the sector's institutional framework, such as the creation of a new public CIR at the BCB, the enactment of legislation allowing for salary-backed loans, and the reforms in the bankruptcy and corporate laws. The results have been positive, but so far unremarkable: the cost of capital remains extremely high, there is little financial intermediation taking place, and external finance reaches only a small number of large firms.

Our analysis reasserts the importance of reforms geared to improving the quality of information and strengthening the rights of creditors and minority shareholders. It also stresses other complementary explanations for the relatively small contribution the Brazilian financial system has had towards promoting growth and equity. Four are worth stressing.

First and foremost among the barriers to financial intermediation is the incomplete macroeconomic adjustment of the economy—and, in particular the large public debt—which lead to high interest rates, market volatility, and a preference of savers for liquid, short-term financial investments. By giving savers the alternative to invest in highly paid, low risk, highly liquid public bonds, the public sector sets a hard to meet benchmark for private investors, while downplaying the role of the financial sector in selecting and monitoring investment projects. This is the case of institutional investors, which control large sums of financial saving, largely invested in Treasury bonds. Fiscal imbalances also explain the relatively high reserve requirements on sight and term deposits, reducing the pool of savings that banks can draw on to finance firms and households.

Second, the high tax burden (35.91% of GDP in 2004) and the associated high degree of informality and fiddling with company accounts, which lower the quality of the information disclosed to financial institutions and minority shareholders. This lowers the supply of external finance and makes it more expensive. But most companies prefer to pay this price to give up the opportunity to partly evade taxes. Financial intermediation per se is also subject to high taxes, enlarging the wedge between the cost of capital to investors and the remuneration obtained by savers. These enhance the importance of retained profits as a source of investment finance, notably in the case of small and medium companies, being another factor contributing to financial disintermediation.

Third, the central role of the state in mobilizing and allocating savings, largely an inheritance of the pre-1990s development model, which dampens the impact of financial intermediation on capital productivity. Virtually all long-term credit in Brazil is funded through compulsory savings and the mandatory use of a part of sight and term deposits to finance selected activities. These resources amount to 40% of all credit available to the private sector and are mostly intermediated by public banks. Both the loss of flexibility and political interference in the allocation of credit by public banks reduce the impact of financial intermediation on capital productivity.

Fourth, the low protection of minority shareholders and especially creditors against expropriation by the state and private parties create a highly uncertain and risky environment that raises the cost of capital, discourages financial intermediation and raises the preference for short-term and liquid financial assets. This low protection of rights reflects a number of factors—judicial activism, high volatility of tax rules, contract breaches by the government, and the slow enforcement of laws and regulations—, including an overall bias against financial investors in the Executive, Legislative and Judicial branches of government.

Novaes (2004) shows that emerging economies with relevant capital markets have low inflation and a relatively low public debt, with a long duration. She also shows that the transition to such a macroeconomic environment, allowing for a decline in interest rates, has preceded a discrete improvement in financial market development, confirming our assessment that furthering the fiscal adjustment process and lowering the public debt to GDP ratio are pre-requisites not only for lowering the tax burden and jurisdictional uncertainty, but ultimately to allow for financial development in Brazil.³⁸

Some of these problems are even more acute in the so-called retail segment, which covers individuals and small businesses. Financial institutions operating in this segment tend to direct loans to consumers, rather than producers; prefer to operate with the rich, rather than the poor; and essentially supply only short-term loans. Default rates are higher than the average, and so are interest rate spreads. This is the targeted clientele of micro-credit institutions, which have expanded their activities in recent years, but from a very low base. Their activities are hampered by the same kind of legal and informational problems that complicate traditional institutions: lack of valuable, well titled, executable collateral; severe problems of asymmetric information; and, in the case of small businesses, a high mortality rate.

The combined effects of these problems are financial disintermediation and a preference for liquid, short-term financial assets. Savers also tend to either reinvest their savings or keep them abroad in safer jurisdictions. The end result is a financial system that, although counting with a sophisticated infrastructure, plays a very limited role in fostering growth and equity.

^{38.} The good news is the evidence indicating that there is a discontinuity in the relation between macroeconomic indicators and financial development when countries become investment grade. Concurring to that are regulatory requirements that limit investment by some institutional investors in non-investment grade securities, thus limiting the available pool of resources.

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