The Financial Sector in Latin America:
The Challenges of Stability, Growth, and Equity

Barbara Stallings
Rogerio Studart*

*Director and Economic Affairs Officer, respectively, Economic Development Division, United Nations Economic Commission for Latin America and the Caribbean (ECLAC).
This paper is part of a larger project on the financial sector in developing countries, financed by the Ford Foundation and ECLAC. Parts of the paper draw on Stallings and Studart (forthcoming).

I. Introduction

One of the most crucial sets of issues in economic development today is the rapidly evolving nature of the financial sector, the stability of the new system, the role it plays with respect to growth and equity, and the new challenges it faces as a result of liberalization and globalization. While these issues were relegated to secondary status during much of the postwar era, it is now widely recognized that the new, private-sector oriented economies in developing countries cannot function properly without a robust domestic financial system. Of course, the financial system cannot be viewed in isolation; in particular, the interrelationship between financial and macroeconomic performance is of utmost relevance to the way the economies function. At the same time, the challenges of managing financial systems have greatly increased with the greater integration of local systems into world financial markets.

In dealing with the financial sector, governmental authorities have two potentially contradictory roles to play. On the one hand, they must try to maintain the stability of the system as a whole, both financial and macroeconomic. To do so, they establish rules that, among other functions, limit the amounts and types of credit that individual institutions can provide and establish broad guidelines for their behavior. On the other hand, today's governments are also expected to promote growth and a modicum of equity with respect to the fruits of growth. In the financial realm, this involves providing incentives so that financial institutions will channel investment funds to productive enterprises; it also involves creating the institutions and incentives so that credit will be available to all types of firms and households. And, for some observers and policymakers, it requires the government itself acting through state development banks.

If either of these activities becomes too dominant, it can displace the other. Thus, if too much emphasis is put on stability, banks will not lend to productive enterprises in general and certainly will avoid dealing with more risky small and medium-sized firms (SMEs). An unwillingness of banks to finance SMEs is especially problematic since the capital markets are the exclusive domain of larger, more established firms. Likewise, if governments overemphasize promotion of growth, the result will be to undermine stability with negative implications for growth itself. Clearly, a balance must be sought, but it is not easy to know how to design adequate policies, especially since advice from experts is frequently inconsistent.

This tradeoff, or delicate balancing act, with respect to stability and growth and how to achieve them exists in all countries, but it poses an especially daunting task for developing nations. There are a number of reasons for the greater difficulty. The financial systems themselves are more fragile in developing countries, in addition to which governments lack the instruments and institutions that are typically found in industrial nations. They also lack trained personnel. At the same time, in developing countries, high growth rates are more necessary to begin to provide their populations with an adequate standard of living, and inequality is likely to be more prevalent. Finally, and ironically, international attempts to provide help and guidance on financial issues may actually increase problems for developing countries, as has recently been argued with respect to the new proposals by the Bank for International Settlements (BIS) and the codes and standards being introduced by the International Monetary Fund (IMF).

The trend toward financial liberalization and international integration has further complicated the task of financial management for all, but again it has posed special problems for developing countries. However imperfect they were, developing countries had some instruments to maintain stability under the old closed, state-centered development model. The transition to a more open system frequently took place so rapidly that substitutes could not be developed in time; in the industrial countries strong systems of regulation and supervision were developed over decades, not months. In addition, the small scale of most developing country financial systems makes them particularly vulnerable to the large and volatile flows of international capital that have become characteristic of the global markets in recent years. While these flows can help relieve the foreign exchange constraint that has typically limited growth in the region, they can also undermine stability and result in major crises with profound implications for macroeconomic performance, including both growth and equity.

Financial opening has also signified another set of issues with respect to the international environment. The volatile flows referred to above were mainly portfolio investment, often short-term flows. In addition, foreign capital has affected the financial sector via foreign direct investment and the takeover of existing institutions, either through privatizations or mergers and acquisitions. All of our main topics –stability, growth, and access– are potentially affected by a greater foreign presence in the financial sector. On the positive side, many expect (or hope) that foreign institutions will bring with them greater efficiency and deeper pockets that could help make developing countries and their corporations more competitive. But there is also fear that they will be interested only in the largest and strongest clients and will displace their local counterparts (including public-sector institutions), which might have had more interest in a broad spectrum of local clients.

This paper examines these issues in Latin America in the 1990s, although the analysis and conclusions are also relevant for other developing countries and regions. It has five sections, including this introduction. The second surveys the recent changes in Latin American financial systems. The third focuses on questions of financial stability, especially the problems of regulation and supervision of the banking sector. The fourth turns to the questions of growth and equity, concentrating on the investment process and the access to credit. And, finally, the fifth presents our conclusions and some policy issues that need to be considered in the coming years. (1)

1) Certainly, we are not the first to discuss these topics. The most extensive work has been done by the Development Research Group and the Financial Sector Strategy and Policy Department of the World Bank. It has been summarized in World Bank (2001). The annual reports and working papers of the BIS are very useful, as are the publications of the Financial Stability Forum. The IMF annual publication, *International Capital Markets*, contains extensive data and analysis, and the financial sector assessment papers can now be found on the IMF website. On Latin America in particular, see Held and Szalachman (1991), Norton and Aguirre (1998), United Nations (1999), and Aguirre (2000).

II. The Changing Characteristics of Latin American Financial Systems

The financial sector in Latin America has undergone major changes in the last twenty years. Beginning with financial liberalization and passing through crises, rescues, and restructuring, the sector now has quite different characteristics than it did at the onset of the debt crisis in the early 1980s. This section provides a brief overview of the region as a whole, demonstrating both the similarities and the remaining differences among countries. It also provides some comparative data with respect to developing economies in other world regions to highlight the particular characteristics of Latin America.

a. Liberalization, crises, and rescue: some stylized facts

The essential background for understanding current developments in the financial sector in Latin America is the financial liberalization process, both domestic and international, that took place in the 1980s and 1990s in most countries. Chile was an important exception, in that both liberalization and crisis preceded those of its neighbors by at least a decade.

Moving from highly repressed systems, where authorities set interest rates, directed credit, held a large share of bank deposits as required reserves, and frequently acted as bankers themselves, governments withdrew in a substantial way, freeing commercial banks to make their own decisions on borrowers, loan volume, and prices. At approximately the same time, capital account liberalization enabled local banks to engage in transactions in foreign currencies and allowed foreign institutions to enter local markets. Frequently such changes were made without having in place an adequate regulatory and supervisory system, which compounded problems for bankers without sufficient experience in credit analysis of local borrowers, much less the complexities of international financial markets.[(2)]

The typical results were credit booms, mismatches between maturities and currencies, and eventually banking crises. As seen in the emblematic Chilean case, the errors by the domestic actors themselves could provide the basis for such a crisis; if combined with external shocks, the situation could become far more serious (see Held and Jiménez, 2001). Government rescues tended to follow a standard package. In the first instance, the need was to contain the hemorrhaging of the banks. Measures included the takeover of non-performing loans, the recapitalization of banks, and liquidations and mergers, usually involving foreign institutions. Later, in an attempt to prevent future crises, regulation and supervision were stepped up, greater information and transparency were required, and deposit insurance was sometimes put in place. In the process, the characteristics of the sector changed significantly.

b. Characteristics of the new financial sector

The financial sectors in Latin American countries remain bank based, but they have undergone a number of important changes in recent years. First, the size and depth of the

---

2) For a useful summary of the liberalization process, see Williamson and Mahar (1998). See also Caprio, Honohan, and Stiglitz (2001).

financial sector increased in most countries during the 1990s. In part, at least, this is the result of the dramatic decline in inflation throughout the region, such that in most countries prices are now rising at single-digit rates compared to the three or four-digit rates often found in the 1980s. Thus, individuals, households, and firms are more willing to hold money and other financial assets, providing the necessary prerequisite for the development of robust financial systems. Better institutions have complemented the behavior of individual agents.(3) Table 1 gives an idea of the extent of the trend, using M2 as a share of GDP as an indicator. It shows an increase for four of the six Latin American countries during the decade; the prominent exception was Mexico although Brazil also saw a decline. The biggest increase was in Argentina although Chile had the highest levels. The table also shows data for four Asian countries. The contrast is striking in two senses: not only were the levels higher in every case, but the rate of increase was also higher.

[Table 1 here]

Second, the existing banks have been allowed to enter new activities, resulting in the formation of so-called universal banks. In general, this has been a result of deregulation of banking activities, which expanded bank operations into securities trading, insurance and real estate activities as well as allowing banks to own non-financial firms. This is a trend that has moved in tandem with events in mature economies, but unlike some of the latter, securities markets in developing economies are still very underdeveloped and shallow, and therefore most bank portfolio diversification has been into short-term securities, insurance, and real estate activities.

Third, foreign institutions have become increasingly significant actors in the financial sector. Their greater role is part of the liberalization process, as new sectors were opened to foreign participation. Three vehicles were used by foreign banks and financial service firms to enter developing country markets: privatizations, mergers and acquisitions, and greenfield investment. Consequently, as can be seen in Table 2, foreign assets as a share of total assets have risen substantially in all seven Latin American countries with data available (Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela); the increase for Mexico would be much greater if the recent sale of the country's largest bank were included in the table. It is interesting to note that similar trends were found in Eastern Europe but not in Asia.(4)

[Table 2 here]

Fourth, there has been a decrease in the number of banks –especially in Latin America and in Asia– as a result of the just mentioned processes of mergers and acquisitions,

3) On financial institutions, see Burki and Perry (1998) and World Bank (2002).

4) The issue of foreign participation in the banking sector of developing countries has been extensively studied in the last few years. See, for example, Litan, Masson and Pomerleano (2001), Clarke et al (2001b), and IMF (2000).

including privatizations (see Table 3). What is somewhat surprising is that this process has not resulted in a significant increase in the already high levels of concentration. Indeed, in Asia and Eastern Europe, there appears to have been a decrease in concentration. In Latin America, the shares of the largest three and ten banks both rose, but not by a very large amount. This result implies that the institutions that disappeared from the market were the smallest ones.

[Table 3 here]

Fifth, there has been some diversification with respect to the development of capital markets. This development has multiple causes: the increase in portfolio flows to the region, up until 1998; the privatization of social security and the deregulation of private institutional investors, which led to an increase of investments in securities; and the virtuous circle created by the process of stabilization and securities market expansion in some economies in the region. Table 4 presents one indicator of this trend: the volume of debt securities issued in domestic markets (both in absolute amounts and as a share of the total) between 1989 and 2000. While it indicates that such issues in Latin America nearly tripled during the period, the vast majority of the increase was due to a single country (Brazil) and the region's share of total issues barely budged.

[Table 4 here]

All of these trends have implications for stability of the financial system and for the potential for economic growth and access to credit. Larger institutions, a greater mix of activities, and a bigger foreign presence can all complicate the tasks of regulators and supervisors. At the same time, the new circumstances may also offer advantages, if the banks see it as in their collective interest to improve their image and if foreign supervisory institutions provide useful support. From the growth side, financial deepening is certainly positive, and the larger institutions, foreign and domestic, can play a very useful role in increasing credit. Whether this credit will actually be forthcoming and whether it will be widely distributed or concentrated on a few sectors are important questions that we must examine.

III. Regulation and Supervision: The Question of Stability

The stability of financial systems in developing countries has become a major topic of concern as a result of the financial crises of the 1990s, both in Latin America and in Asia. While there are many explanations for the crises, all are in agreement that lax regulation and supervision was a principal one. Nevertheless, different ideas persist about the best approach to the problem. A recent paper by the World Bank, for example, argues that "private monitoring" –involving outside audits, use of rating agencies, and greater transparency– is more effective than stronger state regulation (Barth, Caprio, and Levine, 2001b). Others find that the rating agencies, in particular, are more likely to cause instability than to prevent it (see, for example, Reisen, forthcoming). Similar debates surround the recent proposals of some international institutions for changes in regulatory procedures. Thus, the new BIS proposals have been attacked as potentially increasing instability as well as making it more difficult for developing countries to get access to finance (see Griffith-Jones and Spratt, forthcoming). Another area of contention is deposit insurance and its role in contributing to the "moral hazard" problem. The World Bank has taken a strong stand against deposit insurance for this reason. There are also many practical problems that confront regulators and, especially, supervisors in developing countries, such as how to train the necessary personnel and to maintain them in the face of more lucrative offers from the private sector.

In this section, we look at several aspects of the stability issue: the characteristics of the international financial markets as the context for developing country analysis, the way in which international flows can trigger financial crises, and the role of regulation and supervision in preventing crises.

a. International capital flows and new problems of stability

The context in which financial stability in Latin America must be viewed is what has been happening in international financial markets in recent years. Financial systems in a number of key industrial economies (especially the United States) changed dramatically in the 1980s and 1990s, as a consequence of domestic deregulation and external financial liberalization.[(5)] Several trends can be identified.

First, consolidation and concentration occurred through an active process of mergers and acquisitions (M&A) among financial firms, with a noticeable acceleration at the end of the 1990s. As a result, a significant number of large and, in some cases, complex financial institutions were created. Second, through M&A and other processes, disintermediation took place as traditional banking institutions transformed themselves into new financial services firms. At the same time, non-bank financial institutions –such as mutual funds, investment banks, pension funds, and insurance companies– began to actively compete with banks on both the asset and liability sides of banks' balance sheets. Finally, external liberalization and significant improvements in information technology have increased cross-border dealings in securities and the internationalization of the financial business.

These trends led to spectacular growth of financial markets in the developed economies, which was soon followed by a significant surge of capital flows to the developing world; the latter more than tripled from 1991 to 1995. While flows to developing countries were only a fraction of those between industrial economies, by all measures they were significant vis-à-vis the size of the flows in relation to the domestic financial markets. Indeed, they were generally "excessive," in the sense that they exceeded the needs of current account financing and so led to the accumulation of large amounts of reserves.

[5)] For more detailed description of the changes in the financial systems of mature economies, see Feeney (1994), Blommestein (1995), Fornari and Levy (1999), BIS (2001), and Group of 10 (2001).

Consequently, they had a profound impact on the behavior of these economies, with the particular impact depending on the policies the countries followed.[(6)]

While the policy regimes in Latin American economies had some distinctive features, they also reacted in similar ways to the large-scale capital inflows. After a decade of balance-of-payments constraints (and net negative resource transfers) leading to low growth and high inflation, the surge of capital inflows *cum* trade liberalization eased the external constraint for the expansion of domestic demand associated with increasing imports. Given these exceptional external conditions, many economies in the region used some type of exchange-based price stabilization programs, based on pegged exchange rate regimes and commercial liberalization, which were effective in reducing inflation but had costs in terms of high interest rates and (probably) lower investment and growth.

On a number of occasions in the past (but more obviously in the 1990s), surges of capital flows in Latin America were an important force contributing to domestic financial crises, especially in the banking sector. Several mechanisms were at work. First, the large capital inflows made it possible for the banks to increase credit at a very rapid rate, often beyond the speed at which solid demand for credit could be identified and verified. One of the few areas of consensus in the literature on the financial sector is that very rapid increases in credit are followed by crises.[(7)] Second, the combination of external funding and rapid growth of lending led to a rise in exchange rate mismatching. Third, there was an increasing tendency for banking and currency crises to occur in a similar time period, thus exacerbating the severity of both.[(8)]

b. Regulation and supervision

While external capital flows often played a crucial role in triggering financial crises in Latin America and other developing economies, it is clear that domestic weakness was at least as important. Indeed, a strong domestic financial system can usually withstand all but the most severe external turmoil. An adequate system of regulation and supervision is at the heart of a strong financial system. In recent Latin American history, it took financial crises to reveal the weaknesses of regulation and supervision, but in most cases, governmental and central bank authorities responded with improvements. Nonetheless, some important differences remain across countries as will be seen.

In another paper,[(9)] we have used an important new data base that was created by the World Bank[(10)] in order to analyze the current situation of regulation and supervision in

[6)] For a detailed discussion of the transmission mechanism between external flows, domestic policy regimes, domestic financial structures, and growth dynamics, see Studart (2001). For a complementary discussion of trends in international financial markets in the 1980s and their impact in developing countries, see Griffith-Jones and Stallings (1995).

[7)] On the relationship, see Hausmann and Rojas-Suarez (1996).

[8)] See Kaminsky and Reinhart (1999) on the so-called twin crisis problem.

[9)] See Stallings and Studart (fothhcoming).

[10)] See Barth, Caprio, and Levine (2001a) for a description of the data base, which was constructed from a survey of bank regulators and supervisors in 107 countries. A companion paper (Barth, Caprio, and Levine, 2001b) presents a preliminary analysis of the data.

the Latin American region. The analysis shows that Latin American countries measure up reasonably well in terms of indicators such of the minimum capital-asset ratio requirement, currently set at 8% by the BIS through the so-called Basle I agreement. Also, on the supervisory side, Latin American countries –at least on paper– compare favorably with the United States and that of the best-run financial system in the region itself (Chile). Indeed, some countries appear to have much stricter regulation and supervision than the United States. A possible explanation is that an inverted U-shaped relationship exists, whereby banks become more self-regulating after some level of development (and/or some minimal level of experience) is attained. Thus, lower scores on the World Bank indicators do not necessarily indicate poor regulation and supervision. On the contrary, they may indicate that a country has advanced to a point where it can allow individual financial institutions a bit more autonomy with respect to regulation or for market-based regulation to play a larger role.

The World Bank data set has at least two important problems. First, the data represent only a single point in time (circa 1999) and, second, they are overview measures that summarize a large amount of information in a single number. To get a better idea of some of the details as well as the changes in the regulatory and supervisory systems in recent years, we have to turn to studies of the region per se. (In our larger project on the financial sector in Latin America, we will present case studies of six countries.)

In one of the most important studies, Aguirre (2000) stresses that significant changes have been made in banking legislation in almost all of the 17 countries he surveyed. In general, he says, these changes have come about as a result of crises or serious problems in the respective banking systems. The author identifies key changes as less public-sector ownership, greater foreign participation, broader scope for banking activities, and improvements in supervisory and regulatory authority. With respect to the latter, he focuses mainly on institutional aspects, such as the agency that performs supervision and the scope of the mandate of such institutions (only banks, or also insurance and securities). He finds a wide difference across countries, but admits that the literature is not conclusive on the relative merits of different systems.

Another study, by Livacic and Sáez (2000), focuses specifically on supervision. Again noting the improvements during the 1990s, the authors emphasize the gap between the rules on the books and the ability of supervisors to enforce them. Examples include loans to “related” clients and the treatment of overdue loans on banks’ books. They suggest various remedies, including the need for more resources (financial and human) and greater autonomy for supervisors.

IV. Finance and Development: The Questions of Growth and Equity

The role of the financial sector in the process of growth and development is a topic that has been discussed for centuries. For most economists, financial systems are crucial to the process of development,[11] but at least two important questions remain on the table with significant implications for economic policy. One debate concerns the sequencial relationship between savings, investment, and growth, and the role that financial markets play in the process. The second debate asks about the relative merits for growth and development of two different types of financial systems: those based on capital markets versus those based on banks. In this part of the paper, we summarize these discussions, then turn to some empirical evidence from four Latin American economies. We conclude with a related discussion about access to finance.

a. The role and characteristics of financial markets

A financial system is functional to economic development when it produces loanable funds at different maturities and for different needs. These are necessary for expanding the use of existing resources of the economy at the minimum cost with the minimum possible increase in financial fragility and other imbalances that may halt the process of growth for purely financial reasons. Functionality involves both microeconomic and macroeconomic aspects of financial intermediation in the context of development. Hence, the functionality of financial systems in economic development has two distinctive dimensions: one concerns the stability of the financial system (both as a system of payments and as an intermediary of loanable funds) and another is related to the allocation of real resources.

As regards the former dimension, the efficiency of the financial structure should be judged by how well it performs the functions of financing and funding (transforming short-term savings into long-term finance), that is, how well it supports financially stable growth. In the latter dimension, efficiency relates to the ability to provide finance and long-term funding for the corporate sector at the lowest possible cost and the provision of capital for investments that enhance the country's prospects of development, including social (and environmental) aspects. It is at this point that we get to the questions of equity and who has access to finance from the formal markets.

What might be called the mainstream view of the role of financial markets was summarized by Stiglitz in a recent publication:

> Individual entrepreneurs rarely have enough of their own capital to undertake investment themselves. Individual savers, without pooling their money, would not be able to take advantage of the potential increasing returns of scale of their investments, and would face a large degree of risk with little liquidity. The financial system –including banks and other financial intermediaries, equity markets, and debt markets– solves these problems by *agglomerating* capital from many smaller savers, *allocating* capital to the most important uses, and *monitoring* to insure that it is being well used. At the same time, the financial

---

11) For a wide sprectrum of views that consider financial systems crucial in the process of development, see Keynes (1936), Schumpeter (1939), Gurley and Shaw (1955, 1960), McKinnon (1973), Shaw (1973), Stiglitz (1998), and World Bank (2001).

> system transfers, pools, and reduces risk, increases liquidity, and conveys information (1998, p.1).

This view focuses on the role of the financial system as an intermediary for savings, placing less emphasis on the role of banks as money creators. According to the tradition of Wicksell, Keynes, and Schumpeter, in monetary economies the latter role is essential to allow growth. Keynes points out that:

> [T]he banks hold the key position in the transition from a lower to a higher scale of activity. If they refuse to relax, the growing congestion of the short-term loan market or of the new issue market, as the case may be, will inhibit the improvement, no matter how thrifty the public purpose to be out of their future incomes. On the other hand, there will always be *exactly* enough *ex post* saving to take up the *ex post* investment and so release the finance which the latter had been previously employing. The investment market can become congested through shortage of cash. It can never become congested through shortage of saving. This is the most fundamental of my conclusions within this field (1936: 222).

Different institutions and markets in different development settings have played the roles of finance and funding.(12) Investment can be financed in one of three ways: retained earnings, credit created/intermediated by banks, or securities issued directly in specialized financial markets. The faster the pace of growth, the more firms in the aggregate will have to rely on the latter two options to finance their long-term undertakings. The institutional setting behind investment finance, which is widely neglected by macroeconomists, is therefore extremely important in understanding the financial constraints on growth.

Much influenced by British and American economic history, financial systems are normally depicted as capital-market based financial systems (MBFS), where capital markets play a dominant role in providing entrepreneurs with long-term finance. Segmented financial systems of these types have institutions that can specialize in different maturity transformation and in different liquidity and credit risks. For instance, commercial banks have an important role in providing investors with liquidity, which they can do by managing a revolving fund of sight deposits. Investment banks can finance long-term undertakings, but normally their operations are directly linked to some form of underwriting, whereby long-term securities are sold directly to savers, an operation referred to as funding to distinguish it from finance. The existence of funding mechanisms in this structure is crucial for an investment finance scheme. For not only is the supply of finance in such a structure contingent on the existence of funding mechanisms, but the functional role of funding is also to avoid widening discrepancies between maturity of liabilities and assets, mitigating the rise of risks to both lenders and borrowers.

Even though MBFS is the institutional benchmark normally used to explain the finance-

---

12) For a well-known discussion of the types of financial systems, see Zysman (1983).

funding circuit, it is quite clear that it does not provide an accurate picture of financial structures in most developing economies. As a matter of fact, capital-market based systems are exceptions, rather than the norm, in developed as well as developing economies, restricted mainly to the United States and the United Kingdom. Most economies that industrialized successfully (Japan and Germany, to mention two of the most prominent cases) did not possess developed capital markets.

Moreover, there is no reason why other types of investment finance schemes cannot be as macroeconomically efficient. Indeed, distinct investment finance schema present different advantages and vulnerabilities. Credit-based financial systems (CBFS) can be quite functional in financing accumulation and sustaining growth, but they also have vulnerabilities. In order to understand these, we must remember that, due to the structure of the liabilities of deposit-taking institutions (mainly commercial banks), they are usually suppliers of short-term loans. And, unless there are no significant technical indivisibilities and the maturity of investment is very short, expanding investment leads to higher levels of outstanding debt of the corporate sector.

This conclusion leads us to two important characteristics of investment finance in CBFS. First, in these systems, medium and long-term credit, especially coming from private banks, tends to be insufficient in moments of growth. This explains the emergence, in economies with underdeveloped capital markets, of development banks and curb credit markets, which tend to grow rapidly in periods of expansion. In addition, investing firms that do not have access to rationed middle- and long-term credit must self finance their investments, or simply borrow short to finance long-term positions. Hence, a second, and interrelated, characteristic of CBFS is that growth, especially rapid growth, is usually accompanied by increasing financial vulnerability of the banking sector as well as the investing corporate sectors. Investment finance schemes in such an institutional environment are thus very vulnerable to changes of financial prices assets, and especially the interest rates. This has important consequences for the role of financial policies in the context of development.

b. Finance and growth

As we have indicated throughout the paper, Latin American financial systems are credit-based, with all the advantages and disadvantages just discussed. Capital markets are in their infancy in the region, primarily limited to a few countries insofar as we are talking about corporate listing and trading. In some other countries, there are stock markets, but they are really for the trading of government bonds and money-market instruments.

Figures 1 and 2 illustrate the situation of Latin America with respect to both credit and capital markets. Two obvious conclusions emerge from the two figures. On the one hand, they both reinforce the positive relationship between growth and finance (i.e., higher per capita income is associated with deeper markets), but the direction of causality cannot be determined. On the other hand, both show that Latin American countries are firmly located at the low end of both the income and financial dimensions. Chile, which is the most advanced in both cases, is still below the mean of the countries shown.

[Figures 1 and 2 here]

We also want to look at the dynamic process in Latin America with respect to finance and growth during the 1990s. We concentrate on the four cases of Argentina, Brazil, Chile, and Mexico.[13] Growth of GDP was especially volatile in Argentina, with high rates during much of the decade offset by negative growth after the Tequila crisis and since late 1998. Figures in absolute terms for total lending and lending to the private sector mirrored this pattern closely, while lending as a share of GDP showed a similar trend, but the relationship was less sharp. An interesting point in trying to determine causality is that growth appears to have fallen off a couple of quarters before credit began to level off at the end of the decade (the inflection points were simultaneous in 1995). Problem loans were at their highest in the mid-1990s, and began to climb again in 1999, but they had not yet (as of the end of the year 2000) returned to their previous peak. In comparison with the other three countries in the sample, foreign exposure was very high in Argentina. (Our discussion does not take into account the recent financial crisis in Argentina, which obviously has had a profound impact on these variables.)

The two key periods in Brazilian economic history in the 1990s were the abrupt end of hyperinflation in 1994 and the devaluation in January 1999, following the attack on the *real*. According to all of our indicators, lending jumped dramatically following stabilization. On an absolute basis, it continued at the higher level and even grew somewhat, until the time of the devaluation. As a share of GDP, however, it fell back very quickly and then rose again, but with a substantial differential between total lending and lending to the private sector (the latter was more sluggish). Past due loans peaked in two moments: in early 1999, as would be expected, and in the two years following stabilization. The latter apparently reflects the well-publicized problems of the financial sector in returning to “normal” activities after the hyperinflation. Despite the decline in interest rates, they remained at a level that clearly discouraged a good deal of potential demand for finance.

Mexico shares some characteristics with both Argentina and Brazil. Clearly, the timing of the falloff in growth rates in mid-decade was similar for Mexico and Argentina, as the Tequila crisis was the trigger for Argentina’s economic problems at the time. The later part of the decade, however, was very different as Mexico –taking advantage both of its devaluation and its close ties with the booming U.S. economy– grew very rapidly. The patterns in the credit market, however, were more similar to those of Brazil with a sharp break, followed by an aborted recovery, especially for lending to the private sector. Indeed, one of the mysteries of Latin American economic history in the late 1990s was the disjunction between GDP growth rates and lending in Mexico. Problem loans stayed high for several years, which clearly had a bearing on the question, but even after they fell (and interest rates came down), lending did not pick up.

---

[13] The data used for the analysis of the four countries come from the IMF’s *International Financial Statistics* as well as individual country sources.

Finally, Chile provides the clearest and most successful case of the growth-finance link. GDP expanded at rates of around 7% during most of the 1990s (and the late 1980s), and credit rose steadily in both absolute terms and as a share of GDP. The dominant role of the private sector in this performance is clear, as lending to the private sector and total lending were almost identical. It was only in the final years of the decade, as certain miscalculations were made with respect to the impact of the Asian crisis, when growth fell off and actually became negative for four quarters. At that time, credit as a share of GDP leveled off, although lending to the private sector was flat in absolute terms before the recession set in. While past-due loans increased in 1999 and 2000, they were very low in comparative terms; in addition, they were lower than in the early part of the decade. Interest rates and spreads were also low in comparison with the other three countries, and foreign exposure declined until the end of the decade.

The generally simultaneous behavior of credit and growth rates in the four cases (with only a few exceptional periods) suggests the hypothesis that the two processes are mutually supportive rather than either one determining the other. But more data are needed for more countries, and more sophisticated analysis is required, before any firm conclusions can be drawn.[(14)] The question posed at the beginning of the paper on a possible tradeoff for authorities between promoting stability and growth is better studied at the individual country level, as we will do in future research. Likewise, the role of foreign financial institutions cannot be studied at the level of data that we have presented here. A more detailed breakdown of loans by type of institutions is required.

c. Access to finance

Although it has not received as much attention as the growth-finance relationship, the link between access to finance and the distribution of income and wealth is a crucial one for the development process. It also tends to be a controversial one in which observers have strong opinions, even if they do not have data to back them up. On the one hand, there is the suspicion that the financial sector is an important instrument that the wealthy can use to expand their own holdings. In addition, through various channels, the recent financial crises have increased poverty: by increasing unemployment, raising interest rates, and cutting government expenditure, especially in the social area. On the other hand, others believe that finance can be a crucial factor in increasing equality and opportunity if the institutions can be created to spread access. Here the question of the ownership or control of financial institutions becomes very important. Those supporting public-sector development banks used as an argument in their favor that this is the only way to get credit to the poor, to small firms, and to rural areas. More recently, others have argued that private-sector finance can also be pro-poor. (For a summary of these discussions, see World Bank, 2001).

The results of some recent studies for a few countries in the region provide useful insights and hypotheses on this topic. Although it is not the only way of approaching the issue of access, most of the literature has focused on finance for small and medium-sized

---

14) The World Bank (2001, chp. 1), based on various econometric studies, argues that there is a causal relationship, i.e., that finance is the independent variable.

enterprises (SMEs).[15] It is widely agreed that there are two main obstacles to access to formal-sector credit for small firms: lack of collateral and high unit costs for obtaining information on them and monitoring their performance. In most cases, then, investment by small firms has either been self-financed or financed through informal channels. The former produces a clear restriction on investment and growth, due to the limit on the volume of funds available, while the latter tends to be very expensive in comparison with formal channels. In either case, SMEs are put at a disadvantage vis-à-vis their larger counterparts, and the gap between them has probably increased.

Given this situation, a key question becomes whether the private sector, on its own, can provide a remedy. Most studies suggest that the answer is no, but the recent approach has been to look for some kind of public-private partnership to increase access as opposed to the methods traditionally used in Latin America. The latter involved loans at subsidized interest rates from state development banks and/or directed credit from private institutions.

Probably the best-known examples of the new kind of approach are the micro-credit experiments, of which the most prominent is the Grameen Bank of Bangladesh. In the Latin American region, Banco Sol in Bolivia has received a good deal of attention. The basic idea behind these institutions is the use of group lending contracts to exploit peer pressure to lower delinquency rates, follow-up loans to provide positive incentives, and low management costs. Until now, these schemes have generally been successful in loan recovery and in reaching substantial numbers of people, but they have had to be subsidized by their respective governments or by international organizations (Morduch, 1999; Sebsted and Cohen, 2000, as summarized in World Bank, 2001).

Another example of a partnership concerns the use of “second-tier” (public-sector) banks to help lower the transactions costs of “first-tier” (usually private-sector) banks, which in turn lend to SMEs. The second-tier institutions seek funds in the wholesale market and auction them off to first-tier institutions, which on-lend them to small firms at market rates and terms. Beyond providing the basic access to formal-sector finance, which would otherwise not be available, the second-tier banks can also provide support through subsidies for information collection and lowering credit risks. Held (1999) explains these processes and reports on case studies of such systems in Chile, Colombia, and Costa Rica. The results are best characterized as mixed, with the precise institutional framework and degree of success varying among the three.

Two final studies of interest look at the impact of bank ownership on SME finance. Clarke et al (2002) draw on bank-level data for Argentina, Chile, Colombia, and Peru for the mid-1990s to examine this issue. They find that small domestic banks devoted a larger share of their lending to small firms that did medium and large banks. They also report that public-sector banks did not lend more proportionally to small firms than did private-sector banks. Foreign banks did lend less to small firms than domestic private

[15] For an alternative approach that focuses on housing finance for the poor, see Held (2000).

banks (as a share of total lending), but this result was due in part to the behavior of small foreign banks. Medium and large foreign banks did better by SMEs than did their domestic counterparts in two of the four countries. A companion paper (Clarke et al, 2001a) asks borrowers about the impact of foreign entry into developing-country banking operations. The main conclusion is that foreign banks improve financial conditions for all borrowers, but the process seems to benefit large firms more.

In summary, much remains to be studied on the issue of access to credit. Insofar as it is true that financial deepening helps to promote growth, and growth is generally acknowledged to be the best solution for poverty and unemployment, then finance plays a positive –if indirect– role in promoting equity. The direct question of access to credit by small firms or other disadvantaged groups has become a major concern for policy makers in Latin America in recent years, and many experiments are underway in the region.

V. Conclusions and Policy Issues

This paper has highlighted the principal challenges that governmental authorities –bank superintendents, central banks, in collaboration with finance ministries– face when dealing with the financial system in developing countries. They include maintaining the stability of the financial system, providing incentives for financial institutions to support economic growth, and expanding access to finance for the large majority of the population. These problems do not differ in kind from those confronting industrial countries, but they do differ enormously in magnitude and the difficulty in solving them. The latter is due to the lack of instruments as well as the institutions that the authorities need in order to act effectively. We conclude here with some brief reflections on the main tasks that must be undertaken in the coming years in order to make progress on these three goals. As with the rest of the paper, we focus on the situation in Latin America, but there are likely to be implications for other developing countries as well.

a. Maintaining financial stability

Most Latin American countries have already improved the regulations on the books for the behavior of their banks. They adhere to the BIS capital-adequacy rules; they provide for classification of loans according to risk characteristics and require provisioning for problem loans; they forbid excessive loans to individuals or firms with close relationships to the banks or their directors; they require periodic inspections of the banks; they give supervisors the power to intervene if banks demonstrate significant weakness. Of course, there is more to be done along these lines, but others challenges are at least as important and not always recognized. First, good regulations are of little use if the supervisory capacity for enforcing them is inadequate. This implies the need to resolve deficiencies that exist either because of institutional problems (lack of autonomy from supervisees or their representatives) or human capital problems (inadequate numbers of well-trained personnel). Second, good regulation and supervision will not produce the desired financial stability if macroeconomic conditions are too volatile. Thus, there must be a close coordination between financial and macroeconomic authorities. Third, as financial systems become more sophisticated with the development of strong capital markets, it is increasingly necessary for coordination to take place between bank and capital market supervisors. Finally, and more controversially, the private sector should be encouraged to contribute to financial stability by seeking outside audits, disclosing more information to the public, and –perhaps– being rated by international agencies.

b. Stimulating economic growth

As we discussed earlier in the paper, there is a potential tradeoff between the quest for a stable financial system and the simultaneous goal of rapid economic growth. In the extreme case, banks that make no loans will be highly stable, but there will be no credit to grease the wheels of commerce. While the latter is unlikely to happen, less extreme examples can be found. The most prominent case in recent times is that of Mexico, following the Tequila Crisis in 1994-95. While the banks' main problems were cleaned up, credit to the private sector fell throughout the second half of the 1990s. The role of regulation is unclear but needs to be examined. Likewise, credit has been stagnant in Brazil following the devaluation of the *real* in January 1999. Here we find an example of the interaction of macroeconomics and finance. The Central Bank was determined to maintain inflation under control, thus kept interest rates very high. This affected the behavior of banks and borrowers, limiting credit expansion and restraining growth. To help overcome the stability-growth tradeoff, it is important for governmental authorities to consult with the banking industry to find out what kind of incentives would be necessary to stimulate banks to lend, while still maintaining a prudent approach, at the same time that they talk with potential borrowers to see what problems exist of the demand side. In addition, the development of strong domestic capital markets (for private-sector debt and stock issues as well as public-sector debt) would provide an alternative source of finance for large firms. Such markets would also have the advantage of providing local finance in local currency so as to eliminate some of the foreign borrowing that has been linked to international volatility.

c. Providing access to finance

The third goal we have been discussing concerns the expansion of access to credit to underprivileged households and firms on terms that help to shrink the inequality that has traditionally characterized the Latin American region. As we have suggested, the access goal may also come into conflict with the need to maintain financial stability since smaller firms and poorer households represent higher risks to financial institutions. Since small firms have virtually no access to capital market financing, the center of attention must be the banking sector. Of course, if capital markets provide finance for larger firms, then this in and of itself may expand opportunities for small firms and low-income households, but more needs to be done. Fortunately, governments have begun to focus on the problem of credit access in the last few years, so a number of initiatives are already underway. A major task at this point is to evaluate these initiatives to see which ones have achieved success in local areas and what the chances are for the expansion of the successful ones to larger arenas. In addition, of course, more creative policies –especially ones that combine public and private efforts– must be sought and implemented.

d. Role of foreign institutions

An issue that cuts across all three of the above is the role of the foreign banks and financial institutions that have become so prominent in Latin America in the last few years. First, there is an urgent need for information on whether foreign banks contribute to financial stability through providing support for the regulation and supervision process under normal conditions and access to additional liquidity in hard times. This has clearly been one of the aims of Latin American governments that have sought to attract foreign banks to their countries. Second, there is need for study of the lending patterns of foreign compared to local banks. Do the former support growth by drawing on their access to international funds, and thus providing credit, in times when domestic banks may be constrained by lack of capital? Third, we need to better understand whether foreign banks are more or less likely than their domestic counterparts to provide credit to small and medium-sized firms and to low-income households. The answers to these questions will provide important inputs for policy-making with respect to the financial sector in the coming years.

REFERENCES

Aguirre, E., 2000, "Basic Reforms of the Banking Systems in Latin America" (World Bank).

Barth, J. R., G. Caprio Jr., and R. Levine, 2001a, “The Regulation and Supervision of Banks around the World: A New Data Base," Policy Research Working Paper Series, No. 2588 (World Bank).

_______, 2001b, "Bank Regulation and Supervision: What Works Best," Policy Research Working Paper Series, No. 2725 (World Bank).

Bank for International Settlements, 1998, Annual Report (BIS).

_______, 2001, "The Banking Industry in the Emerging Market Economies: Competition, Consolidation and Systemic Stability," Monetary and Economic Department, Paper No. 4 (BIS).

Blommestein, H.J., 1995, “Structural Changes in Financial Markets: Overview of Trends and Prospects,” in The New Financial Landscape (OECD).

Burki, S.J. and G. Perry, 1998, Beyond the Washington Consensus: Institutions Matter (World Bank).

Caprio, G., P. Honohan, and J. Stiglitz, eds., 2001, Financial Liberalization: How Far? How Fast? (Cambridge University Press).

Clarke, G. et al, 2002, "Bank Lending to Small Businesses In Latin America: Does Bank Origin Matter?" Policy Research Working Paper Series, No. 2760 (World Bank).

_______, 2001a, "Does Foreign Bank Penetration Reduce Access to Credit in Developing Countries? Evidence from Asking Borrowers" Policy Research Working Paper Series, No. 2516 (World Bank).

_______, 2001b, "Foreign Bank Entry: Experience, Implications for Developing Countries, and Agenda for Future Research," Policy Research Working Paper Series, No. 2698 (World Bank).

Economic Commission for Latin America and the Caribbean, 2000, Growth with Stability: Financing for Development in the New International Context (ECLAC).

Feeney, P. W., 1994, Securitization: Redefining the Bank (St. Martin’s Press).

Fornari, F. and A. Levy, 1999, “Global Liquidity in the 1990s: Geographical and Long Run Determinants,” Conference Paper, No. 8 (BIS).

Griffith-Jones, S. and B. Stallings, 1995, "Global Financial Trends: Implications for Third World Development," in B. Stallings, ed., Global Change, Regional Response: The New International Context of Development (Cambridge University Press).

Griffith-Jones, S. and S. Spratt, forthcoming, “The New Basle Capital Accord and Developing Countries,” in R. Ffrench-Davis and S. Griffith-Jones, eds., From Excess to Scarcity: Capital Flows to Emerging Economies (Palgrave).

Gurley, J. and E. Shaw, 1955, "Financial Aspects of Economic Development," American Economic Review, Vol. 45, No. 4.

______, 1960, Money in a Theory of Finance (Brookings Institution).

Group of Ten, 2001, "Report on Consolidation in the Financial Sector" (Group of Ten)

Hausmann, R. and L. Rojas-Suárez, eds., 1996, Banking Crises in Latin America (Inter-American Development Bank).

Held, G., 1999, "Políticas de crédito para empresas de menor tamaño con bancos de segundo piso: experiencias recientes en Chile, Colombia y Costa Rica," Serie de Financiamiento para el Desarrollo, No. 84 (ECLAC).

______, 2000, "Políticas de viviendas de interés social orientadas al mercado: experiencias recientes con subsidios a la demanda en Chile, Costa Rica and Colombia," Serie de Financiamiento para el Desarrollo, No. 96 (ECLAC).

Held, G. and R. Szalachman, eds., 1991, Regulation y supervisión de la banca: experiencias en América Latina y el Caribe, 3 vols. (ECLAC).

Held, G. and L.F. Jiménez, 2001, "Liberalización financiera, crisis y reforma del sistema bancario chileno: 1974-1999," in R. Ffrench-Davis and B. Stallings, eds. Reformas, crecimiento y políticas sociales en Chile desde 1973 (CEPAL/LOM).

International Monetary Fund, 2000, International Capital Markets: Developments, Prospects, and Key Policy Issues (IMF).

______, 2001, International Capital Markets: Developments, Prospects, and Key Policy Issues (IMF).

Kaminsky, G. and C. Reinhart, 1999, "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems," American Economic Review, Vol. 89, No. 3.

Keynes, John Maynard, 1936, The General Theory of Employment, Interest and Money, 1947 ed. (Macmillan).

Litan, R., P. Masson and M. Pomerleano, eds., 2001, Open Doors: Foreign Participation in Financial Systems in Developing Countries (Brookings Institution).

Livacic, E. and S. Sáez, 2000,"La supervisión bancaria en América Latina en los noventa", Serie Temas de Coyuntura, No. 10 (ECLAC).

McKinnon, R. I., 1973, Money and Capital in Economic Development (Brookings Institution).

Mayer, C., 1988, "New Issues in Corporate Finance," European Economic Review, 32.

Morduch, J., 1999, "The Microfinance Promise," Journal of Economic Literature, Vol. 37, No. 4.

Norton, J. and E. Aguirre, eds., 1998, Sistemas bancarios latinoamericanos: reformas recientes y perspectivas (SELA/Agencia Española de Cooperación Internacional).

Reisen, H., forthcoming, "Ratings since the Asian Crisis," in R. Ffrench-Davis and S. Griffith-Jones, eds., From Excess to Scarcity: Capital Flows to Emerging Economies (Palgrave).

Schumpeter, J., 1939, Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process (McGraw-Hill).

Sebsted, J. and M. Cohen, 2000, "Microfinance, Risk Management, and Poverty," Background paper for World Development Report, 2000-2001 (World Bank).

Shaw, E. S., 1973, Financial Deepening in Economic Development (Oxford University Press).

Stallings, B. and W. Peres, 2000, Growth, Employment, and Equity: The Impact of the Economic Reforms in Latin America and the Caribbean (Brookings Institution).

Stallings, B. and R. Studart, "Financial Regulation and Supervision in Emerging Markets: The Experience of Latin America since the Tequila Crisis," in R. Ffrench-Davis and S. Griffith-Jones, eds., From Excess to Scarcity: Capital Flows to Emerging Economies (Palgrave).

Stiglitz, J., 1998, "The Role of the Financial System in Development" (World Bank).

Studart, R., 2001, "Financial Flows, Domestic Financial Markets and Exchange Rate

Regimes in Latin America and the Caribbean," paper presented at conference on Financial and Monetary Integration (Kalamazoo College).

Studart, R. and J. Hermann, 2001, "Sistemas financeiros no Mercosul: Perspectivas a partir das reformas dos anos 1990," Texto para Discussão, No. 799 (IPEA).

United Nations, 1999, World Economic and Social Survey, 1999 (United Nations).

Williamson, J. and M. Maher, 1998, "A Survey of Financial Liberalization," Essays in International Finance, No. 211 (Princeton).

World Bank, 2001, Finance for Growth: Policy Choices for a Volatile World (World Bank).

_______, 2002, World Development Report, 2002 (World Bank).

Zysman, J., 1983, Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Growth (Cornell).

Table 1
MONEY SUPPLY (M2) AS SHARE OF GDP
(Percent)

	1992	1994	1996	1998	2000
Latin America					
Argentina	14	21	23	29	32
Brazil	n.a.	n.a.	28	31	29
Chile	38	37	43	46	50
Colombia	20	20	20	24	26
Costa Rica	32	32	33	33	35[a]
México	29	28	26	28	21
Asia					
Republica of Korea	39	41	43	58	80
Malaysia	72	80	92	95	103
Philippines	36	47	56	61	62
Thailand	75	78	81	103	106

Source: Authors' elaboration, on the basis of IMF, International Financial Statistics.

[a] Figure for 1999

Table 2
FOREIGN BANK ASSETS AS A SHARE OF TOTAL BANK ASSETS
(Percent)

	1994	1999	2000
Latin America			
Argentina	17.9	48.6	49
Brazil	8.4	16.8	23
Chile	16.3	53.6	54
Colombia	6.2	17.8	26
Mexico	1.0	18.8	24
Peru	6.7	33.4	40
Venezuela	0.3	41.9	42
Central Europe			
Czech Republic	5.8	49.3	66
Hungary	19.8	56.6	62
Poland	2.1	52.8	70
Turkey	2.7	1.7	n.a.
Asia			
Korea	0.8	4.3	3
Malaysia	6.8	11.5	18
Thailand	0.5	5.6	12

Source: IMF (2000: 153) for 1994 and 1999; BIS (2001: 25) for 2000.

Table 3

INDICATORS OF CONCENTRATION IN THE BANKING SECTOR

(Share in total deposits)

	1994	1994			2000	2000		
	Number of Banks	Largest 3 Banks	Largest 10 Banks	HH Index	Number of Banks	Largest 3 Banks	Largest 10 Banks	HH Index
Latin America								
Argentina	206	39.1	73.1	756.9	113	39.8	80.7	865.7
Brazil	245	49.9	78.8	1220.9	193	55.2	85.6	1278.6
Chile	37	39.5	79.1	830.4	29	39.5	82.0	857.9
Mexico	36	48.3	80.8	1005.4	23	56.3	94.5	1360.5
Venezuela	43	43.9	78.6	979.2	42	46.7	75.7	923.1
Asia								
Republic of Korea	30	52.8	86.9	1263.6	13	43.5	77.7	899.7
Malaysia	25	44.7	78.3	918.9	10	43.4	82.2	1005.1
Philippines	41	39.0	80.3	819.7	27	39.6	73.3	789.9
Thailand	15	47.5	83.5	1031.7	13	41.7	79.4	854.4
Central Europe								
Czech Republic	55	72.0	97.0	2101.5	42	69.7	90.3	1757.8
Hungary	40	57.9	84.7	1578.8	39	51.5	80.7	1241.8
Poland	82	52.8	86.7	1263.6	77	43.5	77.7	899.7
Turkey	72	40.7	79.1	957.2	79	35.9	72.0	710.2

Source: IMF (2001:11).

Table 4

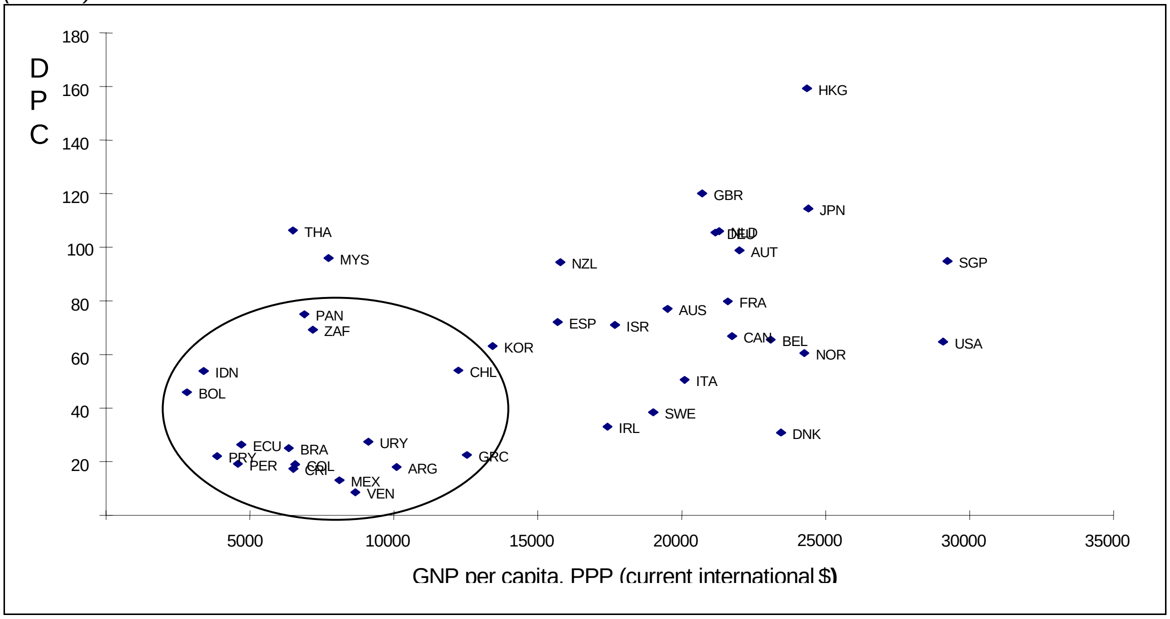
OUTSTANDING AMOUNTS OF DEBT SECURITIES ISSUED IN DOMESTIC MARKETS

(US$ billions and %)

	US$ billions				% of total			
	1989	1993	1997	2000	1989	1993	1997	2000
United States	6 682.8	9 226.7	1 2059	14 545.9	47.6	44.9	47.4	48.9
Japan	2 626.7	4 010.1	4 399.3	6 072.3	18.7	19.5	17.3	20.4
France	557.6	995.7	1 102.5	1 068.1	4.0	4.8	4.3	3.6
Germany	668.4	1 458.4	1 732.1	1 711.6	4.8	7.1	6.8	5.8
UK	332.9	446.1	777.7	895.9	2.4	2.2	3.1	3.0
Latin America	172.1	296.7	490.6	482.8	1.2	1.4	1.9	1.6
Argentina	113.5	39.0	70.1	85.2	0.8	0.2	0.3	0.3
Brazil	0.0	189.9	344.5	292.5	n.a.	0.9	1.4	1.0
Chile	7.5	19.2	36.5	34.2	0.1	0.1	0.1	0.1
Mexico	51.1	47.9	37.6	67.3	0.4	0.2	0.1	0.2
Memo:								
All issuers	14 042.0	20 565.0	25 464.0	29 733.0	100	100	100	100
OECD	13 559.0	19 967.0	24 452.0	28 580.0	96.6	97.1	96.0	96.1

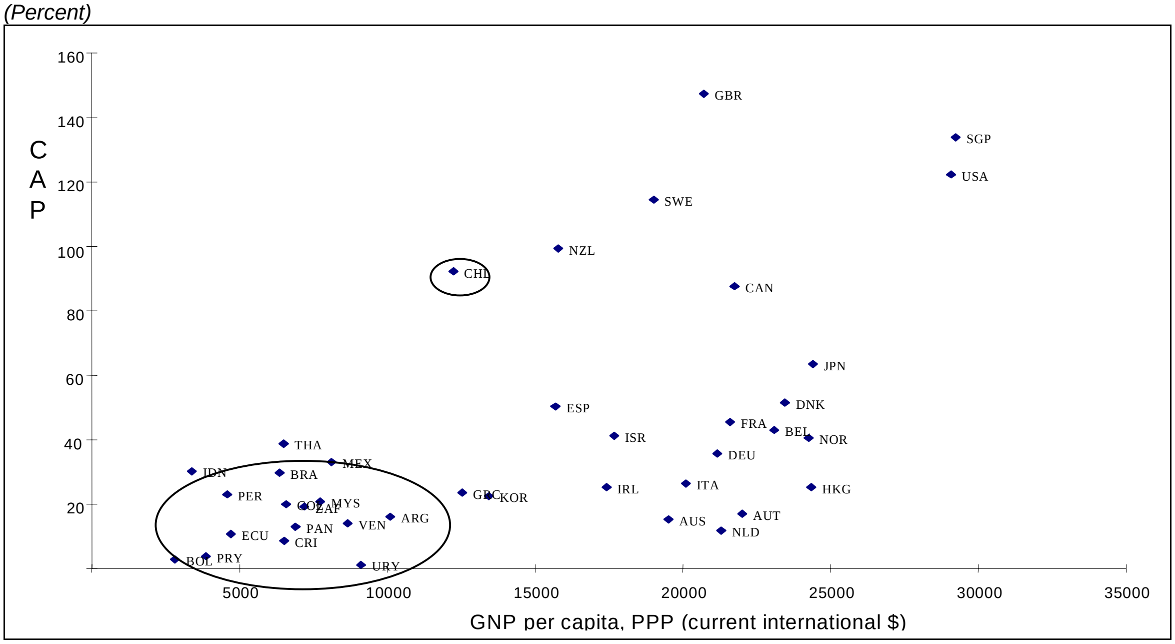
Source: Authors' elaboration, based on BIS data.

Figure 1
PRIVATE CREDIT BY DEPOSIT MONEY BANKS (DPC) BY GDP, 1997
(Percent)



Source: Authors' elaboration on the basis of World Bank data base on financial development.
Note: DPC is credit by deposit money banks as share of GDP.

Figure 2
STOCK MARKET CAPITALIZATION (CAP) BY GDP, 1997
(Percent)



Source: Authors' elaboration on the basis of World Bank data base on financial development.
Note: CAP is stock market capitalization as share of GDP.