

The Crucial Role of Financial Intermediation for Rapid Growth

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Everyone understands that money is essential for any economy. Students of economics learn about the use of shells and stones as money in very primitive societies, and about cigarettes becoming a medium of exchange in prisoner-of-war camps during the Second World War. But it makes sense that there must be money: everyone knows it and uses it. But the crucial role of the financial system is not so obvious, in part because many financial transactions are not an everyday experience, and in part because the work that goes into a financial transaction is often invisible to most people.

Economists know, and teach, that the financial system enables an economy to be more productive because it uses savings from those with few prospects of investing in high rate of return activities and enables those with investment opportunities but few resources to use those savings. In the absence of such a system, savers would obtain and hold low-return assets (such as gold and land) or simply store money (if there were a fairly stable price level) while enterprises with profitable investment opportunities would be restricted at the rate they could expand by the amount of their available cash flow.

While this conventional wisdom was always known and accepted by the development-growth community, I think it is fair to say that, until the Asian crises of the late 1990s, most economists concerned with economic prospects for developing countries underestimated the positive value of a well-functioning and dynamic financial system

that develops as the economy grows and similarly failed to comprehend the damage that was done to productivity and economic growth prospects when financial systems were repressed.

To be sure, some financial economists knew this. My former colleague, Professor Ronald McKinnon at Stanford, was in the forefront of those underlining the importance of a well-functioning financial system for growth. As early as 1973, he was writing extensively on the topic, terming poorly functioning financial systems “repressed”. In his view, repressed financial systems were ones in which government regulation and controls – through state-owned banks, development banks that directed lending to priority projects and firms at below-market rates, and through directives to private banks as to how they should allocate credit – led to low interest rates, credit rationing, and misallocation of resources. While the truth of his argument was recognized, liberalizing the financial system usually seemed to be a reform that was not “of top priority”, and could be delayed until a later date or undertaken very slowly.

But with the financial crises of the 1990s, economists and policy makers sought to understand what had happened and why. It became evident to all, not just financial economists, that the financial sector played a crucial role in economic growth, and in many ways in addition to the savings-investment linkage. Moreover, it was seen that repressed financial sectors had been major contributors to the difficulties that the crisis countries experienced.

Today, I plan first to spell out in somewhat more detail the importance of a well-functioning financial sector’s role in economic growth. I will then turn to the Korean experience, and sketch out what happened in Korea in the 1990s leading to the crisis of

1997-98. The analysis of that experience well illustrates the problems that can arise and cumulate with a repressed financial system. I will then discuss some comparative data suggesting the current status of Brazil's financial system relative to that of some other key emerging market countries.

The Role of the Financial Sector in Growth

As I already said, a major economic function of the financial system is to enable savings of those with few productive opportunities to be used by those with highly productive opportunities. There are benefits to both savers and investors and to the rest of society: savers get a higher rate of return on their savings, while investors with worthwhile investments can do more and thus earn more income as well; that enables more capital accumulation in the economy, which results in more rapid overall economic growth with benefits for the whole society. The financial system has other functions as well (money as a store of value and medium of exchange, for example), of course, but I will not dwell on them here.

But to achieve an environment in which this apparently simple "loan" of resources from savers to investors can efficiently be achieved is not as straightforward as it might sound. Savers must be reasonably confident that they will receive a positive return on their investments, and the riskier the investment, the higher the proffered or expected rate of return will have to be. Similarly, investors who make major efforts to bring a project to a profitable state must be confident of their rights to some of the returns. For both parties to have the appropriate assurances, society must have measures in place to insure that contract terms can be fulfilled. That, in turn, underscores the importance of an efficient and effective legal system, an effective commercial code, and a

framework for the functioning of financial institutions that enables them to fulfill their role

In the process of economic growth, new activities are undertaken, and old activities are undertaken in new ways. Almost all investments are made in the context of uncertainty: in general, investments with the highest prospective rates of return also have relatively high risks. And, since savers and investors are generally not the same (and since would-be investors may not be the best judges of their prospects) the financial sector's sorting of investment opportunities plays a much bigger role than the words "linking savers to investors" indicates.

To assess risk appropriately, those who would potentially extend resources to investors must have information about the investor and the likely prospects that the proposed investment will be profitable; this includes an assessment of risk, but also of the creditworthiness of the investor, his ability to carry out the proposed activities, and so on. If each potential creditor had to assess these attributes, the "transactions" and "information" costs would be huge, and many savers would simply not be able to form the necessary judgments. Information provided by credit bureaus and other external assessment sources is very important. But so, too, is the experience of bankers and others who may specialize in particular lines of activity, understand businesses, and make the appropriate judgments. In modern large-scale industry, the financial sector plays a key role in monitoring the performance of managers of large public companies..

Financial intermediaries enable savers to receive higher returns than they otherwise would. And investors are able to attract resources for prospectively high-return

investments. And since industry specialists can professionally assess activities, financial intermediaries add value for both the investor and the saver.

Beyond that, however, financial intermediaries enable larger investments than would otherwise be possible; pooling the savings of many savers may be necessary to finance investments of economically efficient size; if investors had to raise the funds themselves, many investments would be uneconomically small. There is a wonderful quote from the eminent English analyst, Bagehot, that makes the point well:

“We have entirely lost the idea that any undertaking likely to pay... can perish for want of money : A citizen... in Queen Elizabeth’s time... would have thought it was no use inventing railways... for you would not have been able to collect the capital with which to make them. At this moment [1873] in colonies and all rude countries, there is no large sum of transferable money; there is no fund from which you can borrow, and out of which you can make immense works.”

(Bagehot, Walter, Lombard Street, 1873, pp. 3-4, quoted in Levine, Journal of Economic Literature).

In addition to appropriate allocation of new resources, there are many other aspects: a well-functioning financial system can provide: better corporate governance; a diversification of financial instruments that can enable investors and savers better to match their risks and time dimensions of returns (and thus reduce risks for savers who are risk averse and offer higher returns to those willing to take risks). And, it is often forgotten, economic growth requires the freeing of resources from inefficient uses; when financial intermediaries are effective, withholding of funds from inefficient enterprises,

and offering higher rates of return for those enterprises to invest elsewhere, is an important contributor to growth.

Thus, appropriate risk-return assessments play a crucial role: a financial system that appropriately evaluates alternatives will generate a much higher rate of return on investment than a repressed financial system; and those higher rates of return itself generates higher rates of economic growth.

To understand how important the financial system is, it is useful to consider the situation in an economy without a functioning financial system. Imagine an economy with a number of family-owned businesses, but lacking the conditions to enable families to invest in other than their own businesses. There may be money, but let it be usable just as a medium of exchange, perhaps because there is enough inflation so that money is rejected as a store of value. In such an economy, each family will take its earnings from its business and do one of three things: it may choose to buy and consume goods and services; it may choose to buy assets, such as land or gold, in order to carry wealth forward; or each may choose to invest in his own businesses.

For the families with the most profitable businesses, it is likely that they will choose to reinvest their profits, buying capital goods and other inputs for their business. But for other families, even if they do choose to reinvest, their profits will be lower. And for families with businesses earning very low returns, they may choose to purchase land or similar assets or to increase consumption.

Even for the most profitable enterprises, families may be reluctant to have all their assets tied up in their business (in part because of uncertainty – there is always some risk) and will likely either diversify their product lines – even if the prospective rate of return

is not so high – or invest some part of their earnings in other assets, again such as land or gold.

For individuals without family businesses, the choices are between acquiring assets such as land or gold or consuming their earnings. Either way, the real return to savings will be very low. That, in turn, will induce people to save less than they would if they could realize higher returns.

Hence, for society as a whole, savings, and thus investment, will be lower – perhaps much lower – than would be the case if all households were presented with opportunities to invest in the most profitable businesses. And, even that investment which does take place will have a lower average rate of return than would happen if savers could invest in the entire range of investment opportunities.

Since the growth rate is the outcome of the investment rate and the rate of return on capital, as well as factor productivity growth and the growth in quantity and quality of the labor force, it will be lower than would be attained with a well-functioning financial system. Moreover, factor productivity growth will likely be lower than it could otherwise be, because many of the less profitable family-owned businesses will keep doing what they were doing in the same way, instead of shifting their resources to higher-return activities. A great deal of evidence shows that total factor productivity growth is in large part a result of the increased shares of more efficient firms and the reduced shares of less efficient firms, both within particular industries, and between them.

This can be seen with some simple numbers. Suppose that the rate of investment is 20 percent of GDP while the average rate of return on capital is 5 percent. Then growth attributable to investment will be only 1 percent of GDP. If productivity growth is 1

percent, and the labor force grows one percent, the overall growth rate of real GDP will be 3 percent.

If, by contrast, a well functioning financial system raised the savings-investment rate to 30 percent and the average rate of return to 15 percent (and these numbers are very plausible), growth on that account alone would be 4.5 percent (compared to the 1 percent with 20 percent investment and a 5 percent return). If, in addition, productivity growth doubled to 2 percent – again a very reasonable number, overall growth would be 7.5 percent, instead of 3 percent. Of course, in per capita terms, the difference is even more pronounced. If the growth rate of population and the labor force were the same, the growth rate of per capita income would be 6.5 percent contrasted with 2 percent.

Judging by what has happened in some countries after economic policy reforms, these orders of magnitude of potential gains do not seem unreasonable. Of course, almost all countries, even the poorest, have some financial intermediation, and policy changes conducive to more rapid economic growth encompass more than simply the financial sector.

In fact, saying that the role of the financial sector is to enable savers to put their money into better investments is too great a simplification. As already mentioned, nothing about the future is certain. Virtually all investments are risky. If there were no risks in a well-functioning financial system, rates of return would be the same on all investments because new investment would pour into the most profitable activities until the rate of return fell to the average.

But, in fact, there are usually different degrees of risk associated with different investments. Most people, including savers, are risk averse, and are unlikely to be willing

to invest in a more risky venture unless it offers a higher expected rate of return, to offset the additional perceived risk.

It is at this point that the role of the financial sector becomes even larger. This is because individual investors cannot have the time and knowledge sufficient to judge the likely risk-reward profiles of alternative investments. Even if they could allocate the time to learn about the prospects of potential investment streams, it would be inefficient and a waste of their time for individual investors each to undertake the research necessary to evaluate them.

This is what financial intermediation is about. Financial intermediaries, in a well functioning economy, evaluate alternative future earnings streams – both their expected outcomes and the risks – and channel funds into higher return activities only when the expected return is sufficient to compensate for the additional risk. Savers with different abilities with accept risk can choose different investments, leaving the appropriate assessments to specialists in the subject.

Hence, a well-functioning financial system enables savers to choose investments with risk-adjusted rates of return appropriate to their situations. And, while risks may be high for individual investments, it will generally be the case that the higher risk investments on average yield a higher return. The financial system evaluates the risk-reward profiles of alternatives, and enables savers to choose the degree of risk with which they are comfortable. Savers themselves may choose a portfolio with some investments more risky than others, but the evaluation role of the financial system is essential.

I should point out that technical change and innovation themselves need financing, and well functioning financial systems generally provide it. Venture capital

firms, angel investors, private equity firms, and other financial instruments enable start-ups to develop their products and services to the point where they are large enough to secure other forms of finance. The initial public offering (IPO) is a major milestone in the life and growth of most companies.

So the first point is that a well functioning financial system contributes enormously to economic growth. But the second, and almost equally important, point is that the demands on the financial system grow with economic growth itself. The economic history of the now-rich countries is a history of financial development alongside the development of the real economy. Even the development of simple banking started relatively recently; a shift to use of bank deposits as a medium of exchange required trust in the banking system, which came only gradually until regulatory systems were put into place. Even in the nineteenth century, economic growth was frequently interrupted by “banking crises”; in the United States, banks issued their own money, which often exchanged at a fraction of the face value.

Banking reforms and lessons from earlier crises – such as Bagehot’s famous dicta regarding the role of a lender of last resort – gradually resulted in greater stability in the money supply over time. But even the Great Depression was as severe as it was in large part because of inappropriate monetary reactions on part of the central banks, as Friedman and Schwartz demonstrated so convincingly for the United States.

The Great Depression resulted in a number of reforms in the financial sector, including measures to provide greater security to depositors (with government-provided deposit insurance), greater information to investors (in the United States, through the Securities and Exchange Commission which required registration of public companies

and specified information that was required to be reported quarterly and annually), and a separation of functions between various financial institutions – including commercial banks, investment banks, insurance companies, and equity markets.

But of course, economic growth continued, and as it did, the demands on the financial system increased still further. Most recently, financial markets have increasingly spun off risks in the forms of derivatives. Banks, which earlier assessed alternative investments and lent, became intermediaries themselves, selling the loans they made to other investors once they had extended them. Banking income in the United States and other financial centers now comes in significant part from the fees received for placing loans, rather than from interest on the loans themselves. Current discussions focus on the appropriate kind and degree of regulation in derivative markets, and appropriate resolution of the issues associated with derivatives will no doubt be crucial in determining the future growth of the major financial centers and other countries dependent for their financing upon them.

As this thumbnail sketch of financial history indicates, financial development took place accompanying growth of the real side of the economy. Had financial markets failed to develop, growth of the industrial countries would certainly have been slower than it has in fact been.

For the now-emerging markets, there are lessons from this. After the Second World War, almost all developing countries had very repressed financial systems, along the lines described by McKinnon. Of course there were banks, but those banks were controlled by governments, if they were not government-owned. And in efforts to foster import-substitution and for other purposes, banks were directed to lend specified amounts

or fractions of their loans to industries or sectors specified by the government. Moreover, these, and usually all, loans were often required to be extended at controlled low interest rates. "Credit rationing" was the result. With low interest rates and profitability seemingly assured by protection against imports, firms demanded considerably more credit than was available from the banks. In those circumstances, banks could lend without much concern for risk: they could choose the safest among potential borrowers, and even if a borrower encountered financial difficulties, chances were good that that borrower could plead for greater protection, tax breaks, or other relief. And, at any event, most interest rates were below the rate of inflation so the likelihood of inability to pay was very low. A firm that would realize a zero real rate of return on investment could nonetheless profitably borrow, as long as the real rate of interest was negative.

As growth proceeded, however, financial systems also developed. While government ownership of banks still persists in many countries, others have privatized some or all of their previously state-owned banks. And, in most countries, the problems arising from negative real rates of interest have generally led the authorities to raise permitted interest rates so that they are positive in real terms, if they have not abandoned credit rationing altogether. Regulation, meanwhile, has developed as well, relying more on incentives within a prudential framework and less on direct controls of banks' lending.

There is a growing body of empirical research substantiating all of this. There is a strong relationship between economic growth and measures of how well the financial system functions. Measures of economic growth are straightforward; the functioning of the financial system is usually measured by several variables. These include the ratios of liquid liabilities to GDP, claims on the non-financial private sector to domestic credit,

gross claims on the private sector to GDP, and others. For rich countries, for example, private sector credit as a percent of GDP is 71, while in poor countries it is 47 and in very poor countries it is 37. Similarly, the ratio of gross claims on the private sector to GDP is 53 in very rich countries, 20 in poor countries, and 13 in very poor countries. The correlation between these measures and real per capita GDP is surprisingly high, given all the variables that affect real per capita incomes. There are a variety of other empirical studies, too many to review here. But almost all researchers report significant relationships between the aspect of the financial system's development studied by them and real per capita income and/or the rate of growth.

Lessons from the Asian Crisis

It is thus clear that the financial system must develop at a pace sufficient to meet the needs of the real economy if growth is to be sustained. And, the more efficiently the financial system allocates resources, the more rapidly the economy will grow. But with growth, the real economy becomes increasingly complex: in early days when most economic activity is subsistence agriculture and there are few applicants seeking bank credit, a simple banking system may suffice, and credit rationing may not be severely inimical to growth prospects. But with economic growth, the demands for credit increase in type and variety, and hence the costs of misallocating bank credit (and thus investment) and not having a sufficient array or quantity of alternative financial instruments (such as bonds and equity) become higher. Although all of this was known prior to the Asian crisis, the quantitative impact of an underdeveloped financial system in affecting growth was probably underestimated by most policy makers and development economists.

The experience of South Korea vividly illustrates what goes wrong when the financial system fails to develop alongside the real economy. As you know, South Korea was one of the poorest countries in Asia in the 1950s. After the devastation of the Korean War (when the fighting went up and down the South Korean peninsula three times), recovery was anything but robust. The South Korean government adopted many of the measures then in vogue in developing countries: quantitative restrictions on imports and high tariff levels, encouragement of import substitution activities through prohibition on imports when domestic production was available, establishment of state-owned enterprises, credit rationing, and so on.

In this process, South Korea reached the highest recorded rate of inflation in the world in the 1950s (about a 25 percent annual average, although price controls probably resulted in an understatement of the true rate) and yet resisted and delayed altering the nominal exchange rate both in an effort to reduce inflation and for other reasons. One result was that exports were low even relative to the size of the economy, and grew very slowly: by 1960 exports (of which 88 percent were primary commodities) were only 3 percent of GDP. Worse yet, the domestic savings rate during the 1950s was very close to zero: investment was around 12-13 percent of GDP and foreign assistance was about 10 percent of GDP. And, of course, there was credit rationing, with an interest rate below the rate of inflation. South Korea's economic prospects appeared very poor.

But by the late 1950s, it was evident to the South Koreans that if they did not alter their policies, their economic prospects were dismal. Starting in 1958, therefore, the foreign exchange and trade regime began to be liberalized; by 1960, the exchange rate in real terms had been altered enough so that exporting became profitable for many. During

the 1960s, there were fiscal reforms that enabled the reduction of inflation to single digits; tariffs were lowered; quantitative restrictions on most imports were removed; and the government shifted from direct controls to greater reliance on incentives. As part of its drive to accelerate growth through an outer-oriented trade strategy, the government provided uniform incentives to all exporters including the attractive real exchange rate, exemption from any taxes or controls for imports of goods used in producing exports, favorable tax treatments, and access to rationed credit. All exporters were entitled to equal treatment, proportionate to their export earnings. In addition, while credit rationing was not abandoned, the rate of interest charged to borrowers was raised above the rate of inflation (which fell substantially due to fiscal reforms).

For purposes of understanding the role of the financial sector, there are two important features of subsequent South Korean growth. First, as you know, it was a spectacular success. South Korean per capita incomes are estimated to have increased seven-fold between 1960 and the mid-1990s. South Korean export earnings in dollar terms grew more than 40 percent annually for the first ten years of growth at a time when world dollar prices were fairly constant. Real wages grew an average of about 8 percent annually. The entire economy was transformed. By the late 1980s, the investment and savings rates which, you will remember were 12 percent and zero in the late 1950s, were each over 35 per cent. Exports, which had been just 3 percent of GDP, were over 30 percent, and imports had grown as well. The South Korean economy had been transformed from a very poor, agrarian one to a middle income country – at first called newly industrializing, and soon called newly industrialized. No one could doubt the fantastic success story.

During the period after the beginning of reforms, there was no year in which the South Korean economy did not grow, and the average growth rate was of course very high. By the 1990s, most observers believed that South Korean policy makers had responded to various threats to sustained growth in a timely fashion, and that sustained growth was assured.

But that leads to the second major feature. That is, the very high rate of South Korean economic growth in the early years took place in the context of financial repression. The authorities adopted a macroeconomic stance compatible with a much-reduced rate of inflation and finally single digit rates of price increase. That in itself reduced the degree to which the real interest rate was negative. They also raised the ceiling on the interest rates that banks could charge so that real interest rates became positive. But they still enforced interest rate ceilings and did not liberalize the entire banking system. Credit rationing and interest rate ceilings obviously led to some misallocation of resources, but in the early growth years, there were enough highly profitable opportunities so that the economic costs of financial repression were not too high.

But the situation then and later was complicated by the fact that the great success of the South Korean economy in the 1960s and 1970s had been accomplished in large measure through the chaebol, which were the large industrial conglomerates which dominated South Korean business. These chaebol expanded output rapidly and greatly increased their share of economic activity. They were successful exporters and demonstrated their ability to compete on world markets. But the chaebol were also required to maintain their employment, so that as productivity rose in existing lines of

activity, they took on new ones to keep their labor forces employed. At the same time, many of the banks were affiliated with chaebol. Hence, when one or more businesses within a chaebol were performing poorly, the chaebol bank extended additional funds to them. Not only did the banks have no experience of evaluating risks and returns, but the connected lending that resulted was another impediment to any sound judgment of the situation. Over time, rates of return on investments fell.

I should also note that the fact that interest rates were repressed made it more difficult for any efforts at diversification of the financial system. The development of bond and equity markets as means of financing chaebol (and other) activities was undoubtedly restrained by the fact that bank lending was at below-market rates and hence would-be borrowers did not seek to diversify their funding sources while the development of diverse financial institutions – equity, bonds, etc. – was undoubtedly slowed because of the relatively low cost to borrowers of bank credit.

Hence, the chaebol were financed largely by bank borrowing, and had relatively small equity bases. Over time, they became more and more heavily indebted, which enabled them to roll over existing debt and increase output.

By the 1990s, bank returns on assets and equity were falling sharply. In the early 1990s, the government raised the interest rate ceiling, in an effort to help the banks' profitability. But by that time, the chaebol were heavily indebted, and many were servicing their debts only by additional borrowing, or evergreening of their loans, as it came to be called. Chaebol had debt-equity ratios as high as 700 and 800 percent. It was obviously a situation that could not be sustained. But before the collapse, banks started investing offshore, and especially in currencies where the interest rate they could receive

was higher, in an effort to forestall their incipient difficulties. Some of the major currencies were in Southeast Asia, and when those currencies devalued, bank losses mounted. By that time, both domestic residents and foreigners were selling won-denominated assets, and the Korean crisis was unstoppable.

Thus, financial repression became increasingly costly over time. By the late 1970s, returns on investments were falling although the negative effects were not perceived as the rate of investment was rising rapidly. By the 1990s, rates of return were, as already stated, turning negative.

The resolution of the crisis is not the point here, but I should just note that when the authorities did finally address the root causes of the difficulties, they undertook major reforms in the financial sector, which enabled a resumption of growth within 18 months of the depths of the crisis. Korea's economic growth since that time has not been at the same rate as earlier occurred, but has still been well above that of most other emerging market countries.

But for present purposes, the point is that Korea could and did experience rapid growth for a considerable period of time, during which the degree of financial repression (although it was somewhat relaxed), while a negative, could not offset the factors contributing to strong growth. When policies were changed in the early 1960s, the degree of imbalance in the economy toward import-substituting activities was so great that it is probably true that anyone who had potential exports should have been supported. The high growth rate does not prove that there was no resource misallocation resulting from credit rationing, but there was surely not a lot.

As growth continued, however, the ability of the authorities to direct credit, or the ability of the banks to perform appropriate risk-reward calculations, was increasingly impaired. The real rate of return on investment – very high in the 1960s – naturally fell over time as the initial imbalances were gradually corrected. As that happened, however, selection of the right investments got harder. Banks couldn't do it, because they had been accustomed to lending in circumstances where there was little choice as to which borrowers to support. They had had to evergreen loans when ailing businesses could not service their debts. But, over time, as rates of return fell and the number and proportion of loans that would have been nonperforming had it not been for evergreening, the situation became unsustainable.

The South Korean case presents an important lesson. Growth, and even rapid growth, may be achievable with a given set of economic policies at a particular stage of development, although growth will be less than attainable were resources allocated more efficiently. But the same set of policies and institutions will not support further sustained or rapid growth over the longer term. The art of good economic policy making is to identify those policies and institutions which are not likely to support the economy's move to the next stage. The same policies that may not detract too much from growth at one stage may be a key bottleneck that has to be corrected to continue economic growth. And, the more rapid is economic growth, the more quickly the authorities must adapt the policy framework to the needs of a growing economy.

Korean policy makers had been unusually astute at identifying growth bottlenecks and correcting them for over thirty years. But they failed to recognize the weaknesses of the financial sector, and the role those weaknesses would play in undermining growth,

until the crisis was upon them. Had they proceeded more rapidly with liberalization of the financial system, it is likely that growth in the late 1980s and early 1990s would have been at a higher rate, and the crisis would probably have been avoided.

To be sure, some policies may simply constrain the achievable rate of economic growth – high taxes on labor incomes may be a good example. But other policies may permit fairly rapid growth for a period of time, but are not sustainable and become an increasing drag on growth – import substitution industrialization policies are a case in point. Whether those policies were initially well-advised or not, they were initially consistent with reasonable rates of growth, but over time, rates of growth had to fall until the policies were changed.

The Financial Sector in Brazil

Far be it for any outsider, much less one outside the financial field, to attempt to assess the Brazilian financial system. But it would be inappropriate before this audience to discuss the relationship between economic growth and the financial sector without at least an overview of Brazil's financial sector in international perspective.

To an outside observer, Brazil's financial system appears unusual: in a number of regards it is more developed than that of some other countries at similar stages of development, while at the same time there are some features that appear to be less conducive to supporting rapid growth. Moreover, reforms have been undertaken in recent years and it is too soon to evaluate the extent to which these may have improved the functioning of the financial system and the efficiency of financial intermediation. Hence I offer a few comments on the Brazilian financial system in international perspective more to raise questions than to provide answers.

Among recent reforms, perhaps the most noteworthy was with regard to bankruptcy law. As mentioned at the beginning, financial markets cannot function efficiently unless savers (and intermediaries) can be assured that they have legal rights to the returns on their assets. Rights depend on many things: the extent to which borrowing entities are obliged to provide accurate information about their situation; the degree to which minority holders of equity can have confidence that the majority will not be able to behave in ways which result in the minority receiving less than their share of profits; and many more.

An important one is bankruptcy law. Bankruptcy law is needed to protect creditors so that, in the event that a business cannot meet all its financial obligations, there can be some assurance that the assets of the business will be fairly shared among creditors. Different features of bankruptcy law are appropriate for different types of economic activities: shareholder rights primarily affect the ways in which equity markets can function; information is generally important but crucial for efficient financial intermediation; for lending, laws surrounding collateral and the ease of collection and of enforcement are critical. In countries where creditors cannot enforce rights, they do not lend – leading in some countries to very small mortgage or car loan markets, in others to dependence on self-financing by small business, and so on.

Until the recent reform of the bankruptcy law, which is surely a major positive step, Brazil did not rank well among emerging markets in the ease of enforcing contracts. Of the 176 countries whose procedures with respect to bankruptcy were covered by the World Bank, Brazil ranked 120th. The World Bank reports that there were 42 procedures

required, that it required an average of 616 days, and that the cost of collecting a claim was about 15 percent of the value of the amount sought.

Those numbers indicate much more difficult procedures than in industrial countries. For the U.K. (rated 22nd in terms of contract enforcement), for example, there were 19 procedures, taking 229 days or about a third of the time it takes in Brazil, with a cost much the same as that in Brazil. But even compared to other emerging markets, especially outside Latin America, Brazil did not rank very well. Chile, ranked 73rd, has 33 procedures, and requires 480 days. But many other Latin American countries do not show up very well on these indicators. A big contrast is with Asia: Korea, ranked 19th, has 29 procedures, taking 230 days, with a cost of about 5.5 percent of the claim. Thailand, ranked 44th, has 26 procedures, taking 425 days, and Singapore, ranked 23rd, has 29 procedures, taking 120 days, and costing about 15 percent of the value of the claim.

These numbers are at best imperfect indicators of the quality of the legal system underpinning the economy. But contract enforcement is important for all aspects of economic activity, not just for financial institutions. It is to be hoped that the performance of Brazil's system would improve significantly with the passage of the new law.

Another indicator for which data are available for the 176 countries is the ease of getting credit. Here, Brazil ranks 83rd. The World Bank formed a strength of legal rights index, with zero being the lowest and ten being the best. On that index, Brazil received a 2. A second index was formed with regard to the depth of credit information: here, the more information creditors have about prospective borrowers, the better the financial market is likely to function. Again, Brazil was not highly ranked, receiving a 5. Two other indicators presented by the World Bank, public and private credit bureau

information registry coverage, was 9 percent for the public registry and 43 percent for the private registry. Again, most other Latin American countries are in a similar range. Mexico, for example, is ranked 65th, with a legal rights index of two, a depth of credit information index of six, no public credit registry coverage, but a 69 percent private credit bureau coverage of the population. But if one looks at some Asian countries, the contrast is striking. In Malaysia (ranked third of all countries), the strength of legal rights index is eight, depth of credit information is six, and there is only public registry coverage of information on individuals, with 42 percent coverage.

On other indicators reported by the World Bank, there is again evidence that the ease of doing business could be improved considerably. For example, Brazil shows up as one of the ten countries where the longest time is required to receive the relevant licenses for business purposes. That raises costs to would-be entrants, and serves as yet another barrier to more rapid growth.

Two other indicators suggest that Brazil's financial sector is similar to most of those in Latin America, but behind those in much of the rest of the world. Credit to the private sector as a percent of GDP has been found to be a good indicator of the development of the financial sector, and to bear a close relation to real per capita income. On that measure, Brazil's financial sector does not perform strongly: in 2004, credit to the private sector was about 25 percent of GDP, contrasted with 60 percent in Chile, 70 percent in Canada, 100 percent in Australia, and 130 percent in China.

A second, often used, measure is the ratio of credit from deposit money banks to GDP. In 2006, that was 0.35, which was below Chile (0.665), about the same as Colombia, and above Mexico (0.191) and Argentina (0.126). But relative to Europe, and

the other rich countries, where the ratios are close to 1.0, the financial sector in Brazil is somewhat behind.

It is also reported that there remains a considerable volume of directed lending, representing about 35 percent of total credit. In addition, about one third of Brazilian banks are in the public sector. In most countries, public banks perform less well than private banks.

But all of these indicators suggest that the Brazilian financial system is not that different from others in Latin America; some indicators are a bit better, some a bit worse. The big differences are between Latin America on the one hand, and most of Asia and the industrial countries on the other. There is, however, one indicator where the Brazilian financial system stands out: the high spread between deposit and lending rates, which is far above that even of other Latin American countries. . It is estimated to have been as high as 45 percent in 2003, and to have been 36.9 percent in 2006. Even among the other 4 largest Latin American economies, the highest spreads between deposit and lending rates were much, much lower. The Argentine spread was 12.4 percent in 2002 and is now down to 2.2 percent.

But the reported returns on assets and equity in the Brazilian banking system do not appear unduly high. That raises questions as to what the cost structure of the financial system is, and why.

Directed lending, high reserve requirements, taxation, and other factors, undoubtedly all play a part. The Brazilian taxes on financial intermediation are conspicuous in this regard. But the huge spreads are surely worthy of analysis, and quite

clearly serve as a deterrent to the efficient functioning of the financial system in its intermediation role.

At the present time, the importance of timely information and transparency in the financial markets of industrial countries is glaringly obvious, as concerns with the subprime mortgage market have spread to other financing. This is reported to be largely because there is great uncertainty as to which institutions are holding the impaired assets and what their value may be. When BNP Paribas stopped investors from withdrawing funds, the BNP CEO stated that their exposure to U.S. subprimes was “absolutely negligible”. But the market commentary was that “they simply don’t know what their assets are worth”. And, since BNP could not sell its assets (or find out a price), it could not cash out their fund holders.

There is thus considerable evidence that the Brazilian economy would benefit from the liberalization and improved functioning of the financial system, both to increase its own potential growth rate and to enable all industries to become more competitive relative to their competitors abroad whose financial intermediaries are able to serve at lower costs.

At the same time, it should be recognized that many other countries are reforming, so countries that do not undertake reforms are generally falling further behind. Since access to finance is one important element of competitive ability for individual firms and sectors, reform is warranted not only because of the current situation but because, without reforms, it is likely that other countries’ competitive edges will increase (or their handicaps diminish) and that weaknesses in the financial system will become more costly over time. In 2006, for example, the World Bank rated France as the country

which had undertaken the top reformer in terms of the ease of getting credit, but there were many other countries undertaking reforms last year.

Concluding Remarks

To conclude, a well functioning financial system itself contributes to acceleration in potential economic growth, and a repressed financial system acts as a brake on potential growth. Even with distortions in the real sector of the economy, countries with better-functioning financial systems grow faster than those with more repressed systems. As the significance of a well functioning financial sector has become increasingly understood, more and more countries have undertaken reforms, thus further disadvantaging those whose financial systems are repressed. Moreover, as growth proceeds, there is need for still further reform – at all stages of development – simply for the financial system to meet the new demands that a more advanced economy places on it.

It would appear that there is considerable scope for improving the functioning of the financial system in Brazil. Many of the potential improvements would permit an increase in the sustainable rate of economic growth, and benefit investors, financial intermediaries, and savers alike. Some, such as further improvements in legal protection, and a reduction or elimination of directed credit, can only be undertaken by the government, although clear statements by the financial community may be significant in spurring action. Others, such as further opening of the economy, may be more contentious but would appear to have sufficiently high potential returns that finding ways of achieving the result would have major gains for all over the medium term. The financial community itself may be able to pinpoint ways in which the overall system can

function more efficiently through development to new instruments, improving flows of information, and reducing costs.

It is not possible to judge the potential payoffs for further reforms and strengthening of the financial system. Nor is it possible to estimate the point at which failure to reform may become a major constraint on growth. Brazil's growth rate has remained in the 3-4 percent range for some time and it is certainly possible that the financial system is one, if not a major, reason why.

But three conclusions are possible: reforms which improve the functioning of the financial system will surely improve growth prospects; improved efficiency of the financial system will yield a bigger payoff to reforms undertaken in other sectors; and, equally important, if reforms are not undertaken, there will come a time when further growth is significantly impeded, if it is not already.