## Financial Development and Poverty Alleviation: Issues and Policy Implications for Developing and **Transition Countries**

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#### **Abstract**

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

This paper reviews current thinking on the relationship between financial development and poverty alleviation—a subject that has grown increasingly important in the policy prescriptions of the IMF and other international financial institutions in recent years. Although work on this issue is far from over, some important lessons can be learned from the existing evidence. The paper reflects on these lessons and looks at some of the policy implications of the analysis.

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#### I. INTRODUCTION

In the last decade poverty issues in developing and transition countries have received growing attention. Policymakers of various ideological backgrounds have become increasingly anxious with the failure to significantly reduce the incidence of poverty in their countries. At the same time, the international financial institutions have also started to provide more support to efforts aimed at alleviating the poverty of the large number of poor that typify many developing countries.

The purpose of this paper is to highlight some of the issues and survey the current state of thinking on the relationship between financial development and poverty alleviation. The structure of the paper is as follows. Chapter II identifies the issues and surveys the literature on the key theoretical underpinnings regarding the linkages between financial development, economic growth, and poverty alleviation. It affirms the importance of financial development for economic growth and poverty reduction. Chapter III discusses different indicators of financial development and documents evidence of financial underdevelopment in low and middle income countries. It then attempts to identify the reasons why financial markets remain largely underdeveloped in these countries. Chapter IV discusses policy instruments which promote financial services, with a particular focus on the

## II. FINANCIAL DEVELOPMENT, ECONOMIC GROWTH, AND POVERTY ALLEVIATION: A SURVEY OF LITERATURE

financial services for the poor. Chapter V looks at some of the policy implications of the

This chapter surveys developments in the analysis of the linkages between financial development, economic growth, and poverty alleviation, and attempts to put into perspective where these developments currently stand. For the sake of brevity, the chapter outlines the essential theoretical underpinnings and does not go into a great deal of detail.<sup>2</sup>

## A. Financial Development and Economic Growth

## The Finance-Growth Nexus in Traditional Macroeconomics

analysis for IMF operations. Finally, Chapter VI is a conclusion.

Most of the traditional Keynesian and monetarist literature presumed that financial systems function reasonably smoothly and therefore can be ignored. The IS-LM model emphasized the role of the money supply and interest rates. Factors such as the condition of

<sup>&</sup>lt;sup>2</sup> For a more detailed discussion of the linkages between financial development and economic growth, see for example Gertler (1988), Bernanke (1993), Levine (1997), and Khan (2000). For more information on the growth-poverty nexus, see for example Lindert and Williamson (1985) and World Bank (2001).

the financial sector plays no role in affecting investment. In this vein, Robinson (1952) argued that economic development creates demand for particular types of financial arrangements, and the financial system responds automatically to these demands. Thus, enterprises lead and finance follows, and financial markets and institutions appear when needed.

There were, however, those who took strong exception to this standard view. For example, Gurley and Shaw (1955) argued that financial intermediaries were important since they helped to alleviate frictions between borrowers and lenders. The focus of Gurley and Shaw's work was mainly on the transformation role of banks in reducing the imperfections arising from maturity mismatch. However, their approach was incomplete, since the existence of transaction costs was assumed rather than derived.<sup>3</sup>

## The Finance-Growth Nexus in Economics of Imperfect Information

Since the early 1970s, "revolutionary" work in information economics has shown that inefficiencies can arise when one of the transacting parties has superior information concerning the value of any transaction. In such circumstances, intermediaries play an important role. Akerlof (1970), Stiglitz and Weiss (1981), Bernanke (1983), Diamond (1984), and Fama (1985) developed the foundation of the modern theory of financial intermediation, based on the ability of banks and other financial institutions to resolve the problems arising from the asymmetries in information between the transacting parties.

In the absence of financial intermediation, it is costly for investors to evaluate the quality and performance of firms. Financial intermediaries are able to identify more effectively those entrepreneurs with the best chances of successfully initiating new products and production processes. Because many firms and entrepreneurs solicit capital, financial intermediaries can realize scale economies in obtaining detailed information regarding firms' profitability and investment prospects, thereby greatly reducing verification and monitoring costs. With the most promising firms and managers getting funds, improved capital allocation efficiency fosters faster growth. Although the view that finance is not important for economic development is still held by some prominent economists, most now agree that financial markets play a central role in fostering growth, and that the financial system affects the behavior of firms and individuals.

<sup>&</sup>lt;sup>3</sup> It is interesting to note that as early as in 1873, Walter Bagehot emphasized the important role of financial development for economic growth in England which arose from the relative ease with which financial markets were able to mobilize savings to finance a variety of long-term, illiquid investment opportunities. This easy entrepreneurial access to external finance was critical in facilitating the implementation of new technologies in England.

<sup>&</sup>lt;sup>4</sup> Lucas (1988), for example, pronounced that "the importance of financial matters is very badly over-stressed in popular and even much professional discussion" (p. 6) maintaining that the necessary financial markets would develop as the need for them arose.

#### Box 1. Problems in Measuring Financial Development

There are a number of difficulties in measuring financial development:

- First, there is no single indicator of financial development that measures comprehensively the degree to
  which credit markets finance economic growth and contribute to the alleviation of poverty. This is because
  financial markets can provide many services, and there are numerous channels through which growth can
  be encouraged.
- Second, the statistics on conventional indicators of the *extent* of financial development, such as the ratio of different monetary aggregates to GDP, can give misleading signals about the condition of financial sector and its implications for the economic activity. If, for example, a relatively high ratio of broad money to GDP reflects a heavily finance of the public sector by the financial system, with only little bank financing going to the private sector, such a case could hardly be described as promoting economic growth. On the other hand, if the high ratio of broad money to GDP is accompanied by a balanced fiscal stance and a large number of bank accounts, it could imply that the financial system is likely to provide services to the poorer sectors of the population.\*
- Third, some important indicators of financial development are not easy or even possible to quantify. These are primarily the indicators of the *efficiency* of financial system in reducing information and transaction costs for its customers. The assessment of this efficiency is mainly a qualitative exercise. It normally involves an assessment of observance and implementation of relevant financial sector standards, codes, and good practices, the analysis of credit culture, quality of bank managers and supervisors, corporate governance, etc. Without a comprehensive analysis of the institutional environment and the incentive structure in which bank managers, supervisors, auditors, and depositors operate, it is hard to draw conclusions about the level of financial development of a country.
- Finally, the data on quantifiable indicators may not be easily available across countries and even the available information may not sometimes be easy to assemble in a manner which is consistent and comparable across countries (e.g., the information on the level of non-performing loans may not comparable across countries because of different methodologies used in the calculation of non-performance).
- \* In general, in measuring the degree to which households—especially the poorest ones—have access to the banking system, key indicators would include the number of bank accounts, particularly in the rural areas, and the number of micro loans from banks and microfinance institutions. These data are not easily available in most developing countries.

## Empirical Evidence of the Relationship Between Financial Markets and Growth

The increasingly detailed theoretical analysis of the relationship between financial development and economic growth has been accompanied by empirical studies. A large number of these studies at all levels, including cross country, industry and firm-level analyses, document "extensive periods when financial development—or the lack thereof—crucially affects the speed and pattern of economic development" (Levine 1997, p. 689).

One of the first empirical studies was Goldsmith (1969). This author examined the finance-growth nexus in 35 countries over 103 years (1860-1963), using as measure of financial development, the ratio of financial assets of all financial intermediaries to GDP (see Box 1 for a discussion of the problems in measuring financial development). He concluded that financial development and economic development appear to occur simultaneously. However, Goldsmith's measure only took into account the *extent* of countries' financial systems and ignored the *efficiency* of financial services.<sup>5</sup>

King and Levine (1993) extended Goldsmith's analysis by enriching the measurement of financial development. In addition to measuring the extent of financial development by (a) the ratio of liquid liabilities of the financial system to GDP and (b) the ratio of credit provided to private enterprises (by both private-sector banks and the central banks) to GDP, these authors measured the efficiency of financial development by (a) the share of total credit provided by private banks relative to the credit provided by the central bank and (b) the share of credit allocated to private non-financial firms relative to total credit. Based on these improvements, they confirmed strong empirical links between financial market development and economic growth. Moreover, King and Levine also found that the level of financial development in 1960 in 80 different countries was correlated with the subsequent average rate of economic growth over the next 29 years across these countries.

#### The Direction of Causation

The finding by King and Levine that financial development and economic growth not only move closely together but that the former may also predict the latter was confirmed by Rajan and Zingales (1998). These authors hypothesized that if finance causes growth, financial development should help disproportionately enterprises or industries that rely more on external finance, as opposed to retained earnings, for investment. If, on the other hand, growth and finance develop together, there should be no differences between sectors of the economy requiring different amounts of financing. Their empirical findings provided positive evidence for the argument that financial development predicts economic growth.

<sup>&</sup>lt;sup>5</sup> The *extent* of the financial system describes the proportion of firms and households able to access easily the services provided by financial intermediaries and markets. The *efficiency* of the financial system refers to how effective these markets and intermediaries are in reducing information and transaction costs for their customers (see Khan 2000).

<sup>&</sup>lt;sup>6</sup> In other words, this implies that in countries that are more financially developed an industry such as Drugs and Pharmaceuticals, which requires a lot of external funding, should develop relatively faster than Tobacco, which requires little external finance. Within industries, financial development is more important for young firms that have insufficient retained earnings to finance growth.

Interesting indirect evidence that financial development precedes economic growth was obtained by LaPorta et al. (1997). These authors studied the relationship between economic growth and the legal system. They find that variations in investors' rights and protections across countries cannot be explained solely by differences in GDP per capita. Rather they are related systematically to differences in legal traditions. Because the degree of investor protection affects the availability of external finance and a nation's legal principles are basically independent of its current level of economic development, such legal traditions then can be used to isolate the part of an economy's overall financial development that is uncorrelated with its economic status. This adds support to the hypothesis that financial development encourages economic growth, rather than being caused by it.<sup>7</sup>

## **B.** Economic Growth and Poverty Alleviation

Until recently, few economists explored in any depth the relationship between financial markets and poverty. The debate essentially ignored poverty issues, rather focusing on the broader association between financial development and economic growth. However, economic growth may not be a sufficient condition for poverty alleviation. In theory at least, if income inequality increases, it is possible for a country to enjoy positive economic growth without any benefit to its poorest households—the rich get richer while the incomes of the poor stagnate or decline. Therefore the relationship between economic growth and income distribution is critical.

## The Kuznets Hypothesis

Simon Kuznets was pioneer of the research on how economic growth affects the distribution of income. In an influential paper (Kuznets 1955), he argued that the effects of economic growth on income distribution change at different stages of development. Specifically, income inequality widens in the early phases of economic development (when the labor force shifts from an agricultural sector characterized by low but relatively equally distributed income to urban industrial sectors characterized by higher but relatively less equally distributed income); becomes stabilized for a while; and then narrows in the later phases as economies mature. Kuznets' hypothesis implies that growth benefits the poorest groups of society less than one-for-one in the early stage of (industrial) development<sup>8</sup> and more than one-for-one later on.

<sup>&</sup>lt;sup>7</sup> There are, however, two possible sources of error, which prevent researchers from using evidence that finance predicts economic growth to conclude that it determines economic growth. First, both financial development and economic growth could be driven by a common omitted variable (such as, for example, the propensity of households to save). Second, financial markets may anticipate future economic growth and simply be a leading indicator rather than a casual factor. See Rajan and Zingales (1998).

<sup>&</sup>lt;sup>8</sup> This is not to say that the lot of the poor actually deteriorates, but their relative well being falls.

#### Box 2. Problems in Measuring Poverty and Income Inequality

The standard approach to poverty and inequality measurement uses the data on annual income per capita. However, such data have shortcomings because other dimensions of poverty are ignored (for more details see Lindert and Williamson 1985). As a result, the measurement of poverty and the observed relationship—if any—between poverty and growth (or between poverty and any other variable) may not be strictly accurate. The shortcomings include:

- First, the data on annual income per capita do not measure "full-time" income. Ideally, income should be adjusted to include home time that has some opportunity cost, at or below the individual's market wage.
- Second, the data on annual income per capita do not include items that are hard or impossible to value because they are not traded in a conventional market place. For example, the measurement of income inequality does not take into account inequality in the length of life. Where average life expectancies are short, as in earlier centuries for all countries or in the poorest countries today, life expectancies are also very unequally distributed. Where average life expectancies are long, they tend to be more equally distributed. Thus, the dramatic improvements in life expectancy in the last century or so have favored the poor more that the rich, although by how much is difficult to measure.
- Third, the data on annual income per capita do not measure properly the income of those working informally and the variance of even the best estimates is usually high. It is recognized, however, that poorer countries typically have large informal sectors.
- Finally, the statistics themselves may not be reliable. For example, there is increasing divergence between per capita income statistics and household poverty and expenditure surveys. In addition the consumption weights in national accounts statistics in some countries are over 30 years old. Unfortunately statistics are often the most unreliable in the poorest countries.

The Kuznets hypothesis was accepted by many development economists even though it based primarily on analytical reasoning rather than data. According to Kuznets himself, "the paper is perhaps 5 percent empirical information and 95 percent speculation, some of it possibly tainted by wishful thinking". Although some found confirmation of a U-shaped relation between income equality and GDP per capita, thus supporting the Kuznets Hypothesis, more recent work discredits the view that income distribution and stages of growth are related.

Recent Analysis of the Relationship Between Growth and Poverty

More recently, a growing number of studies on the effects of economic growth on income distribution has challenged, on both theoretical and empirical grounds, the

<sup>&</sup>lt;sup>9</sup> Kuznets (1955), p. 26.

traditional view that the poor fail to gain either relatively or in absolute terms. <sup>10</sup> A series of papers studied the performance of Gini coefficients <sup>11</sup> over time and across countries and concluded that these coefficients are relatively stable over time within countries but different across countries. For example, Li, Squire, and Zou (1998) found such results using the data set on Gini coefficients covering 112 developed and developing countries for the years 1947-94. This suggests that inequality is largely determined by factors that change only slowly within countries but are quite different across countries.

Tanzi (1998) advanced some theoretical arguments why inequality may not be strongly affected by economic growth. He argued that in addition to broad economic changes and government activity, inequality is much influenced by social norms and attitudes. In traditional and poorer societies, where public sector intervention is limited, social norms are very important. These norms tend to be relatively stable over time in specific countries even though they may differ among countries. As such, they have a strong influence in maintaining the existing income and wealth distribution. According to Tanzi, this is a reason why many studies find that Gini coefficients are relatively stable within countries but different among countries. In more open and more developed societies, the role of government and the impact of broad economic forces are more important.

In an important paper, Dollar and Kraay (2001) investigated empirically the relationship between growth and poverty. Using a sample of 80 countries over four decades, they examined the relationship between the effect of economic growth on the income of the bottom 20 percent of the population and found that the income of this group has a unitary elasticity with respect to growth. In other words, economic growth does not disadvantage the poor by excluding them from growth induced prosperity. They also found that the poverty-growth relationship does not change in negative growth episodes or positive growth periods (i.e., incomes of the poor do not fall more than proportionately during economic crises). Furthermore, the relationship between growth and income for the lowest quintile appears to hold regardless of the levels of development of the countries examined.

The 2001 World Development Report also concludes that there are no systematic effects of economic growth on income inequality across countries. 12 The differences in inequality

 $<sup>^{10}</sup>$  As in the case of financial development, an important issue that needs to be taken into account in all empirical studies of poverty and income inequality is measurement. Box 2 addresses some of the problems related to the measurement of poverty.

<sup>&</sup>lt;sup>11</sup> The Gini coefficient is one of the most popular representations of income inequality. It is based on the Lorenz curve, which plots the share of population against the share of income received. See Deininger and Squire (1996) for a discussion of the merits and disadvantages of using the Gini index.

<sup>&</sup>lt;sup>12</sup> World Bank (2001), Chapter 3.

at a given rate of growth could reflect the fact that the combination of policies and institutions that led to this growth differed across countries—and that these differences in policies matter for income distribution.

There is therefore little support for the Kuznets hypothesis or the more modern protest-based contention that growth benefits the rich or large multinational companies only. Many recent studies show that on average economic growth does not systematically affect income distribution. Economic growth raises the income of poor people as much as average incomes.

## C. Direct Links Between Financial Development and Poverty Alleviation

In addition to indirect macroeconomic links between financial development and poverty reduction, intermediated through economic growth, there are more direct microeconomic links. These links result from the availability of accessible financial instruments, services, and institutions for poor households. Until the late 1980s, the literature on these microeconomic links had been virtually non-existent.

In many developing and socialist countries, the predominant view was founded on the belief that state-owned banks, including special development banks, and subsidized lending could massively reduce poverty. This view was based on the perception that the private sector was not able or willing to supply the necessary financial services to key economic sectors nor did it have any interest in lending to the poor. <sup>13</sup> However, the state-owned financial institutions hindered more general financial market development, often served only to destroy savings, and failed to provide sustainable financial services to the poor. <sup>14</sup> Many development initiatives which assisted these institutions reached only a small proportion of the poor population and have often favored politically connected larger borrowers as a way to promote political advantage and reduce administrative costs.

In the late 1980s, this approach was countered by a belief that state withdrawal would suffice. As a result, closing state owned financial institutions became an important priority in adjustment programs supported by IMF and other international financial institutions. However, the expectation that private institutions would rapidly take the place of state-owned banks and improve the provision of financial services to the poor has not always materialized (Chapter IV).

The most recent debates about financial services for the poor generally reflect the socalled "microfinance movement" (see, for example, Ledgerwood 1998 or Matin, Hulme,

<sup>&</sup>lt;sup>13</sup> In the 1960-70s, development banks in a number of countries (especially in Africa) were established with funding and assistance from various multilateral development banks.

<sup>&</sup>lt;sup>14</sup> See Chapter III for a discussion of the state involvement in financial institutions.

and Rutherford 1999). It has generated considerable enthusiasm among academics, donors, and development practitioners. Availability of credit from semi-formal microfinance institutions as well as from informal providers is currently often seen as an important element that can generate employment in small informal businesses, which in turn has the potential to reduce vulnerability and/or increase the income of the poor.

However, there have been few attempts to examine analytically, the microfinance "phenomenon". This is partly because in some circles microfinance has attained semi-mythical status and partly because of the paucity of data. This gap is being filled slowly but much work remains to be done. In general, while the number of microfinance institutions has grown rapidly and remains a centerpiece of many antipoverty programs, some observers are beginning to question whether microfinance is a sustainable solution to dealing with poverty<sup>15</sup>

#### III. EVIDENCE AND CAUSES OF FINANCIAL UNDERDEVELOPMENT

The purpose of this chapter is twofold. First, it will look at some indicators of financial intermediation across countries that are at different levels of economic development. Second, it will attempt to identify the reasons why financial markets remain largely underdeveloped in poor countries.

#### A. Indicators of Financial Development

As discussed in Chapter II, there are a number of difficulties in measuring financial development. In Box 2, it was argued that the ratio of various monetary aggregates—the liabilities side of the balance sheet of the financial system—may not represent an accurate measure of financial development. For this reason, this section will focus on the evolution of credit to the private sector (including bank and non-bank credit to the private sector) as a percent of GDP as an indicator of the extent of financial development. <sup>16</sup> Due to data

<sup>&</sup>lt;sup>15</sup> A recent survey of microfinance concluded that "the win-win rhetoric promising poverty alleviation with profits has moved far ahead of the evidence, and even the most fundamental claims remain unsubstantiated" (Morduch 1999, p. 1609). Microfinance institutions and their role in poverty alleviation are discussed in more detail in Chapter IV.

<sup>&</sup>lt;sup>16</sup> However, even this indicator may be subject to criticism. For example, if loan classification rules are not adequate, then a high level of credit to the private sector may simply mask lending to poor quality borrowers. Similarly, if the credit assessment capacity of financial institutions is not adequate, a rapid growth in credit to the private sector may result in an increase in non-performing assets and precede a severe crisis rather than economic expansion, as for example, occurred in many South East Asian countries prior to the crisis of 1997.

constraints, the discussion will be limited to only 47 countries.<sup>17</sup> Other indicators of the efficiency of financial intermediation examined in this section are interest rate spreads, or the difference between average interest rates on credits and those on deposits. Theoretically, the interest rate spread can be viewed as the cost of financial intermediation, which mainly reflects the efficiency with which financial intermediaries are able to resolve the problems of informational asymmetries.

#### **Extent of Financial Development**

Credit to the private sector from all financial institutions. Figure 1 shows the evolution of credit to the private sector from deposit money banks and other financial institutions as a percent of GDP for a sample of 47 countries over the 1995–2000 period. The countries are arranged by four income groups. The most striking feature regarding the data is the very high ratio of private sector credit to GDP for the high income group and the low ratios for the three other country groups, especially low income and lower middle income groups. While it must be emphasized that in this form, these data do not imply that financial development causes higher rates of growth, the association of high income and substantial financial market development is noteworthy. On a somewhat more positive side, it should be noted that credit to the private sector has been increasing slightly for the low income countries in the last five years, from around 30 percent of GDP in 1995 to more than 40 percent of GDP in 2000.

Credit to the private sector from non-bank financial institutions. Using the available data for the same 47 countries, Figure 2 illustrates the evolution of credit to the private sector from deposit money banks as a share of total credit to the private sector. Financial development is associated with an increased importance of non-bank financial institutions and thus a lower share of deposit money banks in total credit to the private sector. <sup>18</sup> Judging from this perspective, Figure 2 confirms that financial systems appear to be more developed in high income countries.

#### **Efficiency of Financial Intermediation**

Interest rate spread. Figures 3a and 3b illustrate the interest rate spread for the banking system in a sample of 112 countries. The interest rate spread is defined as a simple difference between the average nominal lending rate and the average nominal deposit rate. Figure 3a shows the evolution of this spread between 1995 and 2000 in countries arranged by the same four income groups. It shows the substantial difference between the cost of financial intermediation in high income countries and low income countries. While the average spread

<sup>&</sup>lt;sup>17</sup> Although the data on bank credit to the private sector is available for a broader number of countries, the information on non-bank credit to the private sector is available for 47 countries only.

<sup>&</sup>lt;sup>18</sup> See Chapter IV, for a discussion of this point.

for high income countries was less than 4 percentage points by the end of 2000, it was above 15 percentage points for the group of low income countries reflecting the premium that investors required to compensate for the higher risks. Furthermore, the data reflect lending to the most secure borrowers, while lending rates to smaller enterprises are usually much higher. Although part of the spread may reflect the premium required to compensate for higher risks, which is not indicative of an inefficient financial system since pricing should reflect risks, the substantial interest rate spread primarily reflects inefficiencies in intermediation. Overall, financial systems in many developing countries appear to be inefficient.

#### **B.** Reasons for Financial Underdevelopment

In order to identify the reasons for financial underdevelopment, this section examines the condition of financial systems in developing and transition countries by assessing bilateral relations between financial institutions and their counterparts. These counterparts are grouped into four categories: (a) owners, (b) depositors, (c) borrowers, and (d) regulators. Given the important role of banks and other financial intermediaries in resolving the problems arising from the asymmetries of information, which was highlighted in Chapter II, particular attention is given to those factors that are likely to affect the ability of financial intermediaries to resolve the information problems.

#### **Issues Related to the Ownership Structure of Financial Institutions**

State-owned financial institutions have traditionally played an important role in many developing and transition countries. In many of these countries, these institutions continue to dominate the financial sector despite the fact that their poor performance has been confirmed by numerous studies. <sup>19</sup> Although research on the proper role of state banks is not yet complete, public ownership has generally proved to be inferior to private ownership for two main reasons: (a) opportunistic behavior by politicians, which worsens the problem of adverse selection, and (b) failure in corporate governance, which worsens the problem of moral hazard.

 Opportunistic behavior by politicians may occur when politicians use state-owned banks to make loans to "priority" sectors or borrowers (usually supporters) at preferential terms, sometimes with an implicit understanding that the loans need never be repaid. In extreme cases, some corrupt politicians may simply help themselves to the resources of the state-controlled financial institutions. Politicians may also lean on state-owned financial institutions to make excessive investments in mis-located and overstaffed branches.

<sup>&</sup>lt;sup>19</sup> See, for example, Goldstein and Turner (1996).

• Failures in corporate governance may result from the expectation that poorly performing institutions will be bailed out. Politicians often find it harder to improve incentives for the managers of state-owned financial institutions or to close down an insolvent state-owned institution. This situation reflects an agency problem associated with the separation between ownership and management.

As a result, state-owned financial intermediaries are not likely to be efficient providers of financial services. Their portfolios usually contain large numbers of nonperforming loans, and a financial system dominated by the state-owned institutions is less likely to effectively stimulate growth in the private sector, especially growth in small and medium-sized businesses. In addition, these banks may be used as instruments of development policy and not strictly enforce the repayment of overdue loans. In the long run, this leads to a severe weakening of their financial structure.

The agency problem discussed above is not, however, limited to state-owned financial institutions. According to the principal-agent theory, if "outsiders" (private or public shareholders and depositors) cannot effectively monitor the actions of "insiders" (managers) who run a particular financial institution, these "insiders" may not have sufficient incentives to behave prudently and ensure an appropriate risk structure for the assets of their financial institution. As a result, the action of managers may negatively affect the performance of financial institutions. This provides the rationale for regulation and supervision of financial institutions (see below).

## **Issues in Relations with Depositors**

One of the causes of low financial intermediation in many developing and transition countries is the result of the inability of financial institutions to effectively collect private savings. This stems from a variety of factors affecting both the demand and the supply of savings facilities.

Macroeconomic instability and deficiencies in regulation and supervision of financial institutions are two major factors underlying the low demand for deposit facilities. High, unstable, and unpredictable rates of inflation increase the opportunity cost of holding money. This causes the demand for money to fall as economic agents seek to place their assets in an alternative form (foreign currency, gold, real estate, etc.). Poor regulation and

<sup>&</sup>lt;sup>20</sup> Even when the state-owned financial institutions are established to provide special financial services to a particular class of clients, they tend to concentrate their activities on the largest enterprises, leaving the vast majority of small and medium-sized businesses without adequate access to financial services. A typical example is the state-owned agricultural development banks that were set up in many developing and former socialist countries. These banks tend to curtail rather than expand their services to small farmers in many countries.

supervision may result in public mistrust of financial institutions and lead to a high ratio of cash holdings to deposits.

#### Box 3. Direct Effects of Inflation on Income Distribution and Poverty

One of the most damaging (or alternatively, poverty enhancing) macroeconomic phenomena that injudicious financial market policy can generate is inflation. This became clear from the episodes of hyperinflation that characterized many countries in Latin America in the 1980s and in Eastern Europe and FSU countries following the collapse of the Soviet Union. The result has been a resurgence of interest on the relationship between inflation and poverty which has generated an increasing body of theoretical and empirical literature. This literature consistently finds that the level of inflation and inflation variability have a negative impact on overall income equality and poverty alleviation (see, for example, Bulir and Gulde 1995 or Sarel 1997).

The most direct effect of inflation on households' income (and hence poverty) passes through real wages. As wages are often expressed in nominal terms, they seldom increase as fast as prices, and their real value may therefore be reduced. Similarly, inflation reduces the real value of all non-wage income which is defined in nominal terms (pensions, grants, etc.). In the absence of access to financial instruments—such as indexation or hedging—those segments of the society which have their income set in nominal terms are therefore more vulnerable to inflation.

The "inflation tax" is another important direct effect of inflation on income and poverty. This tax represents a transfer of resources from holders of currency and non-interest bearing deposits to government, which occurs due to their loss of real value. The incomplete indexation of the tax system is yet another possible channel for the impact of inflation on income. Inflation-induced increases in marginal income taxes—when tax brackets are less than fully adjusted for inflation—transfers resources from taxpayers to the government. Also, inflation may cause nominal interest earnings to rise as investors demand compensation for the declining purchasing power of money. But because nominal returns are taxed as income, inflation reduces the after-tax return to saving and transfers resources from savers to the government.

Cardoso (1992) argued that the direct effects of inflation are likely to impact the middle-income groups more powerfully than low-income groups. The segments of the population which have their income defined in nominal terms are typically more middle-income classes than the poor who, in developing countries, are concentrated in agriculture and informal sectors and receive in-kind income. Also, in contrast to the middle-income classes, individuals below the poverty line have little savings (if any) and only negligible average cash holdings, which allows them to avoid strong direct effects of inflation. As inflation is likely to wipe out savings of the middle-income classes and reduce their real income, the number of poor may increase and inequality widened.

While this analysis of the effects of inflation on the middle class is correct, the contention that the poor are better able to weather bouts of high inflation is open to question. It is true that the very poor are concentrated in rural areas and the informal sector, but many of these rely on support from relatives in urban areas. Furthermore, although the cash balances of the poor are low, cash may constitute a larger percentage of total assets of the poor. They have few options with regard to asset hedges in periods of high inflation.

The supply of savings facilities may also be inadequate. In many developing and transition countries, formal financial institutions do not have the technological capacity to deal with small clients, especially in rural areas. Also, high fixed costs and limited economies of scale often discourage financial institutions from opening branches in rural areas.

#### **Issues in Relations with Borrowers**

Unable to effectively mobilize deposits, financial institutions in developing and transition countries provide only little lending to the economy. Low incentives to lend result from the difficulties in resolving information problems. Financial institutions in these countries often have poor credit assessment capacities and lack effective abilities to monitor the performance of their borrowers.

Deficiencies in credit assessment capacities prevent an efficient resolution of the adverse selection problem. These deficiencies result from a variety of factors, including, but not limited to, macroeconomic instability, poor borrowers' accounting records, and lack of qualified managers in financial institutions.

- Macroeconomic instability hampers financial institutions ability to estimate borrowers' credit risks. <sup>21</sup> The inability to make accurate credit assessment results either in an increase in nonperforming loans or in credit crunches. In any case, the effects on the real economy can be damaging. <sup>22</sup>
- Poor accounting records may distort the true picture of the financial condition of enterprises and complicate the credit assessment by financial institutions.
- Poor management of financial institutions may be the prime cause of financial
  institution's difficulties. Not only does this problem concern managers of the head offices
  of financial institutions but also autonomous branch managers whose activities—if not
  properly controlled—can lead to large losses to the whole institution.

The poor monitoring capacity of financial institutions is another reason for limited lending to the economy. In developed economies, this problem is often dealt with by requiring borrowers to pledge their assets as security against default. However, in developing economies weakly defined property rights, especially for movable property, limit the ability of borrowers to pledge assets as security for loans. In addition, inadequate judicial systems do not allow lenders to pursue remedies for speedy repayment through the courts. As a result banks tend to lend to only the largest borrowers with a well-established reputation or those who are "connected" to them (bank's owners or employees, or companies that have links with the banks).

<sup>&</sup>lt;sup>21</sup> It should also be noted that a company's credit history recorded in periods of high price volatility may not provide adequate information regarding its creditworthiness in more stable times.

<sup>&</sup>lt;sup>22</sup> In addition to the indirect effects of inflation on economic growth and poverty through the financial sector, there are more direct effects as discussed in Box 3.

- **Poor property rights**. Few developing countries have property rights that effectively allow households, especially the poorest ones, to have access to secure registered title to their dwellings or their land (de Soto 2000). Loans for the purchase of property are either unavailable or short term and costly.
- **Difficulties in bankruptcy procedures**. Bankruptcy is one of the processes by which resources that are being used inefficiently are transferred to more efficient uses. It is also the process by which unsecured creditors recover their debts. The higher the transactions costs of doing this (the cost of bankruptcy proceedings), the less efficient is the resource transfer and the riskier it is to lend on an unsecured basis. In many developing countries, bankruptcies typically recover only a small fraction of the value of the assets of the bankrupt business.

## Issues in the Regulation and Supervision of Financial Institutions

In many developing and transition countries, regulation and supervision of financial institutions have several weaknesses. These weaknesses represent a serious impediment to the development of financial markets. Both basic types of regulation which are used to provide stability to financial systems—structure and conduct—are often inadequate.<sup>23</sup>

Regarding the regulation of structure, the entry requirements are often inadequate in developing and transition countries. Some countries may have extremely liberal licensing policies which result in large number of weak institutions being able to obtain banking licenses. <sup>24</sup> This undermines public confidence and hampers financial development. In other countries, overly restrictive requirements for licensing create high barriers to market entry, thus increasing the power of the existing financial institutions and reducing competition which results in a widening of the spread between deposit and lending rates and worsens the problems of adverse selection and moral hazard. The former arises from the fact that less

<sup>&</sup>lt;sup>23</sup> The regulation of structure refers to entry requirements, functional separation of institutions (like the separation between commercial banks, investment banks, and insurance), deposit insurance, and the existence of lender-of-last-resort facilities. The regulation of conduct represents rules regarding prudential behavior and disclosure, and pricing rules or interest rate regulations.

<sup>&</sup>lt;sup>24</sup> This issue was particularly relevant in almost all countries of the former Soviet Union during the first 3-6 years after the break-up. Since then, the financial sector has been consolidated in many of these countries, partly as a result of strengthening in regulation. However, some countries are still overburdened by small and weak financial institutions.

efficient enterprises with access to capital can drive out more efficient enterprises who do not have access to funding, while the latter relates to the too-big-to-fail problem.<sup>25</sup>

As to the regulation of conduct, the state involvement in the form of heavy reliance on direct instruments of monetary policy, such as interest rate controls, credit ceilings, directed credits, etc. may have effectively "repressed" the financial sector in many developing countries. These direct instruments of monetary control generally distort the allocation of financial resources and lead to financial disintermediation and loss of effectiveness (McKinnon 1973). In the last two decades, many countries have moved toward a full reliance on indirect instruments of monetary policy (such as open market operations, standing facilities, reserve requirements). However, the direct instruments of monetary policy continue to be actively used in some developing and transition countries.<sup>26</sup>

Furthermore, in many developing and transition countries, governments use moral suasion to direct lending causing problems for privately-owned financial institutions which hampers their development and weakens their financial soundness. In many South Asian countries, policy-related loans that were made by banks at the "suggestion" of public authorities accounted a significant share of total domestic credit prior to the crisis of 1997. According to Nam (1993), policy loans by banks in South Korea accounted for almost half of domestic credit in the early 1990s (p. 127), despite the fact that many Korean banks had been privatized in the early 1980s.

Where excessive state involvement is not an issue, inadequate regulation of conduct may allow financial institutions to engage in connected (or insider) lending jeopardizing the exposure to credit risk. Loans to related companies are often made without guarantee that the financial institution will rigorously apply sanctions later if it discovers financial problems with the affiliated firms.

## IV. POLICY INSTRUMENTS TO PROMOTE FINANCIAL DEVELOPMENT

This chapter looks at some of the policy instruments that might be used to correct the deficiencies in financial intermediation identified in the previous chapter. It also discusses how financial services could be expanded and made more readily available to all segments of society and particularly to the poor. The discussion will cover the following areas:

<sup>&</sup>lt;sup>25</sup> In many developing and transition countries (e.g., Azerbaijan or Ethiopia), the market share of the biggest commercial bank (which is usually owned by the state) is well above 50 percent of total financial system assets.

<sup>&</sup>lt;sup>26</sup> See Alexander, Balino, and Enoch (1995) for a thorough discussion of advantages and disadvantages of different instruments of monetary policy as well as selected country experiences with adoption of indirect instruments of monetary policy.

- Macroeconomic stability
- The scope for state involvement in financial institutions
- Role of regulation and supervision of financial institutions
- Role of specialized financial institutions
- Improving accounting records
- Promotion of credit scoring models
- Establishment of credit information bureaus
- Strengthening property rights
- Role of microfinance institutions

## A. Macroeconomic Stability

Macroeconomic stability is a necessary condition for financial markets to flourish. Macroeconomic volatility worsens the problems of informational asymmetries and becomes a source of vulnerability to the financial system. <sup>27</sup> Low and predictable rates of inflation are more likely to contribute to financial development, economic growth, and poverty alleviation.

Macroeconomic stability is not, however, the sole condition for successful financial development. During the 1980-90s, many developing and later transition countries have gone through radical macroeconomic reform which have resulted in much lower inflation rates, yet financial markets remain underdeveloped. Measures of credit to the private sector from the banking system indicate that financial markets have yet to respond to the reforms. Large segments of society in these countries including virtually all the poor are effectively excluded from the benefits of a well functioning financial system. The result appears to be low rates of economic growth and the perpetuation of poverty.

## B. The Scope for State Involvement in Financial Institutions

Since the late 1980s, the market share of state-owned financial institutions has been falling in the vast majority of countries throughout the world. The decline in state banking—often at the behest of the IMF and other international financial institutions—has been most spectacular in the former socialist countries, where central planning had previously required total state control over the financial institutions.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> It should be noted that the conduct of macroeconomic policies not only affects but may also be affected by the condition of the financial system. For example, if nonperforming loans represent a significant share of banking assets, the central bank may find it difficult to tighten monetary policy.

Two options can be used to reduce the market share of state-owned financial institutions:

(a) privatization of the existing institutions and (b) entry of the new private institutions. In both cases, foreign financial institutions may play an important role (see Section C of this (continued)

#### Box 4. Savings Facilities for the Poor

The analysis of financial markets as an instrument to alleviate poverty is generally focused on supplying credit facilities. However, research in several countries has shown that credit is only one of the financial services that the poor need. Access to bank accounts or savings facilities is as important. For example, people who extract their income primarily from agriculture must build up assets following harvests to sustain themselves for the rest of the year. In the absence of savings facilities, these assets must be held in the form of cash, with consequent risk of theft, or in kind, which raises transactions costs and subjects savers to other types of risks.

Even the poorest households are eager to save if they can obtain positive real interest rates and there are conveniently located deposit collecting facilities. This point has been confirmed by the experience in Bangladesh, Indonesia, and Mexico. Buckley (1997) goes even further stating that "it is, of course, not credit that levers the poor out of poverty but their ability to save from income generated from the use made of credit" (p. 1085). The clear implication of this statement is that without taking into consideration this side of the "financial intermediation equation", programs that aim at promoting financial services for the poor but stress only the lending side, are likely to be missing opportunities to assist the poor people who may wish to save but do not necessarily wish to borrow.\* Overall, mobilizing savings holds three important advantages for the poor:

- First, it helps build up reserves (protected from the theft and other risks of keeping them in kind) to deal with unanticipated fluctuations in income.\*\*
- Second, it creates an opportunity for re-lending the collected funds into the community.
- Third, it familiarizes low income households with the functioning of the banking system which creates a future potential client pool for borrowing which is important in generating loan demand.

Although the fundamental motives behind this tendency to reduce the scope for state ownership of financial institutions were undoubtedly correct, the expected larger volume of lending from privately-owned financial institutions which would lead to more successful and dynamic financial systems, generally has not materialized. For example, in many countries of the former Soviet Union financial liberalization has not subsequently

chapter). In general, successful privatization is likely to be of critical importance to rapid improvement in overall financial sector efficiency. This is because the newly created private institutions need to establish good reputation in order to compete for clients. The establishment of good reputation may in turn require several years or even decades.

<sup>\*</sup> McKinnon (1991) made the similar point for smaller firms in developing economies when he argued that "in providing real liquidity to these would-be investors who must rely on self-finance, the deposit side of the bank's balance sheet becomes more important than the loan side" (p. 25).

<sup>\*\*</sup> Some MFIs, however, have compulsory savings schemes which may carry heavy restrictions on withdrawals so that they may not be effective buffers against emergencies (e.g., the Grameen Bank in Bangladesh).

resulted in an increase in private credit. One reason for the lack of response was that the state divestiture was not effectively accompanied by the development of the institutional foundations for privately owned financial systems.

Therefore, in cases where the market share of state-owned financial institutions is not likely to be immediately replaced by private financial institutions, there may be some scope for state-owned institutions to continue to provide services during a transitional period. In this case, preconditions for successful operations of the state-owned financial institutions would require to avoid those factors—discussed in Chapter III—that normally impede the performance of these institutions. In particular, loss-making state-owned financial institutions should be subject to bankruptcy reorganization or comprehensive restructuring plans and public authorities should avoid interfering in the corporate governance of the state-owned financial institutions. In particular, financial institutions must be restrained from lending to companies that have the patronage of powerful political figures.

In this regard, it should be noted that performance of state-owned financial institutions is not always worse than that of private institutions. In Germany, for example, the market share of state-owned banks such as the Landesbanken and savings banks, accounts for around one third of total banking assets. These banks operate according to commercial principles and the state has only a limited role in their corporate governance, the German banking system effectively intermediates funds for investment and is considered as one of the most efficient in the world.<sup>29</sup>

## C. Role of Regulation and Supervision of Financial Institutions

Regulation and supervision of the financial system play a central role in determining both its stability and the outreach of provided services. Regulation is the set of rules imposed by the authorities on the actions of participants in financial markets. Supervision is the manner in which the authorities verify and enforce compliance with the requirements of the regulatory framework. Regulation and supervision are typically aimed at the protection of depositors from the potentially opportunistic behavior of the "insiders" (owners or managers) of banks and other financial intermediaries. Because deposit-taking institutions operate with limited equity, they heavily leverage their capital with funds from depositors which are loaned to borrowers. Unless they are constrained by regulation, the "insiders" may not have sufficient incentives to behave prudently and ensure an appropriate risk structure for the assets of the financial institution. Prudential regulation and supervision therefore promote

<sup>&</sup>lt;sup>29</sup> Whether the German banking system represents a model to emulate is open to question, however. Issues of governance discussed above make it unlikely that this success can be repeated in developing countries in the shorter term. Focusing on and removing barriers to financial market development remains the most promising avenue for promoting finance in developing countries.

trust in the financial system among potential depositors. Both processes are necessary conditions for financial deepening.<sup>30</sup>

One can argue that effective financial regulation and supervision in developing and transition countries is even more important than in developed countries because of a greater need to build public confidence in the quality and soundness of financial institutions. In this regard, research in several countries has shown that ensuring access to bank accounts or savings facilities is one of the most important financial services that the poor need (Box 4).

Compliance with regulatory and supervisory requirements is, however, likely to create a variety of constraints for the regulated institutions. The regulatory and supervisory authorities often limit financial institutions with regard to certain types of services and engaging in certain types of transactions. They may also require compliance with other regulations such as fixed hours of opening, specific branch location requirements, and minimum or specific staff qualifications. High regulatory costs may introduce biases against expanding financial services in poorer areas, thereby reducing the potential to promote financial services for the poor.

In the process of setting up a regulatory regime, it is important to ensure that there are not biases against establishing services in poor and rural areas. In particular, regulations governing branch requirements should not prevent banks and other financial institutions from opening facilities in poor areas.<sup>31</sup> In addition, regulations in most countries prohibit mobile banking, in terms of which areas that do not have permanent facilities are visited by "transportable banks" on wheels. Rules on the hours that a branch must be open would prevent mobile banking. The requirement that all transaction positions be closed every day could preclude these types of financial services, although technological advances using wireless communications should make this constraint much less binding in the future. Such rules are an example of the type of regulation that can discourage access to financial services by the poor. Finally, unless the regulators have the power to sanction or even close institutions that are not in compliance, little benefit is to be gained from regulation.

<sup>&</sup>lt;sup>30</sup> However, the extent to which different institutions should be regulated is not well established—a robust conceptual framework for prudential regulation and supervision within the context of promoting economic development and financial services to the poor is still evolving.

Mexico provides an example of such constraints imposed on financial institutions: there is a rule governing the size and weight of the safe that Mexican banks must maintain in every branch. While this rule may seem arcane and trivial, the expense that is required to install such an edifice is a significant disincentive to banks to open branches in poorer areas.

#### D. Role of Specialized Financial Institutions

Comparing the financial systems in developing or transition countries with those in developed countries, it is apparent that a broad array of the specialized financial institutions does not exist (see Box 5). In industrial countries, lending of non-bank financial intermediaries to the private sector often amounts to over 50 percent of GDP. In most developing and transition countries, however, this ratio generally is the equivalent of less than one percent of GDP. Equity markets are embryonic or non-existent in most developing countries. Furthermore, commercial banks that predominate in the financial sectors of most developing and transition economies tend to lend only to large, well-established firms.

However, specialized financial institutions may significantly contribute to financial development, economic growth, and poverty alleviation. By knowing the industry that it is financing, the specialized financial institution can better assess financial and investment plans. In addition, in the event of a bankruptcy, such an institution will be in a better position to dispose of the assets of the bankrupt business. Another important advantage of these institutions (especially leasing companies) consists in their limited reliance on clients' credit history, assets or capital base, or accounting records. This helps the vast majority of small and medium size enterprises in developing and transition countries, which do not have historical financial statements.

In order to better support the expansion of small and medium size enterprises, developing and transition countries should remove impediments and establish the necessary framework for specialized financial institutions to operate. Some economies might be too small or too poor for such specialized services to be offered by independent entities. In that case, these types of services could be offered by existing financial institutions—in many developed countries, commercial banks offer them in competition with specialized intermediaries.

## **E.** Improving Accounting Records

Accounting records need to be improved in many developing and transition countries. Accurate accounting records provide an indicator of company performance for its investors, owners, and partners. In many developing and transition countries, standards of auditing and accounting are low, and there are few trained accountants. Virtually all micro enterprises and most small companies in these countries have poor or nonexistent accounting records. Technical assistance programs to improve performance are underway in some countries but progress is slow. Furthermore, if financial institutions do not lend to businesses, and/or if taxes are predatory, incentives to improve financial record keeping are weakened.

<sup>&</sup>lt;sup>32</sup> In this regard, Figure 2 should be interpreted cautiously: it shows only those low and middle income countries on which the data are available.

#### Box 5. Specialized Financial Institutions

In industrialized countries, besides commercial banks which undertake general lending, there are large numbers of specialized financial institutions that focus on lending of particular types, often to specific industries. A few examples of these are:

- Factoring companies, which lend against trade receivables and which frequently undertake the task of debt collecting for companies using their services. The receivables themselves provide the security for the loan—in the event of the company defaulting, ownership of the receivables pass to the factor.
- Leasing companies, which lend for the purchase of capital equipment, allowing the lessee to take delivery of equipment which effectively serves as the collateral for the leasing contract.
- Trade credit suppliers, which finance purchases of raw materials and which use raw material inventories as collateral.
- Mortgage finance companies, which specialize in financing mortgages.

The specialized financial institutions play a vital role in allowing businesses to grow because most businesses, however successful, do not generate sufficient retained earnings to finance their growth. Indeed, it is the most successful and rapidly growing businesses that usually require the most financing. Specialized financial institutions are common in developed economies, especially the United States. In New York City, for example, there are financial institutions which only finance taxi cab operations and dry cleaning establishments. In most developing countries there are no leasing or trade credit entities. The financial and judicial framework necessary for them to operate does not exist.

#### F. Promotion of Credit Scoring Models

Poor accounting records prevent banks and other financial institutions from using traditional methods to assess the creditworthiness of potential borrowers. Any evaluation is further complicated by the fact that the well-being of many rural microenterprises is indistinguishable from that of the head of the household that provides the foundation of the enterprise. As a result production and household consumption decisions are often jointly determined. Therefore other factors such as local information regarding work habits, family expenditure, and spending patterns are probably more relevant in assessing the likelihood of loan repayment<sup>33</sup>.

To evaluate the likelihood of repayment, some uncomplicated credit scoring models based on the available information on potential borrowers can be used. There is some

<sup>&</sup>lt;sup>33</sup> Some microfinance practitioners distinguish between "consumer credit" and "genuine microfinance". However, the fungibility of money and the close connection between the business and the family make this distinction meaningless.

evidence—albeit still limited—that these models can work effectively in developing and transition countries. As an example, Chaves and Sanchez (1999) discuss the case of Mexico, where in some areas, a large quantity of data is available from household surveys. Using these data a statistical model was developed which derived weights for over 40 variables which were found to be important in predicting the likelihood that loans would be repaid. The availability of the survey data allowed the implementation of credit scoring. Although for political reasons the program was terminated before it came fully to fruition, preliminary results regarding the efficacy of the model and its ability to predict repayment rates were highly encouraging.

These credit scoring models may be successfully applied by both formal and informal financial institutions. In particular, they may be applied by the microfinance institutions which may be better positioned for this purpose (see below).

#### G. Establishment of Credit Information Bureaus

As regards larger companies with adequate accounting records, the establishment of a credit information bureaus (or credit registries) could help overcome a major obstacle to the development of efficient financial markets (Bredenkamp 1993). The credit information bureau—which can be public or private—represents a centralized database that includes financial information on enterprises (audited balance sheets, current profit-and-loss statements, business plans, and other borrower data such as court records, utility payments, employment status, etc.). It may also include the cultural context for credit reporting, including the importance accorded to "reputation collateral".

In many developing and transition countries, credit information bureaus are increasingly being used as a basis for loan decisions by financial institutions. A recent survey of credit reporting systems (Miller 2000) indicated that there has been a sharp growth in both public and private registries over the past decade, with transitional and former Soviet Union economies leading in the number of new registries being established. The paper also reports that 17 countries in Latin America and the Caribbean have credit reporting systems. A further interesting point is that countries that have legal systems based on the Napoleonic Code are more likely to have public registries.

Recent studies confirm that the establishment of credit information bureau is beneficial for the efficient development of financial intermediation. Galindo and Miller (2001) analyze the relationship between the existence of credit registries and financial development. They find that well performing credit registries substantially improve the availability of credit to firms: "[credit registries] account for significant reductions in the sensitivity of a firm's investment decisions to availability of cash flows" (p. 14). Credit bureaus are a relatively recent phenomenon, and the results of the research cited above are therefore tentative, albeit encouraging. The implications of this work are that credit information bureaus can go some way towards reducing financial constraints resulting from underdeveloped financial markets. If these results are supported by additional analysis, they imply that investment could be financed with credit in a greater proportion than would be

possible without these types of institutions. Galindo and Miller also conclude that if the data quality in Latin America were improved to United States standards, firms would enjoy significant additional improvements in access to credit.

While credit registries can promote lending to newer firms that have not built reputations over an extended period, they are an imperfect substitute for better developed systems of collateral. Rather, credit reporting systems should be seen as complementary to improved systems of collateral.

## H. Strengthening Property Rights

Property rights represent all the relevant information about any asset for which registered title exists, or for which ownership can be legally established. Not only are well-defined property rights the foundation of wealth creation, but they are also the basis for loans and advances issued by financial institutions. In developed countries, effective and secure property rights are the basis for a large proportion of the lending that occurs. In particular, they are frequently used by small business owners to get financing for startups or business expansion.

Property rights are an effective mechanism for reducing adverse selection and moral hazard problems, allowing the development of financial markets. This has been highlighted by the recent study of Hernando de Soto (2000). He notes that "the United States, Canada, Japan, and Europe—the 25 developed nations of the world—have prospered so much more than those without their kind of accessible, integrated formal property systems that today no one would seriously propose economic solutions that disregarded the need for formal property" (p. 165).

In most developing countries, rights for both fixed property (real estate) and movable property (machinery, inventory, accounts receivable, etc.) are very poorly protected. As a result, either they are worthless as collateral or securing them is so expensive and risky that their usefulness is virtually non existent to many borrowers. Lending secured by movable property is rare and fixed property mortgage markets are inefficient and expensive which hinders financial market development.

De Soto has pointed out that there is enormous untapped wealth in the properties of the poor which is going to waste because of ineffective property rights. "Capital ... is created by people whose property systems help them to cooperate ... to deploy additional production. The substantial increase of capital in the west over the past two centuries is the consequence of gradually improving property systems". 34

<sup>&</sup>lt;sup>34</sup> De Soto (2000), pp. 64-65.

Titling and registering the property of the poor may therefore result in very large wealth effects and substantial financial market development. This claim is strengthened by a number of case studies discussing the experience with formal property registration. For example, Holden (2000) discusses the case of Peru, where secure registered titles for the dwellings of the poor in the outskirts of Lima (national capital) have been provided using revolutionary low cost titling and registration techniques. While the initial value of slum dwelling was low, it still represented an important asset owned by poor families. When a house was titled and registered its value doubled, providing a huge relative increase in net worth.<sup>35</sup>

An effective system of property rights (both for fixed and movable property) requires a stable system of contracting, institutions such as registries to record ownership and security interests, a court system that can adjudicate contracts, and a system for reliably enforcing court decisions. The presence of these institutions and instruments allows for clearly identifiable ownership, the ability to pledge effectively assets as security for loans, and the ability to repossess security in the event of a default. Although some of these institutions are in place in most developing countries, various deficiencies make them inadequate for flourishing financial sectors. Few developing countries have implemented comprehensive reform of fixed property titling and registration systems.

#### I. Role of Microfinance Institutions

Since the late 1980s, the number of microfinance institutions (MFIs) has grown rapidly in many developing countries.<sup>36</sup> This was partly a response to the state withdrawal from the provision of financial services to the poor in the form of state-owned specialized financial institutions and subsidized credit to poor farmers.

There is a number of reasons why MFIs are likely to bring benefits to the poor. MFIs enjoy better local knowledge and proximity, which is an important advantage because the majority of poor households live in vast rural areas that are underserved by the commercial banks. MFIs circumvent the distance and provide easier access to financial services to the rural poor. Furthermore, the semi-formal and informal MFIs complement the formal financial system by providing financial services to those who are excluded from the formal economic activity and have limited access to the formal financial system. As a result, there is an increasing number of well-documented success stories in setting up MFIs.

<sup>&</sup>lt;sup>35</sup> Another example, discussed by Byamugisha (1999), is an ongoing reform program in Thailand, which had begun in 1960 and resulted in a large portion of private property holdings being titled and registered which resulted in higher rates of economic growth.

<sup>&</sup>lt;sup>36</sup> MFIs can be defined as formal, semi-formal, or informal providers of financial services to low-income clients, including the self-employed. Financial services generally are restricted to lending although some MFIs also provide savings, insurance and payment services.

However, the widespread advocacy of microfinance as an instrument of poverty alleviation should be treated with caution. The quality of the loan portfolio of MFIs is often poor because of inadequate management and deficiencies in control of their activities. As a result, a large number of these institutions never reach the efficiency necessary to cover costs and thus can only survive by getting more subsidies from their donors. At the same time, as lending rates charged by MFIs are usually very high, credit worthy poor are totally disadvantaged by participating in a pooling equilibrium in which there are so many poor quality credits. The linkages between MFIs and commercial banks or other formal financial institutions are often weak. Moreover, in virtually no countries where microfinance is widely available is there an upward path out of informality into the formal sector. Successful entrepreneurs whose businesses outgrow the capability of MFIs to finance them are rarely able to find financing at more conventional financial institutions. Also, replication of successful MFI models has often proved impossible due to differences in demographic or cultural contexts. Finally, there are still no countries with a comprehensive network of microfinance institutions.

#### V. IMPLICATIONS FOR IMF OPERATIONS

The traditional objective of the IMF's policy advice is to help its member countries pursue sound macroeconomic policies aimed at sustained economic growth. Whenever a country faces macroeconomic imbalances, the IMF's policy advice aims at restoring macroeconomic stability thereby paving the way to economic growth and poverty alleviation. Also important, a sustainable macroeconomic framework has direct beneficial effects for the poverty reduction.

Since the late 1980s, the scope of IMF work has been broadened gradually from focusing primarily on macroeconomic policies to include structural aspects related to

<sup>&</sup>lt;sup>37</sup> There are, however, some reasons to believe that MFIs are likely to under-report their profits. Not only this may reflect the agency problem discussed above but also the fact that many MFIs exist in high tax countries and have no incentives to pay taxes. Therefore, the reported profitability data of MFIs should be treated cautiously.

<sup>&</sup>lt;sup>38</sup> This represents a forced social subsidy of sorts.

<sup>&</sup>lt;sup>39</sup> There are three channels through which the IMF provides policy advice to its member countries. First, the IMF provides policy advice in the context of its "surveillance" of the economic policies of its member countries, which is carried out mainly through the regular Article IV consultation discussions with all member countries. Second, the IMF provides policy advice in the context of its financial support for the adjustment programs. Third, the policy advice is provided in the context of technical assistance.

the incidence of poverty. 40 From this broader perspective, the major element of the IMF's policy advice to its member countries is now on how to facilitate "high-quality growth" (Camdessus 1990), which is accompanied by policies that attempt to reduce poverty and improve the equality of opportunity.

As financial market development is a precondition of "high-quality growth" and poverty alleviation, the systematic identification of the barriers to financial sector development has naturally become an important element of the IMF operations. This has called for much closer cooperation with the World Bank. In 1999, the IMF and the World Bank jointly launched the Financial Sector Assessment Program (FSAP), which aims at providing information on the strengths and vulnerabilities of the financial systems in the context of the IMF's surveillance activities of its member countries. <sup>41</sup> The FSAP consists of three major components: (a) assessment of stability of the financial system, (b) assessment of the extent to which relevant financial sector standards, codes, and good practices are observed, and (c) assessment of the financial system' reform and development needs (for more details, see Hilbers 2001).

From a developmental perspective, the FSAP represents a detailed assessment of the institutional strengths and shortcomings of financial systems, including the identification of barriers to providing financial services to the poor. While the expanding conditionality in the structural areas in the IMF-supported programs is to be avoided, <sup>42</sup> providing information on the institutional and systemic shortcomings of the financial systems of member countries is therefore an important instrument, which may stimulate economic development in general and help alleviate the poverty in particular. In this regard, the developing and transition countries can be expected to obtain substantial benefit from the FSAP if the recommendations that they contain can be translated into policy actions which result in further development of their financial markets.

<sup>&</sup>lt;sup>40</sup> In 1986-87, the IMF created two concessional lending facilities that emphasized structural reforms set in a medium-term context: the structural adjustment facility (SAF) and the enhanced structural adjustment facility (ESAF). In 1993, the latter facility was extended and enlarged. In 1999, it was replaced by the poverty reduction and growth facility (PRGF) whose cornerstone is a nationally owned and comprehensive Poverty Reduction Strategy Paper (for details, see Gupta *et al.* 2000).

<sup>&</sup>lt;sup>41</sup> The recommendations of the FSAP missions are discussed with the authorities in the context of the Article IV consultation discussions.

<sup>&</sup>lt;sup>42</sup> The extent and focus of conditionality attached to the use of IMF resources is currently subject to heated debate. There is, however, a broad agreement that the focus of conditionality should be sharpened while the country ownership of the IMF-supported programs should be enhanced.

In addition to the broad-based assessment of financial system performance and developmental needs in the context of FSAP, the IMF also provides policy advice to its member countries in the context of its technical assistance. In particular, the Monetary and Exchange Affairs Department of the IMF delivers and administers technical assistance on issues related to central banking, monetary and exchange policies and instruments, prudential regulation and supervision of financial institutions, etc. (for more details, see Mehran et al. 1998). Although the focus of technical assistance activities is generally not as broad-based as in the case of an FSAP, their ultimate objective also consists in providing guidance on how to promote sound and efficient financial system, which facilitates economic growth and helps alleviate poverty.

#### VI. CONCLUSION

The primary conclusion of this paper is that financial development promotes economic growth, thereby contributing to poverty alleviation. Not only financial development fosters economic growth and creates employment opportunities for the poor, but the availability of accessible formal or informal financial services for poor households is also an important precondition for poverty alleviation.

Macroeconomic stability is one of the necessary conditions for efficient financial development and poverty reduction. Macroeconomic volatility reduces the demand for money and complicates credit assessment. High and unpredictable inflation also contributes directly to higher poverty rates because the poor have limited ability to hedge and bear a disproportionately large share of the negative effects of inflation. In this regard, the recent period of price stability that now prevails in many developing and transition countries has undoubtedly contributed to reducing the impact of macroeconomic upheaval on the poor.

However, sound macroeconomic policies have only limited capacity to alleviate poverty directly. Although the progress made in reducing macroeconomic instability should not be underestimated, macroeconomic policies are not the only condition of an effective financial development and poverty alleviation. These policies should rather be directed at promoting growth through prudent implementation of macroeconomic goals, and eschewing direct interventions in financial markets.

The paper identified the need to promote sound institutions and instruments of financial policies as another necessary condition of successful financial development. The efficient functioning of these institutions and instruments has been shown to have the potential to alleviate poverty. Yet the possible beneficial effects of financial markets that effectively intermediate funds are being constrained by the institutional underdevelopment that exists in many developing and transitional countries. In spite of the restoration of macroeconomic stability, the institutional failure inhibits the capacity of financial sectors, especially regarding the provision of services to the poor, and hampers economic growth.

The paper discussed the causes of institutional failure and the policy instruments that might be used to promote financial services. It identified weak institutions, particularly

those concerned with property rights, as one of the prime causes of financial underdevelopment. It argued that the potential to stimulate lending facilities could arise primarily from the reform of property rights and the promotion of credit information and scoring schemes. Furthermore, the paper argued that the promotion of deposit taking institutions that allow poor people to open savings accounts is also an important factor of poverty alleviation. It pointed out that the belief that the poor are too poor to save has not been borne out by experience. In this regard, the paper highlighted the need to ensure effective regulation and supervision, which could help build public confidence in the quality and soundness of financial institutions. The implementation of even some of these steps is likely to make financial services a more powerful instrument to alleviate poverty in many developing and transition countries.

The role of microfinance institutions was also discussed. It was argued that MFIs do have an important role to play in poverty alleviation. However, these institutions should not be regarded as a panacea nor as an end in themselves. The provision of microfinance services can only be effective in reducing poverty if it enhances the ability of the poor to generate sustainably higher income and to save for the future.

Finally, the paper discussed the implications of the analysis for IMF operations. It highlighted the important role of the IMF's policy advice to its member countries in the promotion of strong and sound financial markets. As the conditionality of the programs supported by the IMF resources is only as effective as the political will of the authorities implementing it, the provision of this policy advice in the context of the IMF's surveillance activities (FSAP) and technical assistance activities has substantial potential to enhance financial development and contribute to poverty alleviation.

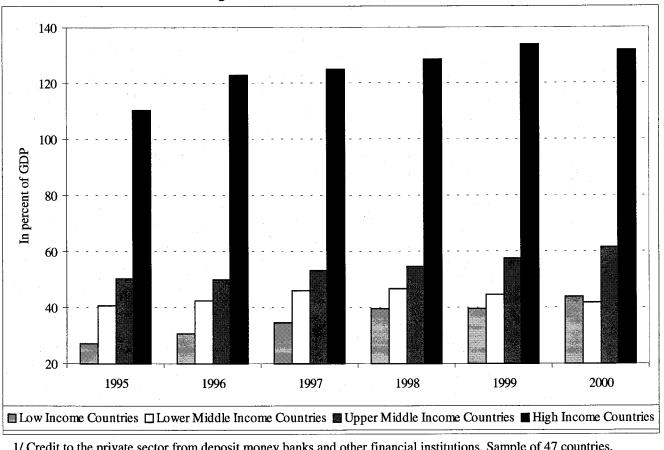


Figure 1. Credit to the Private Sector 1/

1/ Credit to the private sector from deposit money banks and other financial institutions. Sample of 47 countries. High income countries are defined as countries where GDP per capita in 1999 was higher than US\$10,000; Upper middle income countries are defined as countries where GDP per capita in 1999 was between US\$3,000 and US\$10,000 Lower middle income countries are defined as countries where GDP per capita in 1999 was between US\$1,00 and US\$3,000; Low income countries are defined as countries where GDP per capita in 1999 was lower than US\$1,000.

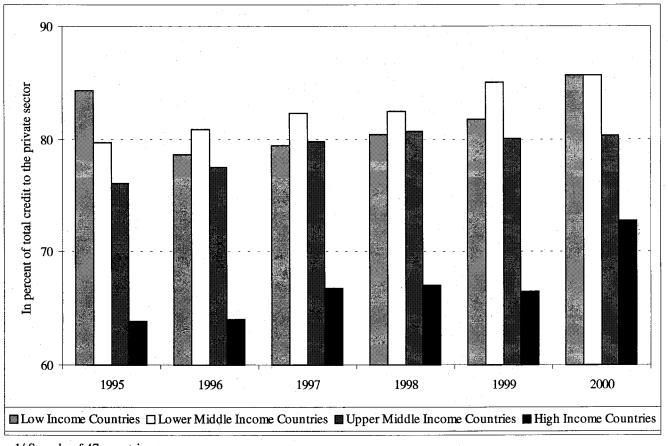


Figure 2. Credit to the Private Sector from Deposit Money Banks 1/

1/ Sample of 47 countries.

High income countries are defined as countries where GDP per capita in 1999 was higher than US\$10,000; Upper middle income countries are defined as countries where GDP per capita in 1999 was between US\$3,000 and US\$10,000 Lower middle income countries are defined as countries where GDP per capita in 1999 was between US\$1,00 and US\$3,000; Low income countries are defined as countries where GDP per capita in 1999 was lower than US\$1,000.

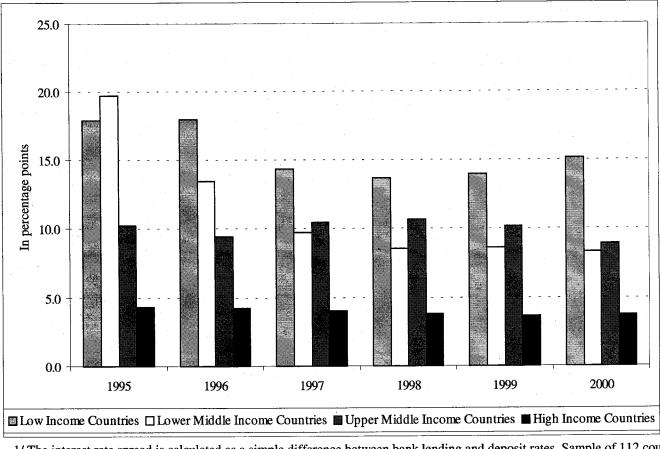


Figure 3a. Interest Rate Spread 1/

1/ The interest rate spread is calculated as a simple difference between bank lending and deposit rates. Sample of 112 countries High income countries are defined as countries where GDP per capita in 1999 was higher than US\$10,000; Upper middle income countries are defined as countries where GDP per capita in 1999 was between US\$3,000 and US\$10,000 Lower middle income countries are defined as countries where GDP per capita in 1999 was between US\$1,00 and US\$3,000; Low income countries are defined as countries where GDP per capita in 1999 was lower than US\$1,000.

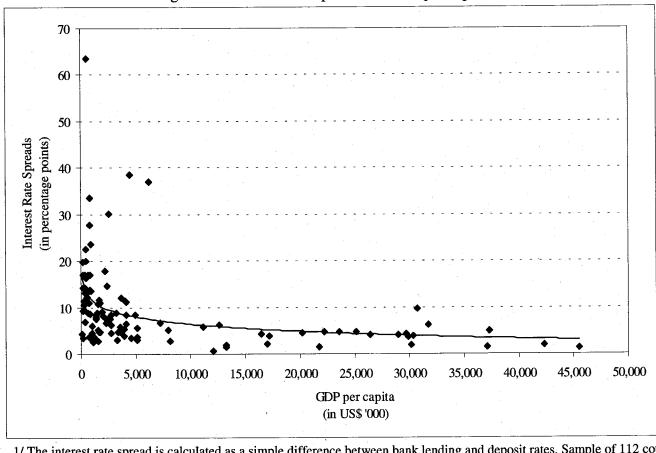


Figure 3b. Interest Rate Spread and GDP per capita 1/

1/ The interest rate spread is calculated as a simple difference between bank lending and deposit rates. Sample of 112 countries. Data as of end-2000.

#### REFERENCES

- Akerlof, George, 1970, "The Market for Lemons: Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, Vol. 84 (August), pp. 488-500.
- Alexander, William, Tomas Balino, and Charles Enoch, 1995, *The Adoption of Indirect Instruments of Monetary Policy*, IMF Occasional Paper, No. 126 (Washington, DC: International Monetary Fund).
- Bagehot, Walter, 1873, Lombard Street, Richard D. Irwin, Homewood, IL (1962 Edition).
- Bernanke, Ben, 1983, "Non-monetary Effects of the Financial Crisis in the Propagation of the Great Depression", *The American Economic Review*, Vol. 73 (June), pp. 257-76.
- Bernanke, Ben, 1993, "Credit in Macroeconomy", Federal Reserve Bank of New York Quarterly Review (Spring), pp. 50-70.
- Bredenkamp, Hugh, 1993, "Conducting Monetary and Credit Policy in Countries of the Former Soviet Union: Some Issues and Options", IMF Working Paper 93/23 (Washington, DC: International Monetary Fund, March).
- Buckley, Graeme, 1997, "Microfinance in Africa: Is it Either the Problem or the Solution?" *World Development*, Vol. 25, No. 7 pp. 1081-93.
- Bulir, Ales, and Anne-Marie Gulde, 1995, "Inflation and Income Distribution: Further Evidence on Empirical Links", IMF Working Paper 95/86 (Washington, DC: International Monetary Fund, August).
- Byamugisha, Frank F. K., 1999, How Land Registration Affects Financial Development and Economic Growth in Thailand, World Bank Policy Research Working Paper 2241 (Washington, DC: The International Bank for Reconstruction and Development).
- Camdessus, Michel, 1990, "Aiming for 'High Quality Growth'", Finance and Development, Vol. 27, No. 3 (September).
- Cardoso, Eliana, 1992, "Inflation and Poverty", *NBER Working Paper Series*, No. 4006, (March).
- Chaves, Rodrigo and Susana M. Sanchez, 1999, "Poverty, Entrepreneurs, and Financial Markets in the Rural Areas of Mexico", in Valdés, Alberto and Ramon Lopez, *Rural Poverty in Latin America* (Washington, DC: The International Bank for Reconstruction and Development).

- Deininger, Klaus, and Lyn Squire, 1996, "A New Data Set Measuring Income Inequality", The World Bank Economic Review, Vol. 10, No. 3, pp. 565-91.
- De Soto, Hernando, 2000, The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else, (New York, NY: Basic Books).
- Diamond, David, 1984, "Financial Intermediation and Delegated Monitoring", *Review of Economic Studies*, Vol. 51, No. 3 (July), pp. 393-414.
- Dollar, David, and Aart Kraay, 2001, *Growth Is Good for the Poor*, World Bank Policy Research Working Paper 2587 (Washington, DC: The International Bank for Reconstruction and Development).
- Fama, Eugene, 1985, "What's Different About Banks?", *Journal of Monetary Economics*, Vol. 15, pp. 29-39.
- Galindo, Arturo and Margaret Miller, 2001, "Can Credit Registries Reduce Credit Constraints? Empirical Evidence on the Role of Credit Registries in Firm Investment Decisions" (Washington, DC: The InterAmerican Development Bank).
- Gertler, Mark, 1988, "Financial Structure and Aggregate Economic Activity: An Overview", Journal of Money, Credit, and Banking, Vol. 20, No. 3, Part 2 (August), pp. 559-88.
- Goldsmith, Raymond, 1969, Financial Structure and Development, (New Haven, CT: Yale University Press).
- Goldstein, Morris, and Philip Turner, 1996, "Banking Crises in Emerging Economies: Origins and Policy Options", *BIS Economic Papers*, No. 46 (Basel: Bank for International Settlements, October).
- Gupta, Sanjeev, et al., 2000, Social Issues in IMF-Supported Programs, IMF Occasional Paper, No. 191 (Washington, DC: International Monetary Fund).
- Gurley, John G. and Edward S. Shaw, 1955, "Financial Aspects of Economic Development", *The American Economic Review*, Vol. 45, No. 4 (September), pp. 515-38.
- Hilbers, Paul, 2001, "The IMF/World Bank Financial Sector Assessment Program", *Economic Perspectives* (February).
- Holden, Paul, 2000, Credit and Poverty: Institutional Reforms To Make Financial Markets Work (Washington, DC: The Inter-American Development Bank).
- King, Robert and Ross Levine, 1993, "Finance and Growth: Schumpeter Might Be Right," *Quarterly Journal Of Economics*, Vol. 108, No. 3, pp. 717-37.

- Khan, Aubhik, 2000, "The Finance and Growth Nexus", Business Review Federal Reserve Bank of Philadelphia (January/February), pp. 3-14.
- Kuznets, Simon, 1955, "Economic Growth and Income Inequality", *The American Economic Review*, Vol. 45, No. 1 (March), pp. 1-28.
- LaPorta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1997, "Legal Determinants of External Finance", *Journal of Finance*, Vol. 52, pp. 1131-50.
- Ledgerwood, Joanna, 1998, *Microfinance Handbook: An Institutional and Financial Perspective* (Washington, DC: The International Bank for Reconstruction and Development).
- Levine, Ross, 1997, "Financial Development and Economic Growth: Views and Agenda," *Journal Of Economic Literature*, Vol. 35, pp. 688-726.
- Li, Hongyi, Lyn Squire, and Heng-fu Zou, 1998, "Explaining International and Intertemporal Variations in Income Inequality", *The Economic Journal*, Vol. 108 (January), pp. 26-43.
- Lindert, Peter H. and Jeffrey G. Williamson, 1985, "Growth, Equality, and History", *Explorations in Economic History*, Vol. 22, pp. 341-77.
- Lucas, Robert E. Jr., 1988, "On the Mechanics of Economic Development", *Journal of Monetary Economics*, Vol. 22, pp. 3-42.
- Matin, Imran, David Hulme, and Stuart Rutherford, 1999, "Financial Services for the Poor and Poorest: Deepening Understanding to Improve Provision", Finance and Development Research Program Working Paper Series, No. 9 (October).
- McKinnon, Ronald I., 1973, Money and Capital in Economic Development (Washington, DC: The Brookings Institution).
- McKinnon, Ronald I., 1993, The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy (Baltimore, MD: Johns Hopkins University Press).
- Mehran, Hassanali, et al., 1998, Financial Sector Development in Sub-Saharan African Countries, IMF Occasional Paper, No. 169 (Washington, DC: International Monetary Fund).
- Miller, Margaret, 2000, "Credit Reporting Systems Around The Globe: The State of the Art in Public and Private Credit Registries" (Washington, DC: The International Bank for Reconstruction and Development).

- Morduch, Jonathan, 1999, "The Microfinance Promise", *Journal of Economic Literature*, Vol. 37, No. 4, pp. 1569-614.
- Nam, Sang-woo, 1993, "Liberalization of Korean Financial Market", in *Monetary and Financial Policy Reforms: European Experiences and Alternatives for Korea: Papers and Discussions from a Joint KDI/FES Conference*, edited by Sung-hee Jwa, with the assistance of Yoon-suh Kim, pp. 93-147.
- Rajan, Raghuram G. and Luigi Zingales, 1998, "Financial Dependence and Growth", *The American Economic Review*, Vol. 88, No. 3, June, pp. 559-86.
- Robinson, Joan, 1952, "The Generalization of the General Theory", in *The Rate Of Interest, and Other Essays* (London: Macmillan), pp. 67-142.
- Sarel, Michael, 1997, "How Macroeconomic Factors Affect Income Distribution: The Cross-Country Evidence", IMF Working Paper 97/152 (Washington, DC: International Monetary Fund, November).
- Stiglitz, Joseph E. and Andrew Weiss, 1981, "Credit Rationing in Markets with Imperfect Information", *The American Economic Review*, Vol. 71, No. 3, (June), pp. 393-410.
- Tanzi, Vito, 1998, "Fundamental Determinants of Inequality and the Role of Government", IMF Working Paper 98/178 (Washington, DC: International Monetary Fund, December).
- World Bank, 2001, *World Development Report* (Washington, DC: The International Bank for Reconstruction and Development).