Financial Intermediation and Policy-Based Lending:

Policy Recommendations for Latin America and the Caribbean

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CHAPTER 10

Financial Intermediation and Policy-Based Lending: Policy Recommendations for Latin America and the Caribbean

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This chapter discusses the conditions under which policy-based lending may further economic development within a Latin American and Caribbean context, given the current state of financial markets in most countries of the region. The discussion is intended as a conclusion to the articles presented at the *Conference on Policy Based Finance and Alternatives for Financial Market Development,* many of which are included in this book. It nevertheless reflects more the opinion of its authors than a consensus. The Conference itself did not attempt to reach such a consensus and at its conclusion many of the participants continued to maintain divergent positions with regards to several of the key issues. In some degree, this chapter is an attempt at a compromise; a position that does not recommend a formal adoption of policy based finance as it exists in East Asia, but rather proposes the incorporation of the universal lessons from the East Asian experience into the more market-based reforms currently under way in Latin America and the Caribbean. While the discussion in most of this book is centered on credit programs, the conclusions are equally valid for other varieties of government interventions in financial markets.

Why Is Policy-Based Lending an Issue?

Many students of development, particularly economists, conclude that any intervention by government in the allocation of financial resources, whether in the form of loans, guarantees or interest rate subsidies (via policy-based lending or more strictly, directed credit programs) will result in a reduction of overall economic welfare. The commonly accepted view, since the time of McKinnon (1973), is that credit decisions are best left to properly functioning markets. Markets are presumed to provide the incentives necessary to encourage individual investors and financial intermediaries to process all available information (which is generally assumed to be freely available) and make the appropriate allocation and pricing decision based purely on the market's subjective distribution of the risk-return tradeoff associated

with myriad investment opportunities. At the limit, all aspects of economic well being, including tradeoffs between the purely rational financial goals and the need to protect societal well-being, can be subsumed into the pricing decision.

Notwithstanding this consensus, empirical evidence indicates that financial markets, especially those of developing countries, do not always conform to this ideal. There is evidence of both market failure and government failure which prevent markets from operating properly. Information is not widely available and available information cannot be processed without the expenditure of significant resources. Barriers to the development and operation of financial markets include legal and judicial environments that do not always provide adequate protection of property values, a concentration of economic power, and incomplete regulatory environments, all of which increase risk and financial costs. In addition, markets do not consider nonfinancial goals or social costs. When one adds the role of significant positive externalities that arise from the existence of properly functioning financial markets, some, albeit limited, role for the government can easily be justified. The question before us then, is how such interventions can best be structured.

The success, controversial as it may be, of policy-based lending in some countries of East Asia, and the recognition of their potential effectiveness by some economists (Stiglitz, 1993; Calomiris and Himmelberg, 1993) have prompted a reexamination of the role of government intervention in the development community. Several East Asian governments have actively pursued interventionist policies that have been credited with the creation of a strong industrial and commercial sector (World Bank, 1993). Detailed discussions of the experiences of Japan and Korea with policy-based finance are included in this book (Shibata, 1997; Cho, 1997). Nevertheless, it is clear that the credit policies of the governments were only part of a financial environment that allowed for and supported economic growth. Thus, the lessons of East Asia for Latin America and the Caribbean are multiple. These lessons must include the importance of macroeconomic stability, the need for consistency among government policies, the role of market-like structures in achieving quasi-market outcomes, the need for independence and professionalism in government credit agencies, and the vital necessity of creating a credit culture including an emphasis on independent project appraisal, monitoring, and collection as part of any government intervention (Vittas, 1997).

The relatively mild interventions in East Asian credit markets, when compared with the massive and unsuccessful interventions in Latin America and the Caribbean (Montenegro, 1997) point towards limited, carefully targeted interventions. The East Asian success stories provide ample evidence of the validity of these underlying lessons. Moreover, the contrast with the Latin American and Caribbean experience highlights the fact that financial markets are imperfect, but that while some kind of government intervention may result in an improved allocation of

scarce resources, this does not necessarily imply that such an intervention will result in a positive reallocation.

It must also be recognized that the more successful interventions have not been without cost. As pointed out by several authors (Cho, 1997; Santomero, 1997; Vittas, 1997; World Bank, 1993), the relative success in many of the East Asian economies was achieved at the expense of slower development of more complete financial markets. Severe financial repression has left the financial systems, especially in Korea but to a lesser extent in Japan, in a relative state of underdevelopment, both with respect to the rest of the developed world and the needs of their own economies. It is not yet possible to judge whether the benefits justify the costs. Would Japan have achieved its current development if it had resorted to market measures in credit allocation and promoted the market development of financial institutions? Without the financial repression associated with policy-based finance, would Korea today be facing the severe problems associated with economic concentration and an underdeveloped financial system? We do not have conclusive answers to these questions, but hope that a discussion of the issues will aid the countries of Latin America and the Caribbean in their development efforts.

All interventions by governments in economic activity are associated with a set of costs and benefits; their relative size will always be a matter of discussion. Some costs and some benefits are impossible to measure, both *ex ante* and *ex post,* and even when they can be measured, there will not be consensus regarding the proper comparison methodology. Politicians will tend to have a very short-term view, and in general, may conclude that the benefits (normally achieved over the short run) outweigh the costs (normally felt over the long run). In their implicit cost-benefit analysis, they effectively use a high discount rate. Theoretical economists, on the other hand, may underestimate the presence of market imperfections, externalities and information asymmetries and tend towards a lower discount rate. The former will tend to overemphasize the fact that whatever benefits are achieved in the short run may have a multiplier effect on economic development that will, in turn, allow for a better absorption of the costs over the long run, while the latter may not provide adequate consideration for any potential multiplier. This may particularly be the case for economists who are accustomed to the developed, information rich, and well-functioning financial markets of the United States or Western Europe.

Given that it is almost impossible to measure and compare all costs and benefits of policy-based lending, the effectiveness of these interventions will always be an issue and the conclusion reached by a given proponent or detractor will always be influenced by the assumptions made, the eloquence in expounding the issues, the issues selected and ignored, and the conditions under which the program is expected

to work or did work, among others. *The effectiveness and desirability of policy-based lending will remain a controversial subject.*

Is There a Role for Government Intervention in the Allocation of Credit?

Given the evidence presented in of this book regarding the experiences of Japan and Korea with policy-based finance, along with the history of other countries in using financial programs to support specific sectors (housing, agriculture, technology development, student loans, small and medium enterprises in the United States; and enterprise development, agriculture and regional development in Europe), it is reasonable to conclude that, under certain conditions and at some point in the development history of a country, policy-based lending or other forms of intervention in the allocation of credit will have a role to play in bringing credit to segments of economic activity which are desirable from an economic and social point of view, but that the market cannot or will not supply. It is unlikely that governments will stop intervening altogether in financial markets (Corrigan, 1996). Efforts must, therefore, be aimed at limiting these interventions to where they have the greatest positive impact and structuring the programs so that distortions and misallocation of resources can be minimized.

Economists often claim that markets are the most efficient tools for the allocation of credit. To understand this claim, we must understand what is meant by market efficiency. Efficiency is a relative concept and will depend on the criteria used to define it. Markets seek to allocate resources that comply with a very strict efficiency criteria, the *maximization* of *financial returns for a given level of risk*[1] based on available information. Furthermore, each agent in the market will make the allocation decision based on the marginal impact of the investment on the investor's own position or portfolio. An investment whose financial return depends solely on the exploitation of a tax loophole may be quite attractive for those able to capture it, even if it does not produce any goods that society needs. Such an investment will probably find financing in the market (subject to the perception of the risk in the elimination of the loophole). Conversely, there are many investments that provide large societal benefits which private markets are unlikely to provide, if these benefits cannot be captured by a specific investor. Investments, such as lending facilities for microenterprises or poor farmers have the potential to create employment, reduce

[1] Or alternatively, the minimization of risk for a given level of return.

poverty, slow urban migration, possibly even reduce crime, and eventually lead to a larger tax base and greater tax revenues. Who benefits from the reduction of social unrest? The benefits do not flow only to those who supply the capital, at least not in the proportion of their contribution, and will therefore not enter into the market calculation. However, such investments, when all costs and benefits are properly accounted for, might not only be economically or socially profitable, but may even prove to be financially profitable for the government through the increase in tax revenues and reduction of other social expenditures. There is a clear potential for externalities that justify some kind of governmental intervention.

From the point of view of society as whole, which is the viewpoint governments should take, the financial profitability criterion used by the markets may not be sufficient when there are other economic and social returns and risks that also have to be incorporated in the evaluation of the efficiency of the allocation. These include achieving greater fairness in income distribution, the creation of level playing fields when there is an unequal distribution of economic resources, assuring the elimination of discriminatory policies (or ameliorating the impact of past discrimination or other injustices), and creating opportunities for specific marginalized sectors of the economy where private perceptions of the risk/return tradeoff are not sufficient to induce investment. The externality may justify the intervention, but the intervention must also be efficient from a societal perspective in achieving the stated goal at the lowest possible cost (including the impact of risk). The question that needs to be asked is whether direct interventions in financial and credit markets, taking account of the resulting distortions in these markets, is the most effective way for governments to address these underlying issues. Too often, financial market interventions are viewed as an easy way to address the needs of a "political constituency" without an adequate analysis or understanding of side effects. Likewise, when designing policies to address these social issues, policymakers must decide whether market incentives can be used to address the issues on a cost effective basis.

There is ample evidence of imperfections in financial markets, especially when compared with the traditional neoclassic model of pure competition. Financial economists have made great strides in explaining the existence and structure of different kinds of financial intermediaries and the instruments issued by these firms. The analyses of Stiglitz and Weiss (1981), Santomero (1989) and Diamond (1984) clearly document that market imperfections created by the existence of information asymmetries are real and can result in market failure. It is equally clear that many of the problems in financial markets in developing countries are due to government failure, where actions (or often the lack of action) on the part of the government prevent markets from working. How are we able to tell which interventions will have an overall positive impact, that is, where total economic and social benefits outweigh the total social and economic costs?

Unfortunately, no one has been able to provide clear answers regarding when a government should intervene, or equally important, how the intervention should take place when justified. Stiglitz, in analyzing the "East Asian Miracle", indicates that there is no simple formula that can be applied; instead he concentrates on the ingredients. "Because these ingredients are interactive, and because they were introduced in conjunction with other policies, the government's approach has to be evaluated as a package. Indeed, East Asia's success was based on a number of factors, particularly the high savings rate interacting with high levels of human capita l accumulation, in a stable, market-oriented environment" (Stiglitz, 1996, page 151). When one compares the East Asian experiences with those of Latin America and the Caribbean, it is more difficult to uncover a similar pattern of actions or "combination of ingredients" that justify the intervention that took place. One can. only conclude that while some forms of interventions may be warranted, the conditions under which they can be successfully applied are likely to be quite restricted and must be carefully analyzed and justified on a case by case basis. The following sections provide the basis for such analysis.

Necessary and Sufficient Conditions for Government Intervention in Credit Markets

A necessary condition for government intervention in markets is evidence of market failure or the existence of significant externalities. However, the justification of such intervention requires as an additional, sufficient condition that it is effective in overcoming the market failure and/or offsets for the externality. Such necessary and sufficient conditions can also be applied to policy-based finance or other government intervention in creditor financial markets. While not intended to bean exhaustive list, the three justifications discussed below are among the most important.

Necessary Conditions:

- *Information Asymmetries.* The classic discussion of the failure of financial markets concerns information asymmetries between borrowers and lenders. The argument is generally made that information is very expensive to obtain (but once obtained by one lender, the information can be freely observed by others) and that it is hard for lenders to justify the investment in information gathering and monitoring. Information asymmetries often lead to significant adverse section and moral hazard problems. There is also evidence that the inability of financial intermediaries to properly measure and segment risks (whether due to a lack of information or the inability to use information) results in the collapse of markets.

- *Externalities (public goods, social benefits).* The claim is often made that financing specific activities will have positive spillover effects on the rest of the economy. Claims for externalities are most often used to justify intervention in science and technology, agricultural finance or support for small and microenterprises, but are used to justify pilot programs in a number of sectors.

- *The General Failure of Credit and Other Financial Markets in Emerging Markets.* A common criticism of the financial markets and institutions in Latin America and the Caribbean is that they fail to provide complete services or services to specific sectors. This includes the lack of longer term markets, insufficient risk mitigation instruments or diversification opportunities, the lack of competition among providers of financial services (and resulting high prices), and especially, the limited availability of credit services to small and medium enterprises or to the rural sector. In some instances, the government intervenes when the scope of a project is considered too large for the local financial sector to finance.

It is easy for governments to perceive the existence of some form of market failure, to claim that resources are not allocated properly, and find some areas where intervention may be justified. As is generally the case with necessary conditions, it is far harder to find a justification for effective government intervention. For government to effectively provide these services when the private sector is unwilling or unable to do so, it must be able to demonstrate that it can correct for the market failure or externality or that it has the ability to resolve the information problem more effectively than the private sector. Thus when addressing the perceived market failures, governments must be able to defend sufficient conditions similar to those that follow.

Sufficient Conditions:

- *Resolve Information Assymetries. If* there are information asymmetries, the government must show that is has better access to information (or is able to better use existing information).

- *Correct for externalities. If* there are externalities, the government must be able to measure them and justify that the proposed program corrects the market's allocation in ways that take the externalities into account.

- *Overcome Market Failure. If* private markets are unwilling to lend to a specific sector, the government must show that in the programs designed to correct the underlying cause of the problem and not just the symptoms of market failure.

In our examination of the sufficient conditions for government intervention in the allocation of credit there are two aspects that must be kept in mind. First, if there is a market failure, it is not enough that there is a willingness on the part of the government to lend to the sector in question. The government must also be able to demonstrate that it is better able to select risks, monitor the resulting credits and recover higher amounts than would be possible for the private sector. Second, it is important that market failure is distinguished from government failure. If the private sector is unwilling to lend to a specific sector because of legal constraints or regulatory restrictions, because the judicial system is unwilling or unable to enforce contracts, or because the government's has a history of intervention in a sector (e. g., forced refinancing or credit forgiveness) to the point that the private sector is unable to compete, the government's role should more appropriately be concentrated on the elimination of such restrictions.

It should be noted that government policy may also be aimed at supporting greater social equity. There are continual tradeoffs in economics between equity and efficiency. Many of the credit programs that are directed at smaller borrowers or the rural sector have social equity as an underlying motive. In such cases, when government makes a conscious decision to support a particular sector, care must be taken to ensure that subsidies are carefully targeted. Too often, funds are unintentionally diverted to groups that may share similar characteristics with the targeted group, but are not the group in need of assistance.[2] As noted by Bernel Stone (1997), direct subsidies are almost always preferable to interest rate subsidies as they can be more directly targeted to the specific need. Moreover, even the structure of a direct subsidy program (e.g., production-based vs. income-based) can make a large difference in the incentive compatibility of the program, thereby impacting its effectiveness.

Advisability of Policy-Based Finance in Latin America and the Caribbean

In order to provide recommendations regarding the advisability of policy-based lending in Latin America and the Caribbean, the applicability of the above noted necessary and sufficient conditions must be first assessed. One of the first tasks will

[2] Credit programs with highly subsidized interest rates are often directed at smaller firms. Nevertheless, because of the fixed costs associated with obtaining the subsidy (getting information about the program, navigating the bureaucratic maze, etc.), these programs often result in a concentration of credits with the largest eligible firms. They may also attract camouflaging where "non-eligible" firms try to portray themselves as "eligible" in order to gain access to the subsidy.

be the design and implementation of programs to remove all feasible obstacles. While it is clear that imperfections will still exist, care must be taken to ensure that the degree of market imperfection is not increased by the intervention or that one imperfection merely replaces another. The degree and extent of any intervention must be determined by the degree and extent of the market imperfection. As Calomiris and Himmelberg (1993) aptly point out, "The fact that one can imagine justifications for government credit policies to support industries does not mean that such policies are a good idea. It is not clear that the assumptions necessary for justifying government involvement are met." Before embarking on a policy based lending program to reach some given target, the above-mentioned criteria should be carefully examined as to their applicability in the specific case. Often, private financial markets and/or market incentives can and should be used in reaching a cost effective solution.

Some of the conditions for the successful application of policy based lending, especially those learned from the (relatively successful) experiences of East Asia have been ably detailed by Dimitri Vittas in chapter four. Nevertheless, analyzing the experience of other countries, particularly the failures observed in Latin America, detailed in chapter three by Armando Montenegro, we can present a more complete set of conditions. We propose grouping them into two categories: eight conditions with respect to the *economic environment* (largely exogenous to the programs) and eight conditions governing *program design* (endogenous to the programs).

Economic Environment

The *eight conditions* briefly described below are basic for the functioning of all credit markets, but acquire more relevance in the case of policy-based lending or other interventions in financial markets, with their potential for distortions in the allocation of credit.

- *Macroeconomic Stability:* As the experience of many Latin American and Caribbean counties in the 1980s attests, credit can still be granted under conditions of instability. Nevertheless, it is clear that such credit is extremely hard to control and the transaction costs involved make can make such programs prohibitively expensive. Policy-based lending under inflationary conditions is indeed conducive to misallocation of resources.

- *Open Economy:* One of the best ways to ensure the effectiveness of any type of credit program, market-based or policy-based, is to promote an open economy, subject to international competition. Under such conditions, the production of goods and services will tend toward efficiency, increasing the likelihood of success of any credit program. Furthermore, open financial

Exhibit 1

Minimum Conditions for Successful Application of Policy-Based Finance

Economic Environment	Program Design
• *Macroeconomic Stability*	*Policy Consistency*
• *Open Economy*	• *Market-Like Source of Funds*
• *Industry Competitiveness*	• *Small, Targeted to Imperfections*
• *Repayment Culture*	• *Select Only Profitable Projects with Positive Development Impact*
• *Satisfactory Legislative and Regulatory Frameworks*	• *Multisectoral-Problem Oriented, Not Sector Specific*
• *Functioning Judicial System*	• *Professional Management*
• *Appropriate Supervisory Oversight*	• *Political Independence*
• *Functioning Private Financial Markets*	• *Temporary Nature, Limited Size*

markets will encourage the flow of capital into the country and contribute to the financing needs of local industry, helping to overcome any deficiencies in local savings and the lessen the impact of the duration mismatch between assets and liabilities of the financial system. The openness of the economies of Japan and Korea was instrumental to the success of policy-based lending programs in these countries.

- *Industry Competitiveness:* In market-based credit systems, intermediary institutions allocate credit only to firms and industries that are considered viable and competitive, at least over the term of the credit. It is equally important that the industries or activities selected by the government are solvent and competitive in their own right, either before or especially after the allocation of credit. Otherwise, sooner or later, repayment problems will

arise. The selection of competitive firms and industries was one of the key features of the programs of Korea and Japan. These programs used export competitiveness as a signal; international competition provided the necessary performance incentives. If the firms receiving credit are internally oriented, the markets in which they operate must provide similar signals. Otherwise, the allocation will result in a crowding-out of other competitive industries. Those managing the credit programs must keep in mind the justification for government involvement in credit allocation. There must be a significant externality, some clear market failure or an identifiable information asymmetry, that can be corrected by government involvement. The fact that a firm cannot get credit is not a justification for government involvement. The firm may not be creditworthy.

• *Culture* of *Repayment:* Sadly, in many countries of Latin America and the Caribbean, there still exists the notion that credit allocated from fiscal resources or through a public financial intermediary constitutes a reward for the activities being carried out. This perception often exists within the credit granting agency as well as among the borrowing population. The provision of credit resources is considered to be a subsidy (or at times, a grant) and timely repayment is not perceived to be a requirement of the loan. It is no wonder that the market is unwilling to finance these kinds of activities in the face of such experience. A culture of repayment within the lending institution is a necessary condition for these programs to be successful. Each credit must be carefully analyzed with regards to its repayment potential. Appropriate guarantees or collateral must be required. Credit should not be extended nor renewed when there is a history of non-payment. Following extension, the credits must be carefully monitored for the use and any deterioration of credit quality. Timely repayment must be demanded (with full recourse to the legal collections process when payment is not made). The professional staff of the lending institutions must have the appropriate incentives to assure compliance with credit standards. In this regard, governmental programs must be indistinguishable from market based credits. This is one of the strong features of the programs is East Asia that distinguishes them from efforts in Latin America and the Caribbean.[3]

[3] It should be noted that problems in the repayment culture exist for the private sector as well in much of Latin America and the Caribbean. Legal systems do not function as well as one would want, especially with regards to the perfection of collateral and the execution thereof. This situation is one of the major barriers for the provision of credit to many sectors of the economy (especially smaller firms and agricultural credit) whether by the private or the public sector. Government resources should be dedicated to the resolution of these problems prior to promoting public involvement in extending credit.

- *Satisfactory Legislative and Regulatory Frameworks:* Laws and regulations must be comprehensive, consistent, comprehensible and fair. Of particular importance in financial and credit markets are: the ability to enter into voluntary contracts; a delineation of the powers of and limitations on financial institutions; a clear definition of rights and responsibilities associated with a variety of financial instruments (particularly non-traditional instruments); the ability to perfect collateral and enforce claims (including ease of access to collateral); and the rights of the government to intervene in the affairs of a financial institution and/or to limit or circumscribe the use of specific instruments or transactions.

- *Properly Functioning Judicial Systems: To* operate efficiently, financial markets require effective and efficient judicial systems that will consistently enforce contractual obligations. Property and individual rights must be effectively enforced. Not even the government should be willing to grant credit if it cannot assure repayment or repossess collateral. In the case of policy-based or other directed credit programs, with the potential for collusion between lender and borrower or other forms of corruption, the effectiveness of the legal system is even more important.

- *Appropriate Supervisory Oversight:* The existence of information asymmetries often implies that financial markets require some kind of official oversight. This can range from very formal supervision, as in the case of commercial banks or insurers, to less formal oversight (including information disclosure requirements and oversight of self-regulatory organizations) as in the case of markets for traded securities. It is critical that the staff of the supervisory organizations be respected professionals who are adequately trained and compensated. Supervisory organizations also need the powers to enforce regulations and to intervene and close unsafe or imprudently managed institutions.

- *Properly Functioning Financial Markets:* Policy-based systems, but it must be clear that policy-based lending cannot be used as a substitute for imperfect financial markets. The fact that financial intermediation is deficient, either because of a lack of credit resources or institutional weaknesses, does not by itself constitute an excuse for the government to intervene by providing, allocating and pricing credit. If market mechanisms cannot operate, government efforts should be directed at improving those mechanisms, not at stifling their development by intervening in the credit markets. If the basic conditions do not exist, governments must work simultaneously in the development of market-based financial systems. It is also critical to note that the interventions in East Asia generally resulted in a mild degree of

financial repression - interest rate subsidies were generally small. This differs greatly from the severe degree of financial repression observed in the countries of Latin America and the Caribbean.[4]

Program Design

Even if all of the above conditions are present in a given country, they do not ensure the success of a policy-based lending program. There is a need for effective program design, as the potential for abuse and the introduction of distortions is enormous. For all practical purposes, policy-based lending programs must seek to imitate the conditions under which a well functioning market-based financial system operates. The *eight conditions* below attempt to summarize the requirements of an effective program.

- *Policy Consistency:* Policy-based lending cannot function in isolation of other government policies. These must be consistent in such a way that they complement and support each other. For instance, policy-based lending must operate within an industrial policy that does not protect certain industries, is reasonably free of price controls, has positive real interest rates and has an exchange rate policy that neither hinders industrial competitiveness nor artificially protects it. The cases of Korea and Japan amply demonstrate the wisdom of policy coordination and consistency.

- *Source Funds with Minimal Fiscal Impact.* The source of resources utilized in policy based lending should be transparent. If fiscal resources are involved in providing a subsidy, they should be clearly identified in the fiscal budget and limited to these amounts. If deposits are gathered, these deposits must

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[4] The last few years have witnessed significant attempts at reform of the financial sector in most countries of Latin America and the Caribbean (see the 1996 Economic and Social *Progress Report* of the Inter-American Development Bank). Even though much progress has been achieved in the areas of liberalization of interest rates, strengthening of bank supervision, improving information disclosure requirements, and limiting of the role of the state in direct financial intermediation, much remains to be done, (especially in the implementation of internationally accepted accounting and auditing standards and corresponding information dissemination, the implementation of regulations on self-dealing, the oversight of financial conglomerates, and the development of capital markets and hedging instruments). Santomero (1997) and Corrigan (1997) present an extensive discussion of the requirements of properly functioning financial markets. The Inter-American Development Bank has been very active in promoting financial sector development throughout the region. Since 1990, Investment Sector and Financial Sector Loans, Multisectoral Credit Facilities containing financial sector conditionality, along with related technical assistance programs have been instituted in virtually all borrowing member countries.

be repaid from the program. Resources should not arise from the inflation inducing money creation by the central bank. The institution of extra reserve requirements on the banking system to fund these loans should also be avoided. The creation of unfunded deficits can be very destabilizing to the economy as a whole. Rather than solving the financing problem for a relatively small industrial, commercial or agricultural sector, such interventions tend to create long-term problems for the entire economy via increased inflation and interest rates. The ideal sources of funds are those coming from borrowings, be it external from multilateral institutions or commercial sources, or internal through financial intermediation. This was one of the major differences of Korea and Japan; in Korea, a sizable portion of the resources came from the Central Bank, contributing to macroeconomic instability while in Japan, most of the resources came from postal savings, without introducing additional macroeconomic distortions.[5]

- *Small, Targeted to Imperfections:* Policy-based lending should be in response to a market problem and as such should be targeted to overcoming that problem (or provide temporary relief while the problem is being resolved). The intervention can neither be generic nor widespread, as the distortion in resource allocation would only be compounded. If the problem is one of term (local markets only generating short-term resources), the government contribution might be limited to extending the term, possibly by obtaining longer-term international funds. If the problem is one of access to credit, as is the case of smaller enterprises, government intervention in the credit markets should generally be limited to mitigating the perceived riskiness of smaller enterprises through the absorption of some of the costs associated with processing smaller loans (usually limited to the first loan), providing technical assistance to financial intermediaries willing to work with smaller borrowers, or providing training and technical assistance to the smaller firms themselves.

[5] Internal resources must also be used with care to ensure that the allocation is based on market principles. In Japan, there area number of restriction on the deposit taking activities of commercial banks that have provided the postal savings system with some unfair competitive advantages. In turn, Postal Savings, along with government pension funds have provided government bureaucracies with a large source of funds, the Fiscal Investment and Loan program, that has been used as a "second budget" (equal to 50% of the official budget but managed by the Trust Fund Bureau without parliamentary oversight). As the government of Japan is embarking on a major financial system restructuring, the size and existence of this fund is a cause for concern. As well as concerns regarding the impact on the competitiveness of the banking system, there is evidence that some of the funds raised through the postal savings system and public pension funds have been on lent to projects that are unable to repay the loans. (See discussion in the Wall Street Journal, March 5, 1997; and Washington Post March 10, 1997).

- *Profitable Projects with Developmental Impact:* Investments funded by government programs should be able to pass profitability, solvency and liquidity criteria imposed by the market on other comparable investments that are not experiencing the problems that the government program addresses. Investments should not be made in firms that need subsidies or protection to be profitable, but in firms that are viable and can contribute to the country's development in ways that would not be realized without government intervention.

- *Multisectoral, Problem Oriented, Not Sector Specific:* In order to maintain competitiveness within the economy and encourage investment in those sectors that have the greatest comparative advantage, it is often preferable to maintain a multisectoral orientation. Governments have seldom proved to be more successful than private markets in identifying industries or firms that will expand, and are often tempted to supporting noncompetitive industries for political rather than economic reasons. In Latin America and the Caribbean, some of the more successful *efforts to* support the development of financial markets have incorporated the private sector in credit analysis, risk taking, monitoring and collection. Multisectoral Credit Facilities sponsored by the Inter-American Development Bank and other development institutions provide long-term financing to the private sector (addressing one of the perceived market failures) by utilizing the domestic financial system. Funds are made available, at market rates, to a group of eligible financial institutions (selected based on financial strength and the ability to evaluate and monitor longer term investments). These local intermediaries, in turn, provide long-term financing to private sector firms, again at market rates. The private financial institutions bear the full credit risk; only the funding risk is eliminated.

- *Independent and Professional Management of the Program:* Most of the problems experienced in the directed credit programs of Latin America and the Caribbean can be traced more to program management than to problems related to the goals of the program. Many of these programs have been managed within a setting that considered that public funds, granted in the form of credit, are at best to be repaid if everything goes much better that expected. The accountability of managers has been almost non-existent. For a program to be successful it must be managed as a private endeavor. The importance of monitoring and collection cannot be underestimated. This was clearly the case in both Korea, where the country as a whole was, to a certain extent, managed as if it were a corporation with thorough *ex ante* evaluation and *ex post* supervision of every investment (Cho, 1997). In the case of Japan, the Japan Development Bank, from its earliest history, was

clearly managed by independent professionals (Shibata, 1997).

- *Political Independence:* Related to the previous two conditions is the *sine qua non* of political independence. Policy-based lending must be devoid of political influence and lending institutions must be operated according to commercial criteria. The potential for political interference in this type of program is large, be it through the potential for corruption or vote seeking behavior associated with selective regional development or job creation programs. Where political gains are to be achieved, they must be the result and not the purpose of the programs. Independence is clearly one of the reasons for the success of the programs of Japan and Korea, while the lack of independence can be linked to the failure of many program in Latin America and the Caribbean.

- *Temporary Nature and Limited Size of Support Programs:* Since directed credit programs are targeted at specific market failures, information asymmetries or externalities, they should be complemented by measures to address the underlying problems. The larger the program, the more distortions it introduces in the allocation of resources and the more chances there are of stifling the development of market-based alternatives. The magnitude of the program should be relatively small, compared with the overall credit in the economy. The program should preferably be of a specified duration with a planned termination when the underlying causes are removed.

Although these restrictions do not call for an absolute exclusion of public involvement in credit allocation, they do strongly suggest that it will not be easy to develop successful programs where there is a direct role for the government (or a government owned intermediary) in the allocation of credit. Within the political and social environment of Latin America and the Caribbean, the application of the preceding criteria will no doubt require the allocation of the resources using, as much as possible, the existing channels of the private financial system. The role of the state should ideally be limited to setting policies, ensuring proper oversight of financial markets, monitoring and enforcement of policies, and building the legal and regulatory infrastructure needed for the private financial markets to operate.

While longer-term markets are developing and gaining access to international markets, there may be a temporary role for the government in intermediating longer term funds to solvent, well managed financial intermediaries. In these second tier lending programs, the private financial intermediaries should be responsible for the individual lending decisions and the monitoring of the investments and receive the reward and/or suffer the consequences resulting from their actions. Resources should be allocated at market rates, in order to avoid channeling subsidies to the owners of financial intermediaries. Central banks should have no role in credit programs and public development banks should operate under strictly commercial

criteria; never in the guise of first tier, direct lending institutions. Under no circumstances should policy-based lending or other directed credit programs be used to substitute for, or to crowd-out, the private financial system.

Costs Associated with Policy-Based Lending

Needless to say, it would be difficult to apply all of the conditions presented above. Some imperfections will exist in any system where a government agency is asked to determine credit policy via administrative allocation. Their incentive structure does not allow for efficiency for a large scale program. Significant costs will therefore be associated with the implementation of directed credit programs. Moreover, the potential for misallocation of resources is very large. While these costs seem to have been limited in the case of Japan (Shibata, 1997), a preliminary evaluation of the Korean experience indicates that the costs of intervention were potentially high (Cho, 1997). A complete evaluation will likewise need to take into account the social costs associated with a directed credit program (Calomiris and Himmelberg, 1993). As one attempts to measure the cost, it must be emphasized that the conditions described above, the lessons learned from the East Asian experience, are specifically designed to help policymakers avoid or minimize those costs. The value of the lessons lies in how they can be applied to credit programs in other developing countries. Just as the value and appropriate design of a government supported credit program must take into account the specific characteristics of the targeted sector (and indeed, of the country in question), the costs will depend on the structure of existing financial markets.

The potential costs associated with the application of policy-based finance can be divided into three general classifications. First, there is the direct cost of the government intervention, including the extent to which government intervention may result in a sub-optimal allocation of scarce economic resources or distortions in related financial markets. Second, there is the risk that the programs will not be properly implemented, that lessons, such as those that can be gleaned from the East Asian experience will not be fully incorporated into the program. Third, there are the indirect costs associated with the underdevelopment of financial markets resulting from an overdependence on government sponsored financing programs. Unfortunately many of the costs are difficult to measure prior to establishing the financial market intervention. Many of these indirect costs are ignored in the analysis or are considered to be "risks" that will be avoided though proper management of the program. Nevertheless, appropriate probabilities are not applied to the risks nor are funds made available to create the structures needed to control for these risks. When the risks become a reality, the *ex post* costs will be borne by the economy, but these potential costs are not properly accounted against the claimed *ex* ante benefits in determining whether or not a program should be implemented.

- *Direct Costs of Government Intervention in Financial Markets.* There are three types of direct costs associated with government intervention in financial markets. The first, the cost borne by the economy as a whole, is the sum of the costs associated with the management of the program (in excess of what would be charged by private markets), the funds needed to pay either direct or interest rate subsidies, and the losses generated by the program (whether in an implicit budgetary allocation or in the unexpected costs that arise once the program is in effect). A second set of costs are those related to the misallocation of funds within the economy. This includes the use of resources by firms that are not competitive and might otherwise exit the market and the corresponding lack of funds for firms that would be able to add to the wealth of a nation, but that are for some reason not targeted by the government. A final set of costs are those associated with rent seeking. These costs, along with the related potential for corruption associated with government sponsored credit allocation programs, are greatest when the potential subsidy is high. Such a use of non-productive resources represents a dead weight loss to the economy.

- *Costs of Improperly Implemented Interventions in Financial Markets.* The hidden costs that are associated with improperly implemented government directed credit allocation programs are possibly the most insidious. These include the potential impact on macroeconomic instability discussed earlier and the costs associated with poor management. Thus, the risks associated with inconsistent and/or inflexible policies, the lack of professional management and/or independence from political influence, the inability to create a credit culture, the temptation to support non-competitive industries or to use the program to keep the economy closed, the use of improper funding sources, and/or the lack of attention to the underlying problems (macroeconomic instability, poorly functioning legal system, undercapitalized financial institutions, inadequate disclosure requirements or accounting standards) while *efforts are* concentrated on resolving the symptoms (high interest rates and lack of access to financing by some segments of the economy), must all be taken into account. A country with a history of professionalism and independence within the government agency responsible for the intervention is thus more likely to be able to successfully implement a program than is a country where the civil service is underpaid or one that has a history of political intervention and/or corruption.

- *Indirect Costs Resulting from the Underdevelopment of Financial Markets.* Of particular importance when looking at the cost of direct government involvement in the allocation of credit is the impact of financial repression on the development of financial markets. While repression was generally

more limited in the East Asian experience than in Latin America and the Caribbean, both have resulted in underdeveloped financial markets. As pointed out by Allen (1997) and Santomero (1997), the financial systems of Latin America and the Caribbean will have to move beyond their dependence on government for the allocation of investment funds if they are to meet the needs of the real sector.

The long-term cost associated with government interventions in credit allocation on the development of financial markets is hard to measure on an *ex* ante basis. Some needed markets will just not develop. Private financial markets are unlikely to target rural markets or build the systems needed to lend to small and medium enterprises if they are faced with competition from massive government programs. It is especially hard to compete with a lender that does not place a high emphasis on credit quality or collections. Likewise, if governments dominate the provision of longer-term credits to industry or to major exporters, the private sector may not have the incentive to develop the technologies needed to capture funds, to diversify and/or hedge risk, or to analyze and monitor complex projects. Moreover, such systems are more likely to remain dominated by banks or bank-like intermediaries and not develop traded markets, institutional investors, venture capital specialists, and the other types of institutions and instruments needed in a modern economy. No single model will be appropriate for all countries at all times, but a failure to allow markets to develop through the use of structures that are incentive incompatible vis-a-vis private markets will only slow the process of development.

Concluding Remarks

Given the history of Latin America and the Caribbean with respect to credit allocation schemes, it is not clear that the development of a policy-based finance program along the lines implemented in East Asia would prove successful. Given the history and the economic milieu in which Latin America and the Caribbean is operating today, the efforts of the governments should be concentrated on ensuring the proper functioning of private financial markets. *Efforts should* first be concentrated on maintaining macroeconomic stability, ensuring the existence and functioning of appropriate legal and regulatory environments, and maintaining adequate supervision and information disclosure requirements.

While efforts should be concentrated on the development of markets and institutions, the lessons from East Asia are still important. It is unlikely that the countries of the region will abandon interventions in financial and credit markets

targeted at specific sectors. This being the case, the correct application of the lessons of East Asia to government programs of credit allocation, can help ensure that the needs of the targeted sector are better met and that the cost of the intervention will be minimized.

These lessons are straightforward. A proper underlying economic environment is essential; this is where government policymakers can have the greatest impact. Governments must strive to maintain macroeconomic stability, to keep their economies open and maintain a competitive structure for their industries, to develop a political environment conducive to a repayment culture for all government supported credit programs, to establish and maintain a judicial system that provides effective and efficient protection of both individuals and property rights, and to ensure a regulatory environment that allows for the functioning of safe and sound private financial markets.

Once this background is in place, lending programs can be designed to ameliorate specific market failures by *attacking the problems and not the symptoms.* Such programs should be limited to those where the government has a comparative advantage, access to better information, or where there is a clear externality associated with the government's support for a specific sector. When the lack of credit in a specific sector is due to government failure rather than market failure, the underlying problem should be addressed. The programs developed should have policies consistent with the overall economic strategy of the government and be funded by a market-like source of funds (ideally, one that has to be repaid out of funds generated by the program plus any explicit budgetary allocations). The programs should be targeted to specific, identifiable imperfections (with concurrent efforts to eliminate them), and thus should be limited in size and duration. To the greatest extent possible, they should be oriented to specific problems and limited to those projects that clearly have a positive development impact. Professional management and independence from political influence are essential.

The reader will likely conclude that all, or even most, of those conditions cannot be met in any of the countries of Latin America and the Caribbean. As at the beginning of this chapter we criticized the position of theoretical economists for concluding that only the market is able to properly allocate credit on the basis of their unrealistic assumptions, we can also be the object of criticism for proposing excessively narrow conditions for the application of policy-based lending. It is likely that not all of the sixteen conditions will be met in all government interventions in financial markets, but the success of such interventions, in both macroeconomic and microeconomic terms, will be a function of how closely these conditions are met. Moreover, the conditions do point out the general direction that policymakers should follow in the creation and implementation of policy-based lending or other interventions in financial markets. The further a specific

intervention diverges from meeting the standards set forth in this chapter, the less likely it is to be successful, and the more likely it is to greatly exceed the projected cost. Thus, the lessons from East Asia will be of particular value to policymakers as they undertake to correct for market failure while simultaneously working to develop more complete financial markets.

References

Allen, Franklin. 1997. "The Impact of Institutional Structure on Financial Innovation and Risk Sharing: A Comparison of the United States, Germany and Japan." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D. C.: Inter-American Development Bank.

Calomiris, Charles W. and Charles P. Himmelberg. 1994. "Directed Credit Programs for Agriculture and Industry: Arguments from Theory and Fact." *Proceedings of the World Bank Annual Conference on Development Economics 1993,* Washington D. C.: World Bank.

Cho, Yoon J. 1997. "Credit Policies and the Industrialization of Korea: Lessons and Strategies." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D. C.: Inter-American Development Bank.

Corrigan, Gerald. 1997. *Building Modern and Efficient Banking Systems in Emerging Markets.* Infrastructure and Financial Markets Working Papers Series. Washington, D.C.: Inter-American Development Bank.

Diamond, Douglas W. 1984. "Financial Intermediation and Delegated Monitoring." *Review of Economic Studies* 51:393-419.

Inter-American Development Bank. 1996. *Economic and Social Progress Report of the Inter American Development Bank.* Washington D.C.

Iglesias, Augusto. 1977. "Pension System Reform and the Evolution of the Capital Market: The Chilean Experience." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D. C.: Inter-American Development Bank.

Kruse, Douglas. 1977. "Innovation in Financial Markets: The Experience of Japan from the Perspective of a Private Sector Financial Institution." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D.C.: Inter-American Development Bank.

Llisteri, Juan J. and Jacob Levitski, editors, 1996. *Sistemas de Garantías de Crédito: Experiencias Internacionales y Lecciones para América Latina y el Caribe.* Washington D. C.: Inter-American Development Bank.

McKinnon, Ronald. 1973. *Money and Capital in Economic Development.* Washington D. C.: Brookings Institute.

Montenegro, Armando. 1997. "Directed Credit in Latin America." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D.C.: Inter-American Development Bank.

Santomero, Anthony M. 1989. "The Changing Structure of Financial Institutions: A Review Essay." *Journal of Monetary Economics.*

———. 1997. "Effective Financial Intermediation." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D.C.: Inter-American Development Bank.

Shibata, Tsutomu. 1997. "Policy-Based Finance in Japan: Possible Lessons for the Americas." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim B. Staking, editor. Washington D. C.: Inter-American Development Bank.

Stiglitz, Joseph E. 1993. "The Role of the State in Financial Markets." *Proceedings of the World Bank Annual Conference on Development Economics.* Washington D. C.: The World Bank.

———. 1996. "Some Lessons from the East Asia Miracle." *The World Bank Research Observer* 11(2):151-78.

Stiglitz, Joseph E. and Marilou Uy. 1996. "Financial Markets, Public Policy, and the East Asian Miracle." *The World Bank Research Observer* 11(2):249-76.

Stiglitz, Joseph E. and Andrew Weiss. 1981. "Credit Rationing in Markets with Imperfect Information." *American Economic Review* 71(3):393-410.

Stone, Bernel. 1977. "Government Support and the Financing of Technology Development: Lessons for Developing and Developed Economies." Policy Based Finance and Market Alternatives: *East Asian Lessons for Latin America and the Caribbean. Kim B. Staking, editor. Washington* D.C.: Inter-American Development Bank.

Vittas, Dimitri. 1997. "Policy-Based Finance: Application of East Asian Lessons to the Americas." *Policy-Based Finance and Market Alternatives: East Asian Lessons for Latin America and the Caribbean.* Kim. B. Staking, editor. Washington D. C.: Inter-American Development Bank.

Vittas, Dimitri and Yoon J. Cho. 1996. "Credit Policies: Lessons from Japan and Korea." *The World Bank Research Observer* 11(2):277-98.

World Bank. 1993. *The East Asian Miracle: Economic Growth and Public Policy.* Washington D.C.