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Abstract

This paper discusses the transition strategy from administratively set interest rates to market rates. Despite worldwide trends toward financial liberalization, few monetary authorities are prepared to accept as reasonable any interest rate level that is market-determined. The paper suggests some helpful indicators to assess the adequacy of interest rates. It discusses factors which contribute to a smooth liberalization process. The main conclusion is that interest rate liberalization is not synonymous with laissez-faire policies. It requires, however, the replacement of the administratively set interest rates by indirect monetary management techniques which operate through the market.

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Summary

Many countries have chosen to maintain interest rates at low and unchanged levels. While it is now generally recognized that this strategy has serious shortcomings, it is less clear how to achieve a smooth transition from repressed interest rates to market rates. This paper tries to identify the key factors that may impinge on the success of interest rate liberalization.

The first step in any strategy for interest rate liberalization is to assess the adequacy of prevailing interest rates. It is also important to identify distortions in the structure of interest rates and correct the underlying causes of these distortions. Examples of distortions include selective credit control practices, market segmentation, wide interest margins, and preferential rates for government.

If the level and structure of rates are found to be adequate, rapid interest rate liberalization is unlikely to pose serious problems. If interest rates are clearly out of line, however, the transition from rigid interest rates to a system of market-determined rates should be carefully planned. In both cases, however, the following questions need to be addressed at the outset of the liberalization process. Will there be enough competition in the banking markets? Are borrowers (and depositors) sufficiently sensitive to interest rates? Are the monetary policy instruments and operating procedures adequate to influence the marginal cost of funds to banks? Are transmission mechanisms sufficiently efficient to permit market interest rates to respond promptly to shifts in monetary policy and market fundamentals? Are there prudential concerns that call for special consideration by the authorities prior to interest rate liberalization? In most cases, the answers to these questions would rule out a "naive" approach to interest rate liberalization by which the monetary authorities would simply accept market rates--in order to achieve quantitative targets for money or credit--without attempting to influence these rates through direct or indirect means.

The development of effective mechanisms to influence market-determined interest rates through changes in the availability of bank reserves or the cost of bank reserves is a complex process requiring a careful sequencing of financial sector reforms in several areas. The effectiveness of comprehensive financial sector reforms will depend crucially on the achievement of macroeconomic stability based on the containment of fiscal deficits and the elimination of relative price distortions.

Issues on Interest Rate Management and Liberalization 1/

1. Introduction

Modern economic thinking generally acknowledges the important role of interest rate policy as a demand management technique to achieve both internal and external balance and to ensure the efficient allocation of financial resources in an economy. Interest rates influence the demand and supply of investable resources and the decisions of economic agents to invest or consume. They are at the center of any policies that the monetary authorities may choose to undertake to influence business conditions and economic activity. They affect exchange rate and capital movements as well as inflation. 2/

Despite the importance of this variable, many countries have chosen to maintain interest rates at unrealistic levels. A large number of developing countries have traditionally followed a policy of low and unchanging interest rates. These policies are normally the result of three factors: (a) the desire to increase the level of investment; (b) the desire to improve the allocation of investment among sectors; and (c) the desire to keep financial costs down so as to avoid possible inflationary effects of interest rate liberalization. A vast body of literature appeared in the 1970s to refute the validity of these considerations.

The belief that low interest rates stimulate investment and growth has been vigorously attacked by McKinnon (1973) and Shaw (1973), among others. They have shown that if real interest rates are reduced below market equilibrium levels, demand for investment will no doubt increase, but actual investment will decrease since at low interest rates insufficient savings will be generated to finance these investments. Moreover, the excess demand for investment will require the rationing of existing resources among all competing investors willing to borrow at that rate. Where there is rationing and controlled lending rates, it is unlikely that financial intermediaries will choose to provide funds according to a ranking of rates of return on investment. Most likely, other factors such as the capacity to provide collateral and political influence will also play an important part in the financial intermediaries' decisions. Consequently, a policy of low interest rates not only inhibits investment, but also tends to reduce the average rate of return on investment below the maximum attainable rate.

Attempts to improve the allocation of resources are also an important factor behind the use of low interest rate policies by many countries. These countries are convinced that selective reductions of interest rates to preferred sectors of the economy will significantly improve the allocation of resources. Available evidence tends to contradict this assumption. In most cases in which this hypothesis was

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1/ This paper draws on material from Leite (1982) and IMF (1986).
2/ For an elaboration of these points, see IMF (1983).

tested, results show that the effect of selective credit policies on growth and investment is minimal. The key problem is that of the fungibility of money which makes it very difficult to ensure that funds are in fact used for their original purposes (Johnson, 1975; Khatkhate and Villanueva, 1978).

The third reason often mentioned in defense of low interest rate policies is the possible inflationary impact of interest liberalization. There is no doubt that there will be some short-term price effects resulting from interest rate liberalization. However, the direction of these effects is a complex empirical issue that cannot be easily resolved on a priori grounds. In any case, the possible inflationary effects of interest rate liberalization tends to be somewhat overplayed by defenders of the status quo. Available estimates of the ratio between financial costs and total production costs in several countries indicate that they seldom exceed 10 percent. Thus, the direct effect of an increase in interest rates on production is likely to be small. Moreover, this increase will not necessarily be completely passed on to consumers as interest rate increases should reduce demand. 1/ Finally, interest rate increases are likely to reduce the hoarding of goods, thereby increasing aggregate supply.

The purpose of this paper is to emphasize some key elements which have proved important in the process of interest rate management and liberalization. This process, while relatively straightforward in the abstract, holds a few pitfalls that can perhaps be avoided by learning from the experience of the several countries which have moved toward market-related interest rates in the last decade.

The first step in the process of interest rate management and liberalization should be an assessment of the appropriateness of the prevailing interest rate levels and structure. Section 2 discusses a number of indicators that can be used to gauge the appropriateness of prevailing interest rate levels.

Section 3 discusses the interest rate structure and its assessment. If the level and structure of rates are found to be adequate, the only concern of the monetary authorities should be to ensure that they are flexible, i.e., that changes in underlying economic conditions will be fully reflected in interest rate changes so as to keep these rates always adequate. However, if rates are not at acceptable levels, a strategy needs to be designed to move them to more realistic levels. The experience of many countries which have undertaken this process of interest rate liberalization shows that the transition process from rigid interest rates to a system of more flexible and market-determined rates can be traumatic if not properly managed. Thus, the monetary authorities should plan carefully the proposed liberalization path so as to achieve

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1/ To the extent that higher interest rates shift savings from goods into financial instruments, the rate of inflation would decelerate.

this goal with minimal side effects to the economy. Section 4 discusses the transition from fixed to market-determined interest rates.

Section 5 examines government intervention in the economy and its relevance for interest rate policies. It discusses the impact of government financing on interest rates and on the financing of the rest of the economy.

Section 6 presents some concluding remarks.

2. Adequacy of interest rates

Determining the most adequate interest rate level is not a simple task since there is no clear-cut method of assessing its appropriateness. However, there are a number of indicators which together can help the policy maker judge whether the prevailing interest rate is grossly out of equilibrium. These indicators are discussed below.

a. Positive real rates

Savings instruments should bear a positive expected real interest rate, otherwise there would be a strong tendency to substitute hoarding of goods and self-investment for financial savings. Clearly, not all real interest rates on financial instruments need to be positive. In most countries, demand deposits (and currency holdings) do not pay interest. However, up to a point, the services and convenience resulting from the use of these deposits make them attractive to hold. Nevertheless, in all cases, and specifically in hyperinflation situations, it is highly unlikely that under competitive conditions, the average real rate of return on savings instruments would be negative. Thus, if this return is consistently negative, it is likely to be due to a lack of competition or to government ceilings on interest rates. This is even more so when real lending rates are negative. Occasionally, the real interest rates observed in the economy may be negative, even when rates are free and competitively determined. For instance, if the inflation rate is volatile, people may underestimate the future rate of inflation. This underestimation is likely to result in relatively low nominal interest rates that will turn out to be negative in real terms ex post. Also, the combination of bank-specific credit ceilings, and unfettered growth in reserve money may lead to market-determined interest rates that are negative even in competitive banking systems.

Positive real rates give only a floor on nominal rates; other indicators would have to be used to assess how far above that floor interest rates should be. Moreover, a few caveats should be kept in mind when using positive real rates as a guide for interest rate policies. First, when there are price controls the calculated inflation rate is likely to underestimate underlying inflationary pressures. Therefore, calculated real rates may be overstated because of the artificially low measured inflation. Second, calculations of expected inflation rates are difficult without long, consistent time series, and even then may not be

reliable. Third, the most appropriate deflator of the interest rates is a broad-based price index that takes into account the prices of current consumption goods as well as the prices of assets that would produce future consumer goods (capital goods) (Brown and Santoni, 1981). Finally, taxation of interest incomes should also be taken into account when calculating expected real interest rates (Tanzi, 1980).

b. World interest rates

Economic theory suggests that if two economies are totally open to capital movements, the differential between their domestic interest rates will be equal to the expected movements in the exchange rate between the currencies of these countries. 1/

Although most developing countries have some form of control on capital movements, these controls have limited effectiveness, resulting in different degrees of openness to capital movements. Consequently, a country's leeway in determining domestic interest rates is limited, as failure to take foreign interest rates into account is likely to result in destabilizing capital movements. The ability to determine interest rates independently of international rates is increasingly limited if: (a) there are no effective capital controls; (b) the currency is freely convertible; (c) the currency is widely accepted outside the country; (d) there is a thriving black market for foreign exchange; (e) foreign firms have a large role in the domestic economy.

In cases where there is some but not perfect capital mobility, the interest rate differential, after allowance is made for exchange rate expectations, should not be too large so as to avoid destabilizing capital movements. For this purpose the relevant "world" interest rates are those of the countries to and from which capital movements are more likely to take place. Note also that if a country is hoping to attract foreign private capital flows, domestic rates should exceed world rates, in order to compensate foreign investors for the increased risks of international lending.

c. Rates of return on investments

Rates of return on investment projects should exceed the interest rate charged on the funds used to finance them. Therefore, one way of assessing the adequacy of interest rates could be to estimate the economy's overall rate of return--probably on the basis of completed projects--and to compare prevailing interest rates to that overall rate. This could help to determine the adequacy of the interest rate levels.

The difficulty with this approach is that in most countries factors of production are not perfectly mobile and there are special constraints

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1/ However, some other country-specific variables such as political risk or reserve requirements may also play a role.

to entry into the high return sectors. Also, there is no overall rate of return on investment for the economy, but a spectrum of rates. Moreover, to the extent that real interest rates have been kept below equilibrium levels because of regulation ("financial repression"), the rates of return of some of the projects undertaken exceed the actual lending rate but are below the maximum rates of return attainable under more competitive conditions. Those projects are clearly suboptimal. These facts have led to the suggestion that the lending interest rate be guided by the rate of return on the "modern" sector of the economy. 1/ The problem with this approach is how to define the "modern" sector. Nevertheless, some guidance can be obtained by ranking the rates of return of different sectors and trying to gauge which lending rate would reduce the number of investment projects to a level that can be financed within the available resources. 2/

Perhaps more interesting is to compare the rate of return on potential investments with the lending rate. If lack of financial resources seems to hamper the chances of a project being implemented even if its rate of return substantially exceeds the prevailing lending rate, one should suspect that the lending rate is artificially low and that credit is allocated according to other criteria ("credit rationing"). This is especially so if the rate of return on these potential projects also exceeds the rates of return on a number of completed projects.

d. Interest rates in "informal" markets

In many countries interest rates in informal markets are substantially above the rates prevalent in the organized financial system. Unfortunately, it is doubtful that interest rates in the informal markets could be used as a guide to the proper level in the organized market. Although by their intrinsic nature informal markets are unregulated, there is no evidence that they are always more competitive than organized markets. Also, informal markets do handle high-risk loans and consequently require a higher premium to cover their expected losses by default (Wai, 1956; Bottomley, 1963; and Bhaduri, 1977). Consequently, interest rates on informal markets, while an additional piece of information, can only provide an upper bound for the rates prevailing in the organized market. Movements in these rates, however, may parallel required changes in the rates in the organized market.

e. Relative price of capital and labor

Interest rates can be viewed as a component of the relative price of capital to labor. This relative price is the ratio of the rental price of capital to the nominal wage rate, with the rental price of capital defined as the product of the price of capital goods and the real (or nominal) interest rate. Therefore, the real interest rate could be

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1/ Galbis (1977), and Khatkhate (1980).
2/ Dasgupta, Sen, and Marglin (1972).

chosen so as to restore this relative price to a target level, taking into account the developments in the price of capital goods and the wage rate. This approach, of course assumes that the authorities have some view on the adequate level of this relative price, perhaps based on past experience, when the interest rates were at adequate levels. Unfortunately, all this method can do is to say how the prevailing interest rate levels need to be changed so as to restore the relative prices of capital and labor to some target level. Therefore, this method is not very helpful in situations in which the authorities have no idea of what the proper relative price between capital and labor is.

3. The structure of interest rates

The structure of interest rates also needs to be examined when evaluating the appropriateness of a system of interest rates. However, ready and easy rules on interest rate structure are yet to be found, as so much depends on the specifics of each market. Interest rates on saving instruments (and lending rates as well) should differ according to their intrinsic characteristics such as their riskiness, maturity, their liquidity and the convenience of their use. Yields on savings instruments (and loan rates) should be positively related to their riskiness and negatively related to their liquidity. A term structure of interest rates that offers insufficient returns to longer maturity deposits could reduce the availability of term finance for investment.

Under competitive conditions the spread between lending rates and the average cost of loanable funds (that is, funds obtained by the financial intermediaries to on-lend) should be just enough to cover costs, risks and "normal" profits. Large spreads common in many developing countries indicate, in many cases, the lack of competitiveness or government intervention in the financial markets. 1/ Sometimes they reflect high intermediation costs, often resulting from a large portfolio of nonperforming loans or high operating costs. Whatever their cause, these spreads will most likely result in low deposit and high lending rates, with an inappropriate division of risk.

Against this background, any strategy to improve the interest rate structure should start by abolishing the most obvious causes of the initial distortions. Steps to be taken include the introduction of policies to reduce interest subsidies based on an assessment of their incidence and effectiveness in redirecting resource flows. Also, policies to streamline and monitor the cost-of-funds calculations of financial institutions should be introduced. Other policies which are likely to improve the interest rate structure include, for example, reduction and unification of liquidity requirements on various groups of financial institutions, the introduction of a prime rate or base lending

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1/ Most often, high reserve and liquid asset requirements that are not adequately remunerated contribute to widening the spread, particularly in times of high inflation.

rate system, measures to monitor and improve the operating efficiency of financial institutions, and legal, regulatory, and institutional changes to minimize the incidence of bad debts. The use of indirect instruments of monetary control instead of direct credit controls is also likely to improve the interest rate structure.

Another possibility would be to use the interest rate differentials prevailing in some other countries as a basis for a first approximation of the relationships between interest rates in the domestic markets. One should be careful, however, because country characteristics and government intervention could influence these relationships. Differences in country regulations that affect the operating costs of the financial intermediaries such as liquidity ratios, reserve requirements, access to rediscount window, etc., will result in different interest rate structures. In sum, while international comparisons are useful, one should take these differences into account when assessing the appropriateness of a given interest rate structure.

One measure to minimize the complications of setting up an appropriate interest rate structure is the reduction of the number of interest rates by eliminating (or at least streamlining) selective credit policies that artificially create new interest rate categories. 1/ It is also helpful to increase the integration of the financial markets, for example by moving toward universal banking--as opposed to narrowly defined specialized institutions.

Freeing all interest rates from government regulation is often advocated as a way to achieve an initial approximation of an equilibrium level and structure of interest rates. 2/ In practice, the conditions for optimality of this strategy are unlikely to hold strictly. However, many policy makers would argue that the application of this strategy would at least approach the optimal solution. That said, there is some concern about the speed in which this strategy can be implemented in the presence of macroeconomic imbalances and weak bank supervision. Given proper safeguards, this is, nevertheless, one of the best ways to eliminate the most important interest rate distortions.

4. Financial liberalization strategy

If a country's interest rate system is inappropriate and until conditions for free interest rates obtain, some kind of interest rate

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1/ Selective credit policies aim at granting credit to designated sectors (e.g., agriculture, exports, etc.) under more favorable conditions (amount, interest rate, etc.) than they would get in the absence of such policies.

2/ This requires that certain conditions obtain, namely the existence of perfect competition, absence of externalities and government intervention, well-behaved risk distributions and full information.

management policy may be necessary. This management can take various forms. The following are some alternatives:

The savings deposit rate can be used as the minimum basic rate and all other rates can be tied to it. The government would then intervene in the financial market by adjusting the savings deposit rate in line with the various criteria discussed earlier, while monitoring its effects on the interest rate structure.

Some governments have set a minimum deposit rate (or a structure of minimum rates by type of deposits) and a maximum lending rate, and over time adjusted the floor and ceiling rates to bring about a gradual liberalization of the system.

Still another alternative used in some countries is to set interest rate ranges for the deposit rates and lending rates separately, and allow the commercial banks to set rates within these ranges. The authorities would then widen these ranges over time so as to phase in the liberalization of the rates.

An alternative that relies more heavily on market forces, is for the government to fix the maximum spread between the average cost of funds to the financial intermediaries and their lending rate, while allowing them to determine the level of their interest rates. If the spread allowed by the authorities takes into account "normal" intermediation costs, risks, and profits (but not excessive monopolistic profits), the result, even in the presence of oligopolistic structures, could be an interest rate structure similar to the equilibrium rates under competitive conditions.

In any case, any move toward a more liberal interest rate regime should be associated with the development of appropriate monetary policy instruments that are capable of influencing the rates indirectly to reflect monetary policy objectives such as containing credit expansion or ensuring that divergences from world rates are not excessive (resulting in large capital flows), etc. In this regard, the appropriate choice of operating techniques of monetary policy become important to ensure monetary control without undue impact on growth, and to promote further development of financial markets. For example, raising the level of interest rates and containing credit expansion through increases in unremunerated reserve requirements would result in a larger spread between deposit and lending rates and greater distortions in credit allocation than alternative methods of containing credit expansion such as open market operations.

Interest rate liberalization has a better chance of success if the following key questions are addressed at the outset of the liberalization process:

a. Will there be adequate competition?

To ensure adequate competition, the interest rate liberalization would have to be accompanied by a properly phased freeing and homogenization of various portfolio regulations. In particular, as stated above, various selective credit policies based on below-market interest rates would have to be either eliminated or reduced in scope. In addition, policies toward mergers, licensing, and branching would have to be modified, taking into account possible economies of scale. Also, it is important to provide adequate incentives for borrowers to behave in an interest-sensitive fashion, by eliminating "soft" budget constraints that often apply to state enterprises, or enterprises that are closely linked to banks. Insolvent banks are another obstacle to competition. Government banks are often not as competitively minded as private banks. Rehabilitation and restructuring of banks may be an important step to increase competition in the banking system. Without such a range of policy changes to improve competition, interest rate liberalization could produce significant distortions in the level, structure, and responsiveness of interest rates.

b. Are the money market and monetary policy instruments adequate to influence the marginal cost of funds to banks?

The issue of instrument adequacy takes on particular importance in the context of interest rate liberalization. Typically, such liberalization would have to be accompanied by, or preferably preceded by, measures to strengthen the money and interbank markets, and to improve the effectiveness of monetary policy instruments. In particular, developing the technical ability to monitor the money market and intervene to stabilize and influence money market rates would become important, insofar as these rates serve as the marginal cost of funds to banks. In the absence of well-developed money markets, the authorities would have to develop and streamline primary issues of central bank or government securities and the rediscount mechanisms so that the primary issue yields or the rediscount rates can serve as the marginal cost of funds to banks. 1/

The development of market-based instruments of monetary control and a fostering of money markets are mutually supporting processes; the former requires the latter, and vice versa. Therefore, the introduction of market-based monetary control instruments should be paralleled by measures to strengthen money and interbank markets--such as reforms of laws governing issuance and transfer of short-term securities, introduction of new instruments, the development of well-capitalized and supervised dealers, etc. Often, the clearing and settlement system for payment transactions would have to be strengthened to support an active

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1/ For a survey of developing country experiences in adapting such market-related policy instruments, see Johnston and Brekk (1989).

money market. As money markets evolve, the indirect monetary control procedures can be progressively refined and day-to-day money-market intervention can become over time the primary means of both defensive and dynamic monetary policy implementation.

c. Will the market-determined lending and deposit rates respond rapidly to shifts in monetary policy and to developments in international interest rates and exchange rates?

In addressing this question, a key factor to be considered relates to the relative importance of domestic and international factors in the determination of domestic interest rates. The relative weight of the two factors is likely to undergo a significant change following the liberalization, and this must be closely monitored to judge the extent of monetary independence. To the extent that monetary policy can play a role influencing interest rates--depending upon the degree of openness to capital flows and other structural features--the speed of response of interest rates to monetary policy can become a critical issue.

In some countries, following interest rate liberalization, the authorities have introduced significant monetary reforms to develop money markets and strengthen monetary policy instruments. As a result, they have achieved the technical ability to influence money market rates or, more generally, the marginal cost of funds to banks. Nevertheless, bank response in adjusting the lending and deposit rates in line with the marginal cost of funds has been rather slow. This can frustrate policy-makers and cause doubts as to the wisdom of liberalization. Sometimes, some of the lending rates respond rapidly, but a wide range of lending rates and even deposit rates may respond sluggishly, often leading to large spreads, and in some cases to excessively and persistently high lending rates.

Based on the recent experience of countries undertaking interest rate liberalization efforts, it appears that key factors that cause such sluggish response include: inappropriate prudential limits on interbank borrowing, too restrictive limitations on the range of instruments and participants in the money market, the oligopolistic structure of the banking industry, significant differences in the maturity structure of assets and liabilities, excessive fluctuations in money market rates, and the inelastic demand for credit owing to large share of nonperforming loans, highly leveraged borrowers, and weak banking supervision. Some of the measures that can speed up the responsiveness to monetary policy are: appropriate changes in money market regulations, changes in policies on licensing banks, mergers, takeovers, and branching so as to promote greater competition, a strengthening of defensive monetary policy operations so as to stabilize money market rates, and policies to reduce segmentation in the loan markets (e.g. loans to related firms, discriminatory regulations on credit). In some cases, a financial restructuring of banks, supported by a strengthening of prudential regulations, may

become necessary to ensure the effectiveness of interest rate liberalization based on active competition.

d. Is the banking system sufficiently sound to face interest rate competition? Is the bank supervision mechanism sufficiently strong to anticipate the effects of liberalization and react to it in a timely and efficient manner?

If many institutions are too weak--with a large share of nonperforming loans and high operating costs--then, without adequate bank supervision machinery, unexpected failures of individual units can lead to systemic crises. Moreover, a large share of nonperforming loans in the system can significantly reduce the interest elasticity of credit demand; this is because if interest rates rise, nonperforming loans would tend to grow automatically insofar as banks try to keep these loans current by capitalizing interest; the resulting increase in nonperforming loans may offset any decrease in demand for performing loans as a result of the rise of interest rates. As a result, the flow demand for credit becomes fairly inelastic, leading to excessive increases or fluctuations in interest rates. These considerations suggest that a close review of the soundness of the banking system and adequacy of bank supervision and rapid reforms in these areas are critical for the effectiveness of interest rate liberalization.

A related issue in the liberalization of interest rates is the liberalization sequence for various segments of the market. Many countries liberalize segments of the financial system in steps. The sequence in which liberalization of nonbank institutions, private banks, state-owned banks, and government securities has proceeded varies from country to country. The appropriate sequence would depend upon the initial regulatory and institutional features. For example, some countries may initially liberalize only parts of the loan or deposit markets (e.g., short-term deposits) or free the rates of a select group of financial intermediaries (e.g., nonbank financial institutions). After they are assured of the soundness of these financial institutions and the ability of these institutions to be competitive, they proceed to liberalize other markets. In some socialist countries, interest rates in the enterprise deposit and loan markets have been liberalized first, while integrating the household and enterprise markets in the second stage. However, a gradual approach to liberalization may introduce distortions of its own and raises the question of the political sustainability of the process.

Another issue is possible imbalances resulting from maturity transformation by financial institutions. Institutions which lend long term at fixed rates but whose funds are mostly short term can be caught in the liberalization process. If interest rates increase, their cost of funds will increase while interest income will change much more gradually. During the interest rate liberalization process, the monetary authorities will have to pay close attention to this type of problem to avoid the possibility of a financial crisis. To reduce exposure to interest rate

risk, financial institutions which engage in maturity transformation should be encouraged to actively promote adjustable-rate loan contracts. However, these adjustable-rate contracts should be designed in such a way as to avoid unduly increasing the risk borne by borrowers and, thereby, default rates. Some of these techniques, such as interest caps, have been used in many countries, and may help strike the right balance between the interest risk borne by lenders and borrowers. The institutional solutions to the problem of long-term loans at fixed rates should ultimately deal with the question who should pay for the implicit subsidies following the liberalization of interest rates. 1/

5. Should the government try to influence interest rates?

Government intervention poses special problems because while some types of government intervention can improve the allocation of resources, other forms might be the dominant reason behind the misallocation of resources. Thus, it is important to separate those policies that may cause a distortion in interest rates without a corresponding improvement in the allocation of resources from those that may be beneficial.

Monetary policies are an important part of the array of policies a government can undertake. Thus, in most countries, even those which are market oriented, interest rates are influenced by the monetary authorities. It is important to note, however, that while in the past many countries chose to fix the interest rate by fiat, there has been a rising tendency for governments to influence interest rates indirectly through two main mechanisms: (a) financing of government deficits at market-determined rates; 2/ and (b) open market policies directed at influencing trends in monetary and credit aggregates to achieve given economic targets.

a. Government deficits and interest rates

Government budget deficits are financed either from the financial markets or by recourse to the central bank. 3/ If the funds are raised in the financial market in equal terms with the private sector, and insofar as the social return on the government's program financed by these funds exceeds the market rate, there need not be a misallocation of resources. A misallocation can arise more easily when the central bank accommodates the government's credit needs directly or when special incentives are given to hold government debt--such as tax incentives, use of these government liabilities to fulfill liquidity requirements, etc.

1/ Similar problems may result from large changes in exchange rates which often accompany or precede the financial reforms.

2/ While in this case the government allows interest rates to be market determined, it still can have a substantial impact on these rates because of the size of its financing operations.

3/ On the implications of this choice on the control of the money supply, see Coats and Khatkhate (1978).

If the central bank provides the credit accommodation, there is a redistribution of purchasing power in favor of the government that results in the crowding out of the private sector, particularly if there is a concomitant increase in prices. This is even more so when quantitative credit limits on private sector borrowing are simultaneously imposed to correct existing inflationary tendencies. The same is true when the crowding out effect is achieved through the increase in liquidity requirements to levels above those which might be needed for prudential reasons with the objective of tapping resources from the financial system at below-market rates.

Finally, in a number of countries, part of the Government deficit is reflected in central bank losses which have the same inflationary effects as central bank financing of the deficit. These central bank losses often result from the Government transferring to the central bank its foreign exchange risks or the central bank failing to charge proper interest rates on its loans to Government or preferred sectors of the economy. These policies clearly distort interest rates.

b. Open market policies

Open market operations can be conducted either in the primary market or in the secondary market. Many countries have used primary sales of some government securities--either central bank securities or treasury bills--as an instrument of monetary policy. By varying the timing and the volume of primary issues and by issuing them at market rates, it is possible to influence bank reserves and interest rates in the short run, which has provided an attractive alternative technique to influence short-run interest rates and monetary developments, in the absence of active secondary markets in these securities. This has also served as a transitional device to foster the development of secondary markets. Once a genuine secondary market develops, monetary policy can be implemented by operating in these markets. However, to the extent that the budget deficits are large, requiring massive financing, primary sales of government securities tend to be the dominant influence in the financial markets, seriously limiting the use of open market operations as an effective short-run policy instrument and at the same time distorting the level and structure of interest rates.

Therefore, an appropriate level and structure of interest rates can be brought about only if the government gradually reduces its budget deficit to a level that would permit it to borrow directly from the financial market in competition with the private sector, without crowding out the latter and without recourse to special regulations, such as high liquidity requirements. The elimination of such regulations, and the move from captive to active markets in government securities calls for a comprehensive approach to public domestic debt management that is well coordinated with monetary management.

Moreover, the government's intervention should be limited to the financing of expenditures with (social) rates of return above the market interest rate. 1/ Unfortunately, this basic rule is of limited practical utility, as the authorities do not normally know what the socially optimum interest rate is. Dasgupta, Sen, and Marglin (1972) suggest that since the overall social rate of return is unknown, the Government should proceed to estimate the internal rate of return on each proposed government project hoping that, over the years, the accumulated experience of comparing the internal rates of return of individual projects, and having to choose among them, would slowly evolve in a basic agreement among the policy makers regarding the level of the cut off internal rate of return. This rate, when a consensus is finally developed, will be the socially-optimum interest rate.

Open market policies can also be used to maintain interest rates constant without having to resort to direct regulation of financial intermediaries. Such a strategy would imply allowing the monetary and credit aggregates to find their own levels. What criteria could guide the authorities' choice between interest rate and monetary (or credit) aggregate targeting? The generally accepted view is that interest rates should be the preferred short-run and intermediate target when the dominant source of instability in the economic system is the financial sector (e.g., shifts in money demand due to financial innovations). The targeting of a monetary or credit aggregate should be preferred when real sector disturbances are more important (e.g., shifts in terms of trade, fluctuations in real demand for goods and services, etc.). In practice, of course, no simple rule of policy intervention can ensure economic and financial stability. In an economy that may be simultaneously subject to multiple disturbances of varying intensities, on which there is imperfect information, policy makers may prefer to adopt a policy of discretionary adaptation by continuously reviewing the settings of policy targets in the face of the most recent information. Although it would still be necessary to choose between interest rate or money supply targets at any point in time, this choice would generally be subsidiary to the more important task of setting the consistent target levels for these variables. Thus, even in a liberalized interest rate regime, the authorities must constantly take a view of the appropriate level of the interest rate and strive to achieve it. In addition, central banks generally attempt to smooth out short-term fluctuations in interest rates around their "fundamental" trends, partly to ensure that changes in trends are not obscured by day-to-day volatility. Such "defensive" monetary policy operations help to speed up the transmission of the effects of monetary policy, and enable smooth functioning of the financial markets.

1/ The social rate of return may differ from the rate of return that a private investor might attribute to a project. In the social rate of return all the benefits and costs of the projects are computed, even those that do not accrue to the owner of the project.

6. Concluding remarks

Both in market and in centrally planned economies, it is important to avoid distortions in relative prices, if only to ensure the optimum allocation of resources. For this reason, an interest rate reform should be a component of any policy package aimed at improving the performance of these economies. First, it should be well understood that lower interest rates will not lead to additional investment unless savings are forthcoming. Second, expected real interest rates must be positive in order to prevent unproductive hoarding of goods or the financing of economically unsound projects. Third, interest rates, after allowing for exchange rate expectations, should be set with due consideration to interest rate differentials vis-à-vis world financial markets, taking into account the economy's degree of openness to capital movements. Fourth, whenever public sector dependence on the financial markets is due largely to fiscal imbalances, the servicing requirements of the government debt become a major stumbling block in the path of interest reform. Thus, interest liberalization will have to go hand in hand with an improvement in the financial position of the government. Only after its borrowing requirements are reduced to manageable levels will the government be able to engage in a meaningful interest rate policy. Fifth, in centrally planned economies, as well as in countries where the public sector is a major borrower, it is important that the government projects that are carried out yield (social) rates of return that exceed those of the projects (private and government) that are refused financing. The calculation of internal rates of return for each project can assist policy makers in making rational choices among competing projects. In market economies, the socially optimum rate might be assumed, as a first approximation, to be equal to the rate that the market would freely determine in competitive conditions. The government has an important role in promoting competition, and also in ensuring that its financing operations do not distort market rates.

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