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Coordinating Public Debt and Monetary Management During Financial Reforms

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Abstract

The paper analyzes the interplay between public debt and monetary management during financial reforms, and provides suggestions on collaboration between the central bank and the treasury to achieve common objectives. It discusses monetary policy and public debt at the onset and through different phases of a financial reform and emphasizes that many objectives of public debt and monetary management are mutually supportive. It recommends the setting up of units to deal with public debt issues both at the treasury and the central bank, as well as a committee to coordinate public debt and monetary management.

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1. Introduction

Financial reform programs are now being implemented in a number of countries, including several which formerly relied on central planning. These reforms have important implications for public debt management, and conversely, debt management can contribute to, or impede, the development of financial markets. Moreover, without active financial markets, and, particularly, without government security markets, there are very few options for monetary management. The challenge that many countries face during the financial reform process is how to coordinate monetary and public debt management so they are mutually supportive. The purpose of this paper is to analyze the interplay between public debt and monetary management during the financial reform process and provide suggestions on how the central bank and the treasury, working together, can avoid pitfalls and maximize the benefits of financial liberalization. 1/

Financial reforms vary from country to country, but in general they imply measures designed to make the financial sector more responsive to market forces and more competitive, including: (a) steps to make interest rates more market oriented either through outright deregulation or through "managed" liberalization; (b) increased reliance on indirect monetary policy instruments as opposed to direct credit controls; (c) measures to reduce market fragmentation either by allowing existing financial institutions to provide a broader range of financial services or by increasing competition among financial institutions; and (d) measures to rehabilitate weakened financial institutions to make them competitive. 2/

These financial reform measures almost invariably change the debt management strategy of the authorities for the following reasons. First, in many countries the budget deficit is financed by borrowing from the central bank at very low rates or by selling government securities to captive buyers. Steps to make interest rates market determined and to avoid distortions in the interest rate structure are likely to affect the cost of government financing, as well as the optimal characteristics of the government securities used to finance the budget deficit. Second, the use of open market policies as one of the main instruments of monetary policy has implications for debt management. Third, the rehabilitation of financial institutions with large portfolios of nonperforming loans often requires financial contributions

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1/ This paper deals exclusively with domestic debt, but, needless to say, coordination between the central bank and the ministry of finance is equally important regarding external debt because there is also a strong link between external debt and monetary management.

2/ For a discussion of the role and importance of financial reform in economic development, see Fry (1988) and the World Bank (1989).

from the government. This has traditionally taken the form of a swap of government securities for doubtful and substandard loans. Such a procedure clearly has implications for the public debt. Fourth, the level and characteristics of the public debt have implications for the financial reforms by limiting the policy alternatives open to the authorities. Finally, most of the objectives of public debt and monetary management are common or complementary, as can be seen from Table 1 below.

Table 1. Objectives of Public Debt and Monetary Management

Public Debt Management	Monetary Management
1. Minimizes the interest cost of deficit financing, while relying on voluntary, market-based means to finance the government.	1. Aims at achieving the domestic and external stability of the national currency.
2. Contributes to limit the inflationary impact of deficit financing	2. Contributes to limit the inflationary impact of deficit financing.
3. Helps the development of money and capital markets, and thus the future capacity of the government to finance its operations.	3. Helps the development of money and capital markets, and thus the future capacity of the central bank to conduct open market policies.
4. Ensures that public sector borrowing is carried out at rates that fully reflect the opportunity cost of resources.	4. Prevents systemic financial sector crisis resulting from isolated real or financial sector events.
5. Avoids short-term disruptions in financial markets resulting from public debt rollovers and large changes in outstanding debt.	5. Avoids short-term disruptions in financial markets resulting from public debt rollovers and large changes in outstanding debt.
6. Provides the central bank with the tools to carry out open market policies.	6. Develops and uses market-based tools for monetary management

Thus, the interconnections between financial reforms and public debt management strongly suggest that it would be unwise to undertake financial reforms without due consideration of fiscal policy--and that it would be foolish to formulate a public debt strategy that ignores the importance of debt management for the financial sector performance and monetary policy implementation.

Financial reforms are sometimes divided, for expository reasons, into three phases: a pre-reform phase, a transitional phase, and a consolidation phase. The remainder of this paper is organized as follows. Section 2 portrays the typical state of public debt management at the onset of financial reform. The transitional and consolidation phases of the financial reform are discussed in Sections 3 and 4, respectively. Section 5 presents the conclusions of the paper.

2. Public debt and monetary management in the pre-reform phase

At the outset of the financial reforms, the public debt situation in most countries is such that: (a) the level of securitized government debt is relatively small and most of the government debt is composed of central bank advances; (b) most of the government securities are sold to captive buyers--such as banks which may be required to purchase government securities as part of their liquidity requirements, or pension funds and insurance companies, which may have to invest some of their liquid funds in government securities; (c) sales of government securities are mostly on a "tap" basis; (d) interest rates on government securities are often substantially lower than market-determined rates; (e) there is no secondary market for government securities; and (f) the liquidity of the government securities is either nonexistent or provided exclusively by the central bank.

There are a number of problems with this state of affairs which will have to be solved in parallel with the financial reforms. In particular:

(a) government securities cannot be used by the central bank as an instrument of monetary policy because the government does not allow the central bank to do so, or because the money market is not yet developed; for those reasons, direct credit controls tend to be the predominant monetary policy instrument;

(b) interest rates on government securities cannot be used as the reference rate for other interest rates in the economy since they are not representative rates;

(c) since most interest rates are not market determined, it is difficult for the government to decide on a structure of interest rates that adequately takes into account differences in the characteristics of each type of security;

(d) the cost of borrowing to the government does not reflect the opportunity cost of funds in the economy, thus creating a tendency toward misallocation of resources;

(e) the existence of captive markets for government debt, creates market segmentation and interest rate distortions; moreover, depending on how reserve and liquidity requirements are specified, they may increase interest rate fluctuation; and

(f) government securities are seldom used as collateral for financial transactions.

As part of the financial reform program, governments should embark on a new public debt strategy. Essentially, this means shifting to a system in which economic agents voluntarily hold the public debt. In addition, the instruments used to carry out monetary policy will need to be adjusted to the new environment.

A major hurdle in convincing the government to move ahead with a market-oriented public debt strategy is, of course, higher interest costs. In this context, it may be useful to explain to government that what may seem to be unjustifiably high interest rates on government securities may be the cost that the government has to pay to (a) restore market confidence in government paper after a long history of reneging on its commitments; and (b) create an active market that will allow the government to finance its future deficits with less trauma and at more reasonable interest rates. There are at least two good reasons to charge market rates on government debt: to ensure that policy makers are aware of the opportunity cost of funds; and to prevent the emergence of quasi-fiscal deficits and central bank losses, which are as expansionary as budget deficits. 1/

Also, it should be kept in mind that the central bank is often the main beneficiary from higher interest rates on government securities. While this often causes heated discussions between central bank and treasury, it seldom has much economic meaning being just a transfer of resources within the government. In particular, interest payments to the central bank are not a true cost to the government as long as central bank profits are distributed back to the government. While I realize this is not always the case, I see no good reason why the

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1/ Central bank losses often arise from the fact that government debt is one of the main central bank assets, but its yield is often poor by comparison with alternative assets.

central bank should not transfer its profits expeditiously to the government at the close of the fiscal year.

The main objective of the initial phase of the financial reform is to set up the preconditions for a smooth and successful financial liberalization process. This phase generally includes (a) measures to initiate the macroeconomic adjustment of the economy, including steps to reduce the budget deficit; (b) measures to improve bank supervision mechanisms; and (c) the establishment of a "coordination committee" with participation from the ministry of finance and the central bank to coordinate monetary policy and debt management issues.

The coordination committee takes different forms in different countries, but is normally composed of a handful of officials from the ministry of finance (treasury) and the central bank. The committee should be charged with:

(a) the conduct of a regular debt planning exercise aimed at setting quarterly and yearly targets for the sale of securities over the succeeding 12-month period; these targets should reflect government cash-flow requirements, the demand for government securities and monetary policy considerations;

(b) an assessment of the demand for government securities, both short-term issues, which would be held mostly to meet liquidity management needs of financial institutions, and long-term bonds, whose major customers are likely to be pension funds, insurance companies and other institutional investors. The analysis of the demand for long-term securities should take into consideration the actuarial hypothesis under which these institutions are operating to gauge the minimum interest level that would be required to make these schemes viable;

(c) consultations with the financial institutions to gauge their preferences regarding the characteristics of a new short-term instrument to be sold at auction; in particular, decisions must be made on the term of the instrument; whether there would be a coupon; minimum denomination of bonds; auction procedures; frequency of the offerings; bearer or registered securities; physical issuance of bonds and bills; dealer duties and privileges; and information provided to market participants;

(d) requesting studies and making final recommendations on related issues with a bearing on the development of the securities market, such as the regulatory/supervisory framework for trading in securities, and settlement arrangements for government securities.

Answers to some of the questions posed in item (c) above seem to be emerging from the experiences of a broad cross-section of countries. Again they emphasize the need for coordination between public debt and monetary management. For example, in most countries with underdeveloped financial markets, the sale of short-term paper provides a natural starting point for money market growth. In those countries, the risk premium on short-term paper tends to be, on average, significantly lower than that of long-term paper, making placement of short-term paper less costly to the government. 1/ Open market policies traditionally use short-term market instruments because markets in these instruments are more likely to be broad and liquid. Therefore, the early development of a short-term market in treasury bills--and concomitant liberalization of short-term rates--may be a good debt management strategy, but may also be a smart move to speed up the introduction of open market operations.

The advent of computers has made it possible for debt managers to offer securities to the public in any denomination at minimum cost. The traditional wisdom was that securities held by a large number of small investors should be issued in physical form, while securities held by a limited number of large investors and financial institutions should be issued in book-entry form. However, as long as market participants cannot transfer securities against payment in a manner that is expeditious and secure, open market policies would not be possible. Fortunately for monetary policy managers, it seems that people's resistance to computer-based systems for government securities is quickly disappearing. The conclusion is that debt managers should favor computer-based, book-entry systems whenever possible as this would greatly facilitate a rapid turnover of government securities, a requirement for open market policies. Also, a book-entry system allows a streamlined link to the payments system, another factor that may be crucial when using government securities actively for monetary policy purposes.

Finally, most countries conducting securities auctions have come to the conclusion that it is advantageous to have a regular schedule of auctions as it helps market participants improve their liquidity management. In deciding the frequency of auctions, attention should be given to the need to provide an incentive for trading in the secondary market between auction dates, and to allow adequate time for the preparation of the auction. The decision should also take into account any seasonal factors which may be important for liquidity management, such as test dates for reserve or liquidity requirements. Normally, the frequency of

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1/ The risk premium is relatively higher in long-term than in short-term securities in this phase of the market because financial expertise is not yet well developed and macroeconomic and political uncertainty is high. Note that the point I am making here is not that the yield curve is upward sloping but that its slope is steeper than under more normal circumstances.

the auctions increases over time as the executing agency and the participants gain more experience and secondary transactions expand.

3. Public debt and monetary management during the transitional phase

The transitional phase of the financial reform generally involves making interest rates more responsive to market developments. Measures that are often undertaken during this phase include (a) freeing interest rates or at least managing them more flexibly; (b) placing initial offerings of government securities on an auction basis to develop a money market and to permit the central bank to intervene in the market later, and (c) building up the central bank's own portfolio of government securities (if needed). Normally, direct credit controls are still retained in this phase, but indirect monetary policy instruments are being developed and the authorities are actively engaged in evaluating their own capacity to undertake monetary policy without the use of direct credit controls.

It is important to emphasize that the development of markets for government securities not only helps monetary policy but helps fiscal policy and the development of financial markets in general. 1/ The government is typically the largest and most creditworthy borrower, so that government securities are relatively marketable and liquid. Once the market for government securities develops, then the market for somewhat less creditworthy instruments can follow.

During the transition phase, government securities are first used for monetary policy purposes. Government securities are sold at auction (a) to allow interest rates for government securities to reflect market trends; (b) to provide a reference rate which can be used to set other interest rates; and (c) to contribute to the control of reserve money.

A key factor in the quest to use government securities as an instrument of monetary policy is the existence of a solid database on: (a) the amounts of government securities maturing at each point in time; (b) the characteristics of each type of government security outstanding; and (c) the cash flow requirements of the government. Combined with information on the liquidity situation of the banking system and other major investors, this information allows debt and monetary policy managers, working together, to maximize their chances of finding an optimal strategy to minimize the cost of the debt without complicating monetary management.

1/ For a discussion of how innovations in debt management made possible the financing of relatively large amounts of government debt in the case of Italy, see Caranza (1991).

A critical question during this phase is what to do if the government financing needs exceed the amounts that the central bank feels should be placed with the market. If this is a one-shot event, the central bank may wish to absorb the difference, preferably by purchasing the remaining securities at the average interest rate of the auction. 1/ If, however, there is a chronic divergence between the capacity of the market to absorb public debt placements and the financing needs of the government, there is an obvious need for the government to reduce its deficit to a more manageable size. Sustained absorption of government securities by the central bank will increase the money supply, and is likely to result in inflation and balance of payments problems.

The amount of securities offered at each auction will have to be decided carefully by the coordination committee to ensure that monetary policy objectives are met. At this point in the development of the money market, the authorities' influence on the money market derives predominantly from their primary placements. There is not yet a secondary market that would permit the central bank to smooth out seasonal liquidity movements. Thus, the amount of securities placed at each auction can be expected to vary according to the liquidity situation of the banking system at the time of the auction. While it would be useful from the market development viewpoint to be able to standardize the size of the issues, this may have to wait for the final phase of the reforms.

During the transitional phase, the government may also want to consider converting all or at least part of its debt to the central bank into marketable securities bearing market-related interest rates to build up the stock of marketable instruments at the hands of the central bank to allow it more flexibility in the conduct of monetary policy.

Another important question during this phase is to what extent the government (and the central bank) should allow interest rates on the government securities to increase, thus raising the cost of the public debt to the government and, most likely, also increasing interest rates

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1/ This would also help the central bank to build up its own portfolio of securities.

in the economy as a whole. 1/ Irrespective of the intermediate target chosen by the authorities, the use of indirect monetary policy instruments means that such a target should be achieved by market intervention, and not by fiat. More than anything, it is the use of market mechanisms to influence the economic variables that is at the heart of the financial reforms.

Other considerations to be taken into account when using government securities to influence interest rates include:

(a) A government security is normally a liquid and risk-free instrument, and as such should have an interest rate which is relatively low in comparison with other rates in the market. If this is not the case, this may be because of a lack of competitive behavior in the financial markets or because of other distortions that need to be identified. 2/ Whenever such distortions are present, efforts will have to be taken to eliminate them.

(b) Sudden interest rate movements can result in large capital losses for those holding securities, particularly if they are long term. For that reason the authorities may want to "lean against the wind" to minimize short-run, sudden, interest rate movements while allowing the rate to find its own levels gradually. It should be realized, however, that such efforts can only be successful in the short run, and that there may be occasions in which the authorities may prefer a more speedy adjustment path toward equilibrium rates.

A major concern during this phase is to ensure that all instruments of monetary policy are working in the same direction. For example, while in the early stages of financial sector development, the central bank is often a major source of funds to the financial sector, the elimination of financial repression often expands the opportunities for banks and other financial institutions to raise deposits from the public. Thus, it is reasonable at this juncture for the central bank to

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1/ For a discussion of interest rate policies during periods of financial liberalization, see Leite and Sundararajan (1990). It should be noted that while most countries use monetary aggregates as intermediate targets, nothing that has been said in this paper should be construed as meaning that interest rates cannot be used as an intermediate target of monetary policy. What certainly cannot be achieved is a simultaneous control of both interest rates and monetary aggregates; to the extent that the authorities choose to target interest rates, they will lose control of the money supply.

2/ It may also be a sign that investors mistrust the government and fear default.

change its rediscount policy to limit it to the provision of liquidity to the market in a lender-of-last resort basis only. Moreover, the central bank may want to limit its rediscounts to short-term government securities. The central bank rate should be such as to provide a profit opportunity for financial intermediaries willing to engage in secondary market transactions. An adequate discount policy is also of paramount importance to encourage banks to use government securities as collateral for their own interbank transactions. 1/

Other instruments that sometimes need to be adjusted to the new policy framework are reserve and liquidity requirements. Reserve requirements should preferably be set in such a way that they do not result in large interest rate swings around given dates when reserve requirements need to be met. It is much better when reserve requirements are met on an average basis allowing some flexibility to the banking system and minimizing interest rate movements arising from this source. It is also important to limit excess reserves of the banking system to a minimum to ensure the predictability of the monetary policy transmission mechanism. The elimination of the initial excess reserves may require the issuance of special bonds to sterilize them.

4. Public debt and monetary management during the consolidation phase

During the consolidation phase, the main objective of the financial reform is to achieve an active and sufficiently deep secondary market in monetary instruments which would permit the use of open market policies as the main instrument of monetary policy. Other desirable targets are a broadening of the instruments available in the financial markets by the gradual introduction of instruments bearing different characteristics and maturities, including the development of capital markets; and further efforts to increase competition by facilitating the entry of new institutions in the financial markets.

The placement of treasury bills will be done by auction. Once a secondary market has developed, the central bank will intervene in the securities market mostly through purchases and sales in that market, and not by varying the size of the primary issues. In fact, a long-term goal should be to regularize and standardize issue schedules to make it easier for the market participants to establish a consistent bid strategy based on their analysis of market developments. The central bank should also consider the use of repurchase and reverse repurchase agreements whenever it needs to make short-term, reversible, adjustments in financial sector liquidity.

1/ The existence of an adequate collateral for interbank operations may be a precondition for the development of an active interbank market in some countries where the leading banks may not otherwise be prepared to engage in uncovered transactions with the smaller and weaker banks.

During this phase, the financial markets should already provide a reasonable liquidity to the government securities without much intervention from the central bank. The liquidity of the securities should be provided mostly by dealers who stand ready to purchase the securities at a market-related discount rate. Access to central bank discount will, for the most part, be limited to dealers.

At that point, the government may want to increase its efforts to place longer-term securities. Several arguments justify such a strategy: (a) the need to engage in frequent debt rollovers may be administratively inconvenient and may contribute to magnify interest rate fluctuations or to generate a confidence crisis; (b) it seems reasonable to finance projects which will take some time to mature by using long-term debt; (c) there is a considerable demand for risk-free, long-term savings instruments which could be tapped by the government.

Initially, the authorities may not want to use an auction system to place long-term securities, particularly if interest rate fluctuations are marked. Instead, the authorities may want to postulate a yield curve which has a "normal" shape, and price the long-term securities accordingly. The existence of a secondary market for long-term securities will be an important factor in increasing the demand for such securities since it limits the liquidity costs of holding them.

5. Conclusions

The main conclusion of this paper is that without close coordination between the central bank and the ministry of finance on public debt and monetary management issues the road to financial liberalization is laden with obstacles. The ministry of finance has primary responsibility for public debt management and the central bank for monetary management. The existence of a coordination committee is critical in ensuring a forum for discussions between the two institutions on matters of public debt and monetary management.

In most countries, the central bank acts as financial adviser and agent for the government. For that reason, it is often the case that the central bank is in charge of all operational matters regarding public debt management including maintaining the book-entry system and a database on outstanding securities, as well as all matters related to auction procedures. Market intervention and regulatory issues are primarily central bank functions directly related to its responsibilities in monetary management and supervisory issues. The ministry of finance, however, normally retains final responsibility for decisions on the amounts, types and maturity of government securities that will be placed in the primary markets.

Both the ministry of finance and the central bank should have units in charge of public debt management. In the ministry of finance, the unit should be part of the treasury. This unit should be responsible either for making final decisions on placements of securities after consultation with the central bank, or with monitoring the central bank performance as debt manager if this task has been fully delegated to the central bank. This unit should also centralize information on the financing needs and cash flow of the government that will be used for purposes of public debt and monetary management. The central bank will also need to have a unit in charge of operational matters related to the placement of securities. This unit will be in charge of maintaining information on public debt, monitoring developments in government financial markets and advising the ministry of finance accordingly. It will also conduct the placement of government securities. Operations on the secondary market, however, require day-to-day contacts with market participants and should be conducted by a separate central bank unit in charge of monetary policy implementation.

Irrespective of institutional arrangements, there is little that can be done to implement financial reforms if the government is not willing to accept two basic principles: (a) that it should pay market-related rates on its borrowing and (b) that it pays to incur a short-term cost in developing an active financial market in government securities to insure longer-term access to these markets at reasonable rates in the future.

Central bank independence is very much in vogue. There may be a case, however, for espousing the cause of "treasury independence." By that I do not mean a Treasury that is independent of the government, but one that is independent of the central bank. Treasury independence is achieved when the treasury is able to finance the government without having to use either central bank financing or regulations to force economic agents to hold its securities. 1/ There is substantial evidence indicating that the coordination between public debt and monetary management becomes much easier as the treasury acquires its independence. However, treasury independence can only be achieved if governments move decisively to reduce the budget deficit to manageable levels.

Finally, it may be worth repeating that it is not only the budget deficit that places a burden on monetary management. The reverse is also true. Poorly conceived monetary instruments, such as reserve requirements and rediscount policies can make it extremely difficult to develop a sufficiently deep and active government securities market.

1/ The day-to-day cash management of the treasury may require the use of a short-term overdraft facility with the central bank. Access to this facility should be clearly limited.

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