Financial Repression and Economic Development

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Many developing countries impose legal restrictions on financial intermediaries. Interest rate ceilings on bank deposits and loans, compulsory credit allocation, excessive reserve and liquidity requirements, and various types of prohibitions on international financial transactions are among the government-mandated requirements that serve to “financially repress” economies in less-developed countries (LDCs) (Ronald I. McKinnon 1973; Edward S. Shaw 1973).

Advocates of such restrictions often claim that financial repression offers two advantages: (1) more effective control over the money supply and thus better control over inflation and (2) a better allocation of credit, the assumption being that the government is more efficient than the private sector in allocating credit, at least in the early stages of economic development. Proponents of financial liberalization, on the other hand, stress the damaging effects of financial repression policies on economic growth and welfare. They advise, in contrast, channeling credit allocation through financial intermediaries and “liberalizing” these intermediaries and the markets in which they operate as a means to achieve rapid growth and development.

Recently, however, these policy recommendations have come under closer scrutiny. Developments in the financial intermediation literature have highlighted some of the weaknesses of earlier recommendations of financial liberalization, which for the most part ignored government deficit-financing requirements, were derived from models assigning roles that were not well specified to financial intermediaries, and failed to address general equilibrium considerations. More recent analyses of financial repression have
reevaluated the feasibility and desirability of various types of financial liberalization strategy. Some of these studies argue that a fully liberalized financial sector may be neither possible nor desirable in a developing economy. Some also question the growth impetus ascribed to financial intermediaries. For instance, these studies suggest that developing countries’ aggregate output as measured, for example, by gross domestic product (GDP) may not necessarily grow more under a regime of financial liberalization than under one characterized as financially repressed (see, for example, Valerie Bencivenga and Bruce Smith 1991).

It is not the intent of this article to challenge, per se, the view that financial liberalization should be the dominant or preferred policy prescription for long-term economic growth and development in LDCs. It does seem important, however, to temper the popular view among many development specialists that a policy of financial liberalization is optimal in all developing countries at all times without qualification. The discussion presents a framework for analyzing the potential that financial repression may have to contribute to economic welfare.

The analysis first lists some of the adverse effects of financial repression cited by early proponents of liberalization. It then presents an overview of some of the chief challenges to the financial liberalization policy. In this regard, some economists take issue with the claim that credit allocation through financial intermediaries may not necessarily increase efficiency. Yet another challenge comes in the form of empirical evidence that fails to find strong support for the claim that increased levels of financial intermediation are superior in terms of generating growth and development in LDCs. The article considers some welfare and growth implications of financial repression as highlighted in the recent literature examining financial intermediation. It explores the condition underlying the view that some amount of financial repression can be welfare-enhancing in an LDC that is faced with the need to finance large government deficits.

**Adverse Effects of Financial Repression**

Opponents of financial repression such as McKinnon (1973, 1991) and Shaw (1973) stress the damaging effects such policies can have on economic growth and development, noting that “these mandated restrictions interact with ongoing price inflation to reduce the attractiveness of holding claims on the domestic banking system. In such a repressed financial system, real deposit rates of interest on monetary assets are often negative, and rates also become highly uncertain. Thus, the demand for domestic money—broadly defined to include savings and term deposits as well as checking accounts and currency—falls as a proportion of Gross National Product” (McKinnon 1991, 11). In short, a major side effect of financial repression is a drop in an economy’s savings.

Followers of the McKinnon and Shaw school also hypothesize that repressing a country’s financial system results in the fragmentation of its domestic capital market, with highly adverse consequences for the quality and quantity of real, or inflation-adjusted, capital accumulation (investment). More specifically, these researchers note that a financially repressed economy is likely to be adversely affected in the following ways:

1. The flow of loanable funds through the organized banking system is reduced, forcing potential borrowers to rely more on self-finance.
2. Interest rates on the reduced flow of bank lending vary arbitrarily from one class of favored or disfavored borrower to another.
3. The process of self-finance within business enterprises and households is itself impaired. If the real yield on deposits, as well as coin and currency, is negative, firms and families cannot easily accumulate liquid assets in preparation for making discrete investments. Socially costly inflation hedges look more attractive as a means of internal finance.
4. Significant financial deepening outside the repressed banking system becomes impossible when firms are dangerously illiquid and/or inflation is high or unstable. Robust open markets in stocks and bonds and intermediation by trust and insurance companies require monetary stability. (McKinnon 1991, 11-12)

In short, financial repression as seen by the McKinnon and Shaw school leads to premature liquidation of illiquid assets, high inflation rates, and credit rationing with a consequent negative impact on economic growth and welfare. Not surprisingly, the prescription offered almost universally by opponents of financial repression is the removal of onerous legal restrictions. Their view is that by eliminating excessive reserve requirements, interest rate ceilings, and mandated allocations of cheap credit, higher economic growth and overall welfare gains should be realized in the economy. In this context, it is easy to understand why the dictum of
financial liberalization has been prominent among the policy advice given to LDCs and why such advice, until recently, went virtually unchallenged.

Challenges to the Liberalization Prescription

The Neostructuralist Critique. To be sure, there is little consensus among development economists regarding the macroeconomic impact of fueling development exclusively through financial intermediaries. In particular, the view that credit allocation through intermediaries necessarily results in higher real economic growth has recently been challenged in the development literature. According to the so-called Neostructuralist school, there is reason to believe that individuals confronted with legal restrictions that reduce their welfare will circumvent these restrictions by engaging in informal or unofficial transactions (see, for example, Edward F. Buffie 1984, Sweder van Wijnbergen 1985, or Lance Taylor 1980). These informal transactions give rise to markets commonly referred to as “black markets,” “the underground economy,” and “the informal sector.”

Development economists have become increasingly aware of the potential importance of informal markets as their scope has increased, and it is often conjectured that these markets do a good job of allocating credit. That is, to the extent that these informal markets, unhindered by onerous legal restrictions, are efficient relative to the repressed official markets they replace, the economy may actually enjoy faster rates of growth. For example, the Neostructuralists emphasize that the process of financial liberalization may actually have negative macroeconomic effects if it draws funds away from the informal markets, which have no reserve requirements, into the formal banking sector, which does.

Some Empirical Evidence. The empirical evidence on the efficacy of the liberalization prescription is best described as less than conclusive. Although the less repressed economies of the world generally exhibit high real rates of economic growth, there are counterexamples to the pattern. Yung Chull Park (1993), in examining growth in South Korea and Taiwan during the 1980s, noted that these countries’ experience does not support the view that financial liberalization is the most effective solution to the problem of underdevelopment. During the period studied, both countries operated under various forms of financial repression and closedness, and both continued their financial expan-

sion, as measured by various ratios of financial assets to gross national product (GNP) or GNP growth or by the rate of industrialization.

Rudiger Dornbusch and Alejandro Reynoso (1989), in contrasting the Asian and Latin American experiences, noted that the South Korean economic reform program of the late 1970s and early 1980s was successful in generating a high rate of real economic growth for reasons other than financial liberalization. Other factors, including fiscal reforms, played a significant role. They conclude that financial liberalization cannot be clearly singled out as the leading determinant of the country’s successful economic performance. Dornbusch and Reynoso’s study also examined the economic performance of a cross-section of forty-one developing countries and was not able to establish that a higher degree of financial liberalization or financial deepening is positively correlated with economic growth. On the basis of these findings, the authors suggest that the growth effects attributed to financial liberalization may well be “episodic” and not widely supported by empirical evidence.3

Financing Government Programs: The Need for Seigniorage

A key feature characterizing financially repressed economies is the need to finance large government deficits, as measured by the ratio of the government deficit to GDP. This need, and the belief that tight control of the financial sector allows government to finance its deficits while restraining inflation, plays an essential role in the design of financial repression measures in an economy.

Government involvement in developing economies takes many forms. One common example is the direct allocation of subsidized credit by LDC governments, typically based on the belief that private commercial banks allocate credit in a largely speculative and socially undesirable fashion. For instance, in the case of Mexico, public authorities were apparently concerned with the manner in which commercial banks allocated funds as early as 1935. According to David H. Shelton (1964), a distinction between productive and unproductive uses of funds had begun to be drawn by 1935 when the new Mexican banking law declared, “As the funds available in the money market have continued to increase... it has been the constant preoccupation of the government to channel these funds in such a way as to assure their application to productive purposes and

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developmental purposes, removing them consequently from inactivity or from speculative operations, both of which are sterile and prejudicial to economic life.” Similar programs of government involvement in direct subsidized credit allocation have been implemented in Nicaragua, Colombia, and Yugoslavia, among other developing countries.

As well intended as these credit allocation programs were, it has generally been the case that tax collection procedures were unable to generate sufficient revenues for financing them. As a result, sizable budget deficits were incurred and monetary policy was called on to fill the void resulting from the lack of fiscal discipline. These developments in turn created a demand on the part of government to create “seigniorage.”

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Economists sometimes call the revenue garnered from government’s money creation inflationary finance. However, it is traditionally known as seigniorage—a word derived from the French word seigneur, which means lord.4 In medieval times one of the rights of the feudal lord was to coin money that his subjects had no choice but to accept, no matter how little gold or silver it contained. Seigniorage was the profit the lord made by exercising this right. Today, seigniorage is extracted when the government periodically increases the amount of fiat money in the economy.

Seigniorage is a type of tax, which, because it is based on inflation, is often referred to as an inflation tax. Like other taxes, it has two components, a tax rate and a tax base. The inflation tax rate is simply the rate of inflation or, in the case of growing economies, the sum of the inflation rate and the rate of growth. The inflation tax base is the real value of private holdings of currency. Thus, the larger the value of fiat currency holdings, the larger the inflation base; the higher the inflation rate, the higher the inflation tax rate.

To illustrate the way the tax works, assume that the government hires a contractor but does not want to raise conventional taxes to pay for the services. It can issue fresh currency to do so. At first, while there is more nominal money in circulation, the decision to issue money has no effect on the real value of holdings. However, the addition of the new currency means that each dollar in circulation is worth less. In fact, the value of the contractor’s services obtained via the new issue of money equals the purchasing power loss of currency holdings.

Faced with a direct tax, people try to avoid it by shifting to activities with a lower tax burden. Similarly, as inflation picks up, individuals will try to economize on their holdings of fiat currency. Holding less fiat currency in turn brings down the tax base and consequently the revenues the government can earn by increasing the inflation tax rate. As with any other tax, governments have to grapple with a trade-off between the inflation tax base and rate.

Nonetheless, it is easy to see why the inflation tax may prove more appealing than ordinary taxes to a country’s rulers. Monetary expansion is a much easier method of financing government expenditures. The money is simply printed or appears as the remitted profits of the central bank, which uses reserves to hold government securities. No government tax collectors are required, and government expenditures appear to be financed at little cost to the public. Legislative approval is often not required. On the other hand, regular taxes—income taxes, excise taxes, and so forth—often must be wheedled out of parliaments or congresses. Furthermore, these taxes must be collected, and the act of collection calls attention to the drain on the country’s resources that the increased government spending entails.

Seigniorage extraction is a less problematic method of raising revenue. It can be accomplished, for example, by imposing large reserve requirements on commercial banks. Essentially, these reserve requirements force commercial banks (and thus, indirectly, the public at large) to hold government liabilities such as currency or government bonds beyond the point they would otherwise consider optimal. Given that these liabilities pay zero or below-market rates of interest, these forced holdings of fiat currency cause a de facto increase in the seignorage.

If, for example, the government operates with 100 percent reserves—that is, every dollar deposited with the bank must be held as reserves at the central bank—then whenever the nominal money supply increases by a given quantity, the government has exactly this additional
quantity of seignorage base. The higher reserve requirements are, the greater is the government’s potential to extract seignorage. As will be discussed below, reserve requirements play a key role in determining the extent to which developing countries’ economies are financially repressed and influence the speed at which the economies can be liberalized.

Many, if not most, LDCs and countries in transition do not have effective taxation programs. They operate with extensive government involvement in the economy and have central banks that are easily pressured into supporting inflationary financing programs. In the prototypical repressed economy, the central bank is frequently called upon to accommodate a loose or incoherent fiscal policy. As discussed in, for example, Shelton (1964) and Marco Espinosa (forthcoming), open market operations tend not to be a viable option for conducting monetary policy in these economies because they lack liquid and efficient markets for government securities or because governments do not want to pay market rates of interest. Thus, the monetary authority, in accommodating the government’s fiscal deficits, is forced to rely almost exclusively on reserve requirements, resulting in inflationary finance.5

By imposing large reserve requirements on financial intermediaries, the monetary authority, and eventually the government, avails itself of part of the economy’s savings that would otherwise remain with financial intermediaries. Given that this financing scheme extracts real revenues (resources) from the public by issuing currency, the larger the quantity of currency in the hands of the public and the banking sector, the larger the base from which seigniorage can be extracted. This relationship helps explain why LDC economies with large government deficits have also tended to have high reserve requirements. The larger the portion of the government’s deficit to be financed using this financing scheme, the larger the legal reserve requirements will be.6

Based on this brief description, slaying the dragon—eliminating government deficits—would appear to be the best approach for LDCs. However, despite its simplicity and attractiveness, such a policy prescription may not always be feasible or desirable. To continue the metaphor, the size and tenacity of the dragon should be considered. That is, optimal policies should take into account the size of the budget deficit as well as whether it is an isolated or a recurrent phenomenon.

In most developing economies and economies in transition, fiscal deficits are significant and persistent and, hence, require an ongoing program of financing. Recently, some economists have devoted increased attention to the need for seignorage as the rationale for government adoption of financial repression measures. They argue that in many LDCs, monetary policy has by design included financial repression to expand the base from which a government can extract resources and finance larger budget deficits. As J. Huston McCulloch (1982) noted, a government that can create money has at its disposal an easy means of financing its expenditures. In fact, the government is the only entity capable of such “monetizing” to fund social programs, military projects, government buildings, agriculture export subsidies, or any of the multitude of other amenities. In such a context, as explained below, unbridled liberalization may not be optimal for the economy, and the question of how to deal most effectively with the continuing budget deficit essentially translates into a question of determining the optimal degree of financial repression for an economy.

The following analysis reexamines the role financial intermediaries play in the development process and delineates some of their unique features. The discussion then considers some of the welfare and growth implications of financial repression highlighted in recent financial intermediation literature.

### Financial Intermediation and Growth

A thorough discussion of financial liberalization prescriptions must begin by carefully specifying the explicit role of financial intermediaries in the economy. Doing so allows evaluating the financial sector’s part in an economy’s rate of capital accumulation and long-run growth, the desirability of financial repression, and the merits of arguments for and against liberalization. The discussion that follows focuses on a few representative papers from the voluminous literature examining the functions of financial intermediaries in the economy.7

To assume that financial liberalization invariably leads to higher economic growth and then on the basis of that assumption to recommend that LDCs embark on programs of financial liberalization is tautological. Raymond W. Goldsmith’s caution against a policy prescription of unbridled financial liberalization still holds wisdom. In reviewing the case of Mexico he states, “We are not even certain that financial structure and function determine growth and development so that they can exert a significant influence on economic growth. Still less are we in a position to say how, when and why the financial superstructure and the

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real infrastructure interact, or to make more confident statements about the effects such interactions have on economic growth” (1969, 53). McKinnon (1991) likewise has suggested caution, noting that policy reforms that are rational in a successfully liberalizing economy can be counterproductive in a repressed one, depending on the nature of fiscal deficits.

Research by Jeremy Greenwood and Boyan Jovanovic (1990) is representative of the modern view of financial intermediaries as collectors and analyzers of information. Under this view, financial intermediaries perform the key function of directing the flow of an economy’s resources toward activities (investment projects) with the highest return rates. Greenwood and Jovanovic examine the connection between financial structure and economic development, showing that economic growth provides the resources and impetus necessary for developing a viable financial structure. This financial structure in turn enhances economic growth by allowing more efficient capital investment. Their analysis concentrates on the sophistication of financial intermediaries as opposed to the economy’s level of financial liberalization. Typical to this perspective, the financial institutions and services offered arise endogenously; that is, the economic environment is modeled in such a way that financial intermediaries fulfill a role that other private agents cannot. Given that in these models the environment is such that there are no outside or exogenously imposed (by government) restrictions on these intermediaries’ duties, an implicit assumption is that any financial intermediaries are liberalized. Although these types of models do not explicitly address details of financial repression, they do lay the foundation for a more meaningful analysis of financial repression by specifying the conditions under which intermediaries can improve the efficiency of resource allocation and enhance economic welfare.

Bencivenga and Smith (1991) built a model of the financial sector based on the following stylized activities of financial intermediaries: (1) banks accept deposits from and lend to a large number of agents, implying that withdrawals will be fairly predictable; (2) banks issue liabilities that are more liquid than their primary assets (loans and government securities), eliminating the need for self-financing of investments; and (3) reserves fulfill a liquidity role in the economy—liquid reserves are held against predictable withdrawals.

The first two characteristics of the Bencivenga-Smith model help explain how depository financial institutions, by pooling the savings of numerous risk-averse individuals, can hold illiquid assets—that is, make loans that would not otherwise be made. By exploiting the fact that they have large numbers of depositors and are therefore better able to predict withdrawal demand, banks can economize on liquid reserve holdings that do not contribute to capital accumulation. At the same time, the loans they hold are essential to economic growth because they are used to finance capital purchases. These illiquid assets offer higher rates of return than do liquid assets. However, individuals still hold liquid assets, despite their lower rate of return, because they face the probability of a sudden liquidity need. Liquidating an illiquid asset prematurely yields a lower rate of return than liquid assets. Thus, liquid assets are held to avoid liquidity shocks.

Regardless of economic agents’ risk-taking propensity, financial intermediaries, acting as liquidity providers, enhance welfare by eliminating the need for premature liquidation of illiquid assets. Since premature liquidation results in real resource loss, the economy will have more resources available when financial intermediaries are operating. Hence, financial intermediaries help in the creation of capital and, consequently, growth.

In Bencivenga and Smith’s model, the economy does not experience lower savings in the absence of financial intermediaries, as often claimed in the financial liberalization literature. Their model delivers the same level of savings with or without financial intermediation. The potential economic growth benefits of having financial intermediaries come not from the volume of savings but from the way financial intermediaries allocate those savings.

From this perspective, the overall impact of financial intermediaries on the formation of capital, and thus on the rate of economic growth, will be a function
of the degree of risk aversion among the agents in the economy and the liquidity shocks that these agents actually face. In an economy in which savers exhibit a low degree of risk aversion—that is, they are not averse to acquiring riskier illiquid assets—and are not subjected to liquidity shocks that cause premature liquidation of illiquid assets, the contribution of financial intermediaries to the rate of economic growth will be negligible.

As the above discussion makes clear, this line of research concentrates on the role of financial intermediaries as liquidity providers. This is not the only role that financial intermediaries fulfill. Stephen D. Williamson (1987), for example, has concentrated on their role in drafting loan contracts. These contracts link borrowers and lenders in such a way as to economize on the cost lenders incur in monitoring borrowers when borrowers have private information concerning their likelihood of repayment. Williamson assumes that since borrowers cannot guarantee lenders a fixed rate of return, repayment becomes contingent on the state of the economy at the loan’s maturity. If the borrowers are really unlucky, they may declare bankruptcy and pay nothing. Williamson also assumes that lenders cannot costlessly verify whether borrowers are telling the truth. In this context, there is a moral hazard problem, and a costly state verification problem arises. That is, under the assumption of private information, lucky borrowers could, for example, declare that they have been unlucky and skip payment to the lenders. On the other hand, lenders could, at a cost, verify the borrowers’ claims. In this context, overall welfare in the economy can be improved by having financial intermediaries, on behalf of the lenders, draft contracts that reduce the verification costs.

As in the Bencivenga and Smith model, a prominent feature ascribed to financial intermediaries in the Williamson model is the ability to exploit the law of large numbers—that is, the fact that not all borrowers default simultaneously. This advantage allows intermediaries to guarantee lenders a payment—indeed, any state of individual borrowers—that is higher than the expected return they could obtain if intermediaries did not exist in the economy. As in Greenwood and Jovanovic’s model, financial intermediaries arise endogenously in Williamson’s model. Consequently, there is little scope for explicitly examining the details of financial repression. However, if financial repression is interpreted as the general prohibition against financial intermediation, a move from a state of repression to one of liberalization in the form of full-fledged financial intermediation would undoubtedly result in improved societal welfare because monitoring costs would be reduced. By eliminating the duplication of monitoring costs, additional resources can be channeled to productive activities, allowing for higher rates of economic growth.

### When May Financial Repression Be Necessary?

Bencivenga and Smith (1992) extended their model to analyze the case in which bank deposits and currency are held to satisfy liquidity needs. In this model government budget deficits are continuing and must be financed, and capital assets pay higher rates of return than bank deposits but are illiquid. In models of this type, financial repression occurs whenever the government forces agents in the economy to hold more currency than they would hold voluntarily. As noted above, a government can easily do so by increasing the level of legal reserve requirements in the banking sector. As the previous discussion established, if the government increases reserve requirements too much—if the legal restrictions become excessive—the incentive for agents in the economy to hold bank deposits decreases, and parallel informal markets develop. As capital shifts to the informal markets, fewer funds are subject to reserve requirements. Reduced reserves, in turn, provide the government with lower seigniorage revenue. Because the Bencivenga and Smith model requires continued financing of the government’s deficit, the only means available to hold nominal government revenue constant is increased inflation.

The Bencivenga and Smith analysis also shows that if reserve requirements are very high, agents will bypass financial intermediaries and will hold a portion of their savings directly in capital or capital assets. And as is explained below, such accumulation of capital will not, in general, be as efficient as that observed under intermediation. In the event that these agents find themselves in need of additional liquidity, they will have to liquidate their capital holdings prematurely, entailing a waste of resources. On the basis of this analysis, when financial repression is severe enough to result in the creation of an extensive informal financial sector, welfare can always be increased by financial liberalization via a reduction in reserve requirements.

Bencivenga and Smith show, however, that there exists a level of reserve requirements at which agents...
continue to hold bank deposits, all investment activities are financed through the intermediary sector, and the government is able to finance its deficit via seigniorage. Furthermore, they show that in an economy operating with a continuing positive deficit that must be financed, some financial repression is desirable on welfare grounds.9

Recall that financial repression in this context means the enforcement, via reserve requirements, of larger holdings of currency than financial intermediaries would otherwise hold voluntarily. At first glance, one may resist the notion that an economy “needs” some degree of repression. After all, financial intermediaries hold currency voluntarily for precautionary reasons, and the government in turn is able to extract some seigniorage. Why, then, would the government need to repress the financial system?

In choosing the optimal level of repression, a government is able to evaluate the seigniorage tax base and rate trade-off, something financial intermediaries cannot do on their own. In choosing the private holdings of currency, financial intermediaries would not take into account the impact of their decision on the economy’s inflation rate and its social welfare impact. From their perspective, they care only about reducing the burden of seigniorage finance, which would be achieved by reducing to a minimum their holdings of currency—that is, the base on which they would be taxed. Consequently, if the government relied exclusively on low voluntary holdings of currency as the seigniorage base, the inflation rate necessary to finance a deficit would be fairly high and therefore not optimal from a social standpoint. On the other hand, the government’s different incentives enable it to account for this trade-off and to establish reserve requirements that would maximize social welfare, subject to the government’s financing needs. In this second-best world, private agents, left to their own devices, fail to produce an optimal economic outcome. When this condition coexists with a requirement for government expenditures, some degree of financial repression may make sense.

The Bencivenga and Smith result is quite general, and the logic of their analysis can be applied to other forms of legal restrictions in addition to reserve requirements. For example, for ceilings on deposit interest rates, proponents of the liberalization strategy would argue that raising rates by removing legal ceilings would not affect the level of aggregate demand in the economy but would simply shift the composition of aggregate demand away from consumption toward savings, thereby increasing the real capital accumulation in the economy. Stated differently, drawing funds away from the informal or parallel markets back to the banking or intermediation sector would make more funds available for financing firms’ investments and lead to real capital accumulation and real growth.

Neostructuralists, on the other hand, would argue that drawing funds away from the informal or parallel markets would adversely affect the growth potential of the economy since interest rates in the informal market would rise, choking off project financing. In addition, the total amount of funds available for investment spending would be less because these funds, once placed into the official banking sector, are subject to reserve requirements that are higher than those in the informal financial market. Thus, the short-run impact of this type of financial liberalization constrains both aggregate demand and supply and is likely to result in slower real growth. As in the analysis of reserve requirements, it should be possible to show in a simple model that if government has a positive deficit that must be financed, then there exists a ceiling on deposit rates and a level of reserve requirements that are jointly optimal in the sense of maximizing the overall economy’s welfare.10

While it can therefore be legitimately argued that extant prescriptions of financial liberalization are generally robust in generating real economic growth in developing and transitioning economies, under certain institutional arrangements (such as those outlined above) unbridled financial liberalization may reduce economic welfare. The implication of these results is that specific institutional arrangements and preconditions existing in developing and transitioning economies must be identified and incorporated into macroeconomic policy prescriptions if these prescriptions are to enhance economic welfare.11

This discussion has emphasized the need to enhance seigniorage extraction as one of the main rationales for imposing financial repression measures. In this context, it sometimes may make sense to financially repress an economy. Is it only when there is a need to finance large government deficits that doing so makes sense?

Recent theoretical work by John H. Boyd and Smith (1994) suggests that even when one ignores deficit finance considerations, LDCs may be better off under some degree of financial repression. These authors use a dynamic open economy model to examine the output patterns of a developed country and an underdeveloped country. The two countries are assumed to be identical in all respects except their initial capital stocks. Boyd and Smith show that as a result of finan-
cial market frictions, the equilibria exhibited by this model imply that the underdeveloped country can grow at a faster rate if its financial sector is closed to international financial transactions (a very stringent form of financial repression). This result occurs because information asymmetries between borrowers and lenders in the two countries create a costly problem of state verification. As was discussed in regard to the Williamson model, borrowers are assumed to have an informational advantage over lenders concerning such things as the expenses incurred in carrying out their investment or production activities and the true returns associated with these activities. To divert resources away from lenders, borrowers have incentives to exaggerate the level or need for such expenses or to understate the level of returns earned. Lenders who cannot costlessly observe the expenses or realized profits of projects they have funded have to spend resources in order to verify borrowers’ reports. The presence of these state verification costs reduces lenders’ net returns and their willingness to commit funds to otherwise desirable investment projects.

In the Boyd and Smith analysis, poorer countries are also the ones with the highest verification costs. As shown by Ben S. Bernanke and Mark Gertler (1989), capital investors’ ability to provide additional internal finance (equity) tends to mitigate the costly state verification problem because more of the investors’ own money is at risk, giving them greater incentives to invest in desirable projects and to make value-maximizing decisions. Because lenders incur smaller state verification costs, there are increased levels of productive investment. Thus, a country with a high capital stock will have a superior ability to finance investments internally, ceteris paribus, and as a result a wealthier economy is a more attractive home for lenders or investors.

On the other hand, the more abundant a production input, the lower its marginal product and its rate of return. One would therefore, in principle, expect to see a flow of capital from rich to poor countries in an attempt to improve return rates. However, in this model, as is often observed in developing economies, the opposite is true. The explicit modeling of financial intermediaries with costly state verification helps explain this counterintuitive result. Lower state verification costs can offset the fact that capital stock in the wealthy country may actually have a lower marginal product. Thus, the more attractive net expected capital returns in the wealthy country mean that if both economies open their capital markets, capital flight will occur from the poor country to the wealthy country. The capital stocks of the poor and rich countries never converge.

In such a setting, it is easy to see why opening up a poor country’s formerly closed economy can have negative consequences for long-run growth. By keeping the economy closed to international banking (lending), the poor country can grow at a faster rate. Since financial capital is reinvested domestically, the country’s capital stock grows and over time may approach that of the rich country but never equal it. Alternatively, without the underlying factor of costly state verification, convergence of the two economies is quite possible. The policy implications of this work are extremely significant for international development agencies given that these agencies often view the opening of an LDC’s financial sector as a sure means of increasing domestic growth rates.

Conclusion

The concept of financial repression has received increased attention in recent years as a result of Latin America’s reemergence and the opening up of formerly communist countries in Central and Eastern Europe. These developments have also refocused the attention of development economists on problems faced by LDCs as they pursue various liberalization strategies. The role of legal restrictions on financial intermediaries and the interplay of these restrictions with the development of informal or parallel unregulated markets have attracted much attention. This article highlights the importance of this interplay between legal restrictions and the development of informal markets and describes the institutional setting in which financial repression can be optimal for economies in general and for developing economies in particular.

The analysis shows that a key determinant of whether some amount of financial repression will prove superior to a strategy of pure financial market liberalization is the size and recurrent nature of government budget deficits and the alternative financing means. Given that such deficits have to be financed, whenever noninflationary taxes are not an option the optimal amount of repression is the amount that provides for financing the deficit but does not lead to the development of parallel or informal financial markets that siphon resources from the formal financial sector. Hence, by selecting its legal restrictions judiciously, government economic policy can actually induce the highest level of well-being for its citizens.

The article also highlights the virtues of recent developments in the financial intermediation literature as they
pertain to economic development literature. Using these models as foundations, researchers are better equipped to venture policy prescriptions concerning financial intermediaries and government financing needs. While the findings have not provided all the answers, they have better outlined the underlying issues of the debate.

Notes

1. Not all proponents of financial liberalization offer unqualified recommendations. McKinnon (1991), McKinnon and Mathieson (1981), and Courakis (1984), among others, do qualify their financial liberalization recommendations. However, much of the financial liberalization literature and the prescriptions therein seem to have been developed without full regard for the involvement of government in the financial intermediation sector and the impact of this involvement on the development process.

2. Financial deepening refers to the general process by which a country’s financial infrastructure develops and expands. It can be measured, for example, by a country’s ratio of tangible assets, such as buildings and capital equipment to financial assets, such as checking deposits and investment securities. See Goldsmith (1969) for a comprehensive discussion.

3. Examples of the failure of various liberalization strategies in Chile, Argentina, Uruguay, and Turkey are cited by Diaz-Alejandro (1985).

4. This discussion draws directly on chapter 5 of McColloch (1992).

5. Given this discussion, it is easy to understand why many monetary economists and analysts favor separating a country’s central bank from the executive branch of government. An independent central bank, with a clear goal of monetary stability, will be better able to resist the pressures from government to cooperate in its attempts to engage in inflation-ary financing. In cases in which the central bank is truly independent of political pressures, the government will generally not be able to monetize its deficits easily. Thus, politicians will have to limit the scope of government involvement in the economy to its ability to finance its spending programs through the collection of taxes.

6. In considering the case of Mexico prior to World War II, Shelton (1964) detailed how the monetary authority was left to assume the burden of the deficits created by the lack of a coherent fiscal policy and had to accommodate large deficits leading to the adoption of high, restrictive, and contrived reserve requirement schemes.

7. The older literature is summarized in Spellman (1982, chap. 12) and the references contained therein. A survey of the modern literature can be found in Bhattacharya and Thakor (1993).

8. This development occurs because of the zero or negative real rate of return earned on reserves.

9. It should be noted that in the Bencivenga and Smith analysis, it is never optimal to repress the economy to the point where formal and informal markets coexist.

10. Results along these lines are established by Espinosa and Hunter (forthcoming).

11. For a detailed analysis of how the lack of coordination of real and financial sector reforms in developing and transitioning economies can worsen budgetary conditions, see Hunter (1994).

References


