Part III

Characteristics of Financial Market Regulation and Disclosure

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Chapter 8

Financial Market Structure, Regulation, and Operations

Any examination of options for subsovereign borrowing must consider the supply side of the equation. To what extent does a market for subsovereign obligations exist, and how should would-be borrowers access it? Perhaps more relevant in most emerging market economies is the question of where subsovereign securities fit into an overall strategy to develop domestic financial markets. Promoting private capital markets has been a primary objective of financial market regulators and international donor and lending institutions that wish to encourage private ownership and functioning markets.

A financial market along the lines outlined in preceding chapters would have some level of effective competition in rates and terms and would involve private capital, even though government entities also might supply capital. The financial market would be primarily domestic, with borrowers and lenders (or issuers and investors) subject to domestic rules and dealing in local currency.

A key objective of many governments in recent years has been to create a municipal bond market for subnational securities. Most of the liberalization and subsequent growth of the domestic securities markets has focused on privatization and the desire to promote private sector equity ownership. It is in this setting of recasting the roles of the private and public sectors and capital markets that subnational borrowers must navigate.

Financial Market Structure

The topic of financial market structure and development far exceeds the scope of this book, but it is vitally important for judging the various link-

ages that subnational governments may forge with the capital markets. Most national debt markets are dominated by banks and by central government and state-owned enterprise debt. Early securities market growth in emerging and transitioning economies has focused on equity markets, and the few bond markets that exist are dominated by national governments and the commercial banking system, with private capital debt markets coming later and hesitantly. Corporate borrowing has traditionally been through the banking system, and there are few corporate bond issues. Nearly all bank lending to corporations is short term; long-term bank financing is almost nonexistent. Companies have relied on retained earnings or direct foreign investments to meet their long-term financing needs.

The ratio of the volume of listed securities of exchanges or transactions on the exchanges to the overall GDP is a rough indicator of the relative role of financial markets in the economy. A more precise measure of credit markets would look at listed securities in the debt market (including any exchange listings, as well as bonds in the over-the-counter market) in relation to GDP. The relative size of the banking sector can be measured by the three ratios of bank loans and investments to GDP, the size of securities markets to listed securities, and domestically held debt to GDP. Similar measures of other financial institutions and intermediaries provide indices of the development of domestic financial markets.[1]

Government's Role in Credit Market Development

Where subnational credit markets end up on their journey toward more openness and competition depends on policies, luck, and how a variety of competing interests are balanced. One commentator on the development of municipal credit argues that the development of subnational government borrowing should be tied to the methodical and sequential development of financial markets as a way of minimizing several risks inherent in the process (Noel 2000). In this view, there is a progression from state-controlled monopolies on lending, to oligopolies (often holdovers from the state-run system), to open, competitive markets, based on the following prerequisites:

- Reduced moral hazard.
- Greater market transparency.
- Strong financial market governance.
- A level playing field among investor groups.
- Subnational government capacity to manage and budget.

While basic laws need to be in place, in the end markets are developed by champions and risk-takers. The best lessons on market building are those that are taught by mistakes in an environment of accountability and discipline, where public resources and private fortunes are won or lost.

In many developing and transitioning economies, the private sector is a recent arrival on a scene that has been dominated by the state (box 8.1). The extent of central government involvement in the allocation of credit is not always immediately apparent. Government ownership of the banking system and other financial institutions (such as retirement funds and insurance companies) can be very influential in deciding which borrowers' needs are served and on what terms (box 8.2). For example, in laying out prudential rules and reserve requirements for financial institutions, governments can mandate or build in large incentives to invest in certain classes of obligations.

A common market support approach has been to require that reserves contain government bonds (both sovereign and subsovereign) or to set capital adequacy rules that favor these investments. These market development measures are often relaxed over time as a domestic market begins to emerge (Noel 2000).[2] Monetary policy requires that authorities have leverage over bank portfolios. In theory, open market operations can be carried on in any security. However, for subnational borrowers there is a continuing problem of adverse selection, as securities whose markets are directly manipulated by the monetary authorities are either supported or subverted for reasons unrelated to the subnational issuer.

Relationships Affecting Markets

The recurring turmoil in world financial markets has focused attention on the relationship between the finance industry, especially banking, and other industries. The extent of interlocking ownership, control of boards, and self-dealing between financial institutions and their nonbank affiliates has been at issue. Although subnational governments have been a relatively minor player in such concerns in Asia, in South America the relationship between municipal and provincial governments and the banking system has come under considerable scrutiny. Large cities and states in that region may own banks that serve as in-house providers of credit. While efforts have been made to privatize the banks or place them on an equal footing with private competitors, they still can come under political pressure to finance their governmental parent units. Financial institutions that may be called "banks" do not necessarily follow prudential practices, just as regulators do not necessarily regulate nor are laws enforced.

Box 8.1. Commercial Banking in Transitioning Economies

All banking systems in the transitioning economies of Central and Eastern Europe evolved from a single state-controlled bank that was responsible for both monetary policy and commercial banking. These monobanks routinely extended a high volume of credit to state-owned companies to direct production along the lines determined by central planners. The bank did not screen credit or base funding decisions on creditworthiness since credit allocation was a political decision, nor was loan payment enforced. The goal was to get capital funds out according to the plan. Planned economies hid inflation and guaranteed jobs for all, so the standard countercyclical activities of banks were not relevant. Loans to subnational governments were seen as just another production (local services) and employment policy of the state.

In the move from central planning to market planning, the protean monobanks were split into commercial bank and central bank activities, with commercial banking often set up along sectoral lines. New banks were allowed to form, and limited entry of foreign banks was allowed. At the outset, regulation by the central bank was often weak and subservient to political interests. Newly created commercial banks were also weak, with small depositors, unknown portfolios, and flaccid regulation. They also remained under state ownership and susceptible to political influence. Nonperforming loans were simply rolled over, and lax lending policies were used to keep state industries going. Inflationary pressure was created as the central bank printed more and more money, encouraging rapid disintermediation and abandonment of the currency.

Many small banks were established, but they were unsupervised and often closely tied to new private enterprises. Bank scandals erupted in Albania, Romania, and Russia, including Ponzi schemes that drew in thousands of gullible small depositors. Growth of bank loans has not kept pace with growth in the

real sector. Private firms, while borrowing for working capital, rely more on retained earnings and direct foreign investment than in more mature systems. Commercial banks, attracted by the high yields and low risk, have tended to lend to each other and invest heavily in the national government's obligations.

Source: Berghof and Bolton 2002.

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Box 8.2. The Bank for International Settlements' Reserve Requirements and Capital Rules

Prudential regulations can have a major impact on the market for various types of obligations. Many sovereign governments have effectively built in markets for their securities by requiring that financial institutions hold a certain amount of sovereign direct or guaranteed obligations as part of their reserves. Banks may be required to put up government debt as collateral if they wish to hold government accounts. For example, prior to the availability of deposit insurance for large denomination

(*Box continues on the following page*.)

Box 8.2. (*continued*)

accounts, the collateral requirement on public deposits was a powerful incentive for banks to hold U.S. municipal bonds.

One source of information on potential demand for subsovereign obligations (as well as an overall measure of perceived subsovereign risk) is seen in the weights that banks must apply to their assets to calculate their capital adequacy. Although these have varied internationally, they are increasingly coming into conformance with the Bank for International Settlements' (BIS) capital adequacy ratios (ratio of bank capital to performing loans; nonperforming loans carry special provisions). The BIS minimum is currently 8 percent. Virtually all countries have systems that meet or exceed the BIS standards.

Under the BIS regime, loans to the sovereign government of the same country as the bank are assigned a 0.0 sectoral risk weight (they are assumed to be domestically risk free) and those of private sector firms are assigned a 1.0. Recognizing that the relationship between the central government and subnational governments varies from country to country, the BIS allows the central bank to assign the appropriate risk weight. Thus the weightings provide the central bank's opinion of the risk of loans to the subnational governmental sector relative to loans to the sovereign and the private sectors.

In the United States the BIS credit factors range from 0.1 for general obligations to 1.0 for private activity (corporate) bonds. In foreign countries subnational government obligations with explicit central government guarantees have BIS ratios of 0.0 (which makes them tantamount to direct sovereign obligations), and those without such guarantees have ratios of up to 1.0 or even higher. Ratios can be changed to recognize overall changes in sectoral credit strength. This happened in South Africa, where the ratio was increased from 0.1 to 1.0 for subnational government securities when the national government announced that it would no longer guarantee municipal and provincial debt.

Prudential rules for other financial institutions such as insurance companies and pension systems have similar impacts on various types of security. To the degree that subnational securities have been lumped together with sovereign securities, they have often benefited from favorable treatment. However, to the extent they are seen as tantamount to corporate debt and loans, they can be disadvantaged.

The capital rules are being revised (Basel II), with an emphasis on the underlying creditworthiness of the obligor as well as on the character of the securities. This development may enhance the role of credit ratings in the determination of capital adequacy and give a boost to both information systems and credit analysis in domestic markets.

Market Development and Regulation

Since the 1980s, there has been a worldwide move to lessen direct regulation of financial markets and to open markets to greater domestic and international competition. This has involved all aspects of financial markets, from privatizing banking systems to creating stock exchanges to support the privatization of formerly state-owned enterprises. One result has been a greater number of domestic firms in the securities business and more openness to foreign firms doing business in domestic markets. The entrance of foreign firms has been important because they bring not only capital and competition but also experience in financing subsovereign obligations.

There also has been a move toward greater self-regulation by industry participants and away from regulation by administrative fiat and direct government involvement in investment decisions. Less regulation by ministerial fiat and less official involvement in individual transactions have made way for more general rules of fair dealing and capital adequacy and rules of

the road for functioning markets. Thus the presence of more firms and a greater variety and number of financial instruments in the market means a need for more regulation and more sophisticated regulation. This changed regulatory mode depends on the operation of self-regulatory bodies rather than on central government agencies and is not without costs and risks.

Where do subnational governmental borrowers fit into the emerging securities market regulatory scheme? Since subnational government securities are still a rarity, the question is just beginning to be asked in most places. Emerging markets have seen a variety of regulatory schemes, including requirements designed to encourage sound business operations. In Chile publicly offered issues of corporate securities must be rated by a licensed rating agency. Indonesia's securities regulatory body, BAPEPAM, has similar requirements, which have been instrumental in creating the national rating agency, Perfindo. In Mexico the requirement that states and municipalities be rated by at least two credit rating agencies in order to borrow in commercial markets has created strong demand for ratings and helped build an active bond market.

The fundamental concept of regulation is to define the financial system and its rules of operation. That is easier said than done. Countries have different legal traditions that can influence the nature of a market's operation (box 8.3). Countries also have different traditions in regulating the banking system and other financial institutions, with the biggest debate between advocates of the "universal" banking systems and advocates of the separation of the banking system and the securities markets (as in the United States until recently.)[3]

Most emerging and transitioning economies come out of a bank-oriented financial system, often with government-owned or favored universal banks that have seen virtually every phase of domestic financial commerce as fair game. As financial markets broaden and mature, the regulatory boundaries between financial institutions need to be defined. For example, in addition to prudential regulation of traditional financial institutions such as banks, insurance companies, and pensions, there are new entities to regulate such as mutual funds, clearing and settlement operations, securities depositories, and markets in derivatives and asset-backed securities. Subnational governments that enter these markets are exposed to both the opportunities and risks that attend a dynamic marketplace and the ways it is regulated.

Financial market regulation has a variety of roles to play in emerging markets, and the end results may not always be in harmony. Among the competing objectives are the following:

Box 8.3. What Is a Security?

Defining a security is important from a legal perspective for establishing what an investor can look to in support of the obligation and from a securities regulation perspective for characterizing the nature of the transaction and the instrument involved. Efforts to regulate securities and to harmonize laws across countries have been hampered by different concepts of what constitutes a security.

For example, in the Spanish-speaking world and in the civil systems of Eastern and Central Europe the concept of a security has differed from that which evolved under English common law and exists in many English-speaking countries today. A security in Spanish-speaking countries is embodied in the concept of a *titulo valor*, which encompasses only a limited number of specific physical documents that have the right of ownership embodied in the document. Thus the only evidence of ownership for the security investor is the existence and possession of the document itself. The *titulo valor* instrument is like money, since it can be transferred physically without re-registration or even endorsement and is payable on presentation.

The *titulo valor* proved woefully inadequate as a concept for evidencing ownership given the nature of modern transactions. Not only does it pose physical safekeeping and transfer problems, but it does not fit the needs of new financial instrument constructs. New instruments necessarily rely on book entry and dematerialization, such as variable rate securities, derivatives, and investment contracts. New definitions of security now being enacted into law in Latin America rely on the economic basis of what constitutes the security, rather than on the strict definitions of what physical instruments qualify as *titulo valor.*

- *Market development*: Some regulations are intended to provide incentives to market development, especially as part of the effort to privatize government-owned institutions. Opening up markets, particularly to international capital flows and competition, is not without

controversy. With proper regulation, however, the objective of encouraging competition and efficiency appears to be sound even if the means of achieving it are not entirely clear.

- *Market integrity*: Regulators want to foster lively, creative markets yet protect the integrity of the payments system and avoid excessive risk taking. This requires prudential measures to minimize systemic risk and protect the solvency of individual firms.
- *Fairness*: Regulators are keen to prevent fraud and manipulation and to protect investors and prevent monopoly power. Asymmetry of disclosure information (the issuers control it, the investors need it) can be an invitation to manipulation and fraud.
- *Efficiency*: Markets are allocators of capital resources. Realizing the benefits requires competition among players and fair price discovery mechanisms, but the participants must be limited to those that have adequate capital and experience and meet standards of behavior.

In most emerging market economies, subnational governments come to markets as largely untested small borrowers. Where they have adequate revenue bases, they can be viewed as potentially strong "credits" notwithstanding their small size. Even where banks have dominated direct lending, they benefit from the development of a securities market. The market provides banks with more liquidity as investors, even while promoting more competition among them by providing an alternative source of funds to direct bank loans. Furthermore, a more developed credit system allows banks other ways to earn fee incomes, such as acting as trustee and credit enhancer.

The Securities Marketplace

Domestic securities markets are in various stages of development, with different intensities of competition, technological development, and philosophies on regulation. Several measures of development are possible. One is the amount of trading in formal markets (exchanges) versus over-the-counter transactions. Over-the-counter transactions take place in electronic markets of dealer-to-dealer trades in securities that are not listed on the exchange or that can be traded off the exchange as well as on. Typically, registration and listing requirements are softer and less expensive than on formal exchanges.

Over-the-counter transactions give rise to several questions. How much off-market trading is reported, and how are such trades cleared, that is, how is the ownership of securities exchanged against payments of cash? How

integrated are the markets? Is there a single market or are there segmented markets by types of instruments? The great advantages are ease of access for dealers and low cost for issuers. However, with few investors, over-the-counter markets in developing economies often languish from a lack of volume. Most investors buy to hold, and the liquidity provided by a deep and active market remains a goal rather than a reality.

In many transitioning economies, stock markets are a new development, often a by-product of the privatization of formerly state-owned enterprises. Many exchanges are small, with little activity and maybe a short lifespan (World Bank 2002c). To accelerate development of the exchange, regulators in emerging market economies have often required that all securities (equity and private debt) trade on the stock exchange. However, normal exchange listing requirements, typically modeled on those in developed countries, and the related registration fees can be burdensome, especially for new companies and small companies. One answer has been to create a separate bracket for smaller, higher risk companies, as in Japan. Another has been to allow the development of an over-the-counter dealer-to-dealer market or to restrict certain classes of offerings to sophisticated institutions and individuals. This approach provides trading liquidity to otherwise less liquid shares without exposing the general public to undue risk. New credits can be allowed to season before graduating to an exchange listing.

However, having a number of separate markets can lead to an undesirable diffusion of resources. Recently, the move has been toward fewer organized exchanges and screen-based, fully reported trading as opposed to the open-cry, single place market.[4] According to proponents of integrated markets, this leads to more self-policing. The more integrated and transparent a market's operation, the better defined are the market's participants and scope and the more likely that market competition, especially foreign competition, on the basis of price and quality of service, will discipline behavior without direct regulatory involvement.

Even advanced markets such as the United States must continue to work to achieve the correct mix of governmental oversight and market freedom that balance the goal of reasonable access to the markets by would-be issuers of debt with that of protecting the investing public. The boundaries of regulated activity can shift depending on evolving circumstances and events. Achieving an appropriate balance is even more difficult in developing countries, where an infrastructure of experience and legal mechanisms is not yet in place. Efforts to register and list new subnational government bond issues in a national stock exchange are discussed in box 8.4.

Box 8.4. After 60 Years, Municipal Bonds Return to Romania

In November 2001 two small Romanian cities, Predeal and Mangalia, issued municipal bonds, the first subnational government bond issuances in the country since 1941. The local currency-denominated issues were small (5 billion and 10 billion lei, or about $175,000 and $350,000) and short-term (maturities of two years). However, they were viewed by both the communities and the underwriting firms as a first step to opening up a fledgling capital market as an alternative to commercial bank lending. The proceeds of the bond issues were used for modest capital improvements, including a new sea wall for Mangalia and site improvements for Predeal's ski slope, the major business in the resort town.

Much effort went into designing the transactions and documentation, which all parties concerned saw as a pioneering effort. Eager for the exposure, both cities decided to list the stocks on the Bucharest Stock Exchange. This required Security Commission approval, but the commission's registration forms and disclosure requirements were designed for private companies and ill-suited for the municipalities. The commission staff and the applicants set about devising new standards and prospectus. The stock exchange, which acts as registrar and depository for securities issues, entered into contracts with the cities to receive regular reporting information, also a first.

By late November the new bonds were listed for trade, representing only the second and third listing of debt securities by the exchange. (The listing ceremony made the evening television news.) The national government is planning to list its own small-denomination note offerings on the exchange in hopes of cultivating more individual investments. Meanwhile, the Securities Commission is drafting new regulations to govern future bond municipal issuances.

Source: Petersen 2002.

Nature of Investors

In assessing the market environment, the nature of investors is an important consideration. Emerging market economies typically have few investors, and their appetite for long-term securities in locally denominated debt is often limited. Both institutional and individual investors look at the tradeoffs between risk and return. The tradeoffs can be very steep in the case of a domestic currency securities market in a developing economy. Many investors are reluctant to make long-term bets in currencies subject to large fluctuations.

National government securities, with large demand for funds and offering high returns, often sop up most of the supply of investible funds. Furthermore, capital requirements for banks and other financial institutions often reinforce the desirability of holding sovereign securities.[5] However, in many cases, these capital requirements, whether through oversight or intent, can give preferential treatment to subnational debt, which may be considered "governmental" for purposes of the calculations.[6]

The supply of long-term investible funds is especially limited. Because of the need to match assets against liabilities, banks are typically a poor source of such funding. When banks lend for even intermediate periods, the structure of the obligation is typically a variable interest rate, and the loan is often callable, should the need arise. Ideally, longer term funds would be forthcoming from institutions with long-term liabilities (pension funds and insurance companies) and individual investors with long-term savings. While several transitioning and developing countries have embarked on programs to promote these long-term investing institutions in the private sector, progress has been slow and the barriers daunting. There are several reasons.

First, any pool of domestic long-term capital is avidly sought by the national government and the banking system. Second, the institutional investors may be circumspect about making long-term investments in the local currency. Local currencies in small countries can be extremely volatile, with major uncertainties about future value, making them unappealing to investors with other options. Third, raising long-term funds is especially difficult if countries lack considerable liquidity (an active secondary market), as is often the case in emerging market economies.

Despite the difficulty, countries should try to promote longer term savings and to mobilize those savings for infrastructure investments. Banking laws and regulation of institutional investors should not discriminate

against subnational issuers. In many emerging market economies long-term institutional investors with less need for liquidity, such as private pension systems and insurance companies, find themselves in a position similar to that of banks. The high yields on government securities, reserve requirements, and prudential requirements are impediments to investing in nonsovereign bonds, including those of subnational governments (Rosen 2002).

Tax Laws

Tax laws have a powerful effect on the development of credit markets and the motivation to participate in such markets. The distorting effects of tax laws on financial markets are well-known. Financial institutions and transactions, as highly visible components of the payments system, are relatively easy game for oft-frustrated tax collectors. A common measure is a flat rate withholding tax on interest income that is preemptive of any further payment due. Another is a turnover tax on transactions. Yet another measure is to grant tax exemptions on the interest received on long-term bank savings deposits and on foreign currency deposits held domestically. Depending on design and enforcement, all these tax strategies can stifle the development of bond markets.

Tax laws can favor the securities of subnational governments over other financial instruments. The exemption from federal income taxes is the major reason for the low interest rates on municipal bonds in the United States. Both Poland and the Philippines have extended limited tax exemption to subnational government bonds (see case studies, chapters 30 and 26). Most economists argue against tax exemptions for subnational debt on the grounds that exemptions distort the allocation of capital between the public and private sectors (Leigland 1998). Notwithstanding the shortcomings, such tax exemptions are common and can kick start market development. They have the advantage of being implemented through market activities—to enjoy the benefit a government has to initiate the borrowing and be prepared to repay the debt—and, if kept relatively simple, administrative costs are low.

International Markets

Large subnational borrowers and intermediaries that cater to them may have the option of borrowing in the "emerging-markets" tier of interna-

tional financial markets. This source of funds had been growing rapidly until the series of financial crises and setbacks in the late 1990s. Since then international borrowing activity has receded rapidly. The hope remains, however, that when the broader international market recovers, subnational borrowers will again find it an attractive source of funds.

International financial markets are segmented between prime quality sovereign borrowers (public and private) that are able to borrow at the lowest rates and higher risk borrowers that have to pay higher rates of interest. The emerging market sector is part of this high-yield segment of the market (Rosen 2002).[7] Although the high-yield segment performed very well in the mid-1990s, it subsequently fell on hard times, making it difficult for emerging market borrowers of less than prime quality to sell bonds in the international markets. As a consequence subsovereign borrowers have been excluded from international debt transactions.

Domestic bond markets in emerging market economies appear to be expanding at least in part because international markets have become too difficult to access. However fleeting, the exposure that some subnational borrowers had in the international market provided useful lessons for both domestic and international markets. Chief among them were those related to market expectations for disclosure documentation and the importance of internationally accepted credit ratings. These two subjects are dealt with in chapter 9.

Notes

1. None of these measures is flawless. For example, there may be a large number of securities listings, but turnover may be low. Bank loans may be highly concentrated, with a high rate of nonperforming loans. Nonetheless, analysis indicates a positive correlation between the growth in financial markets and the pace of economic development (World Bank 2002c, chapter 5).

2. Noel (2000) sees the preferential treatment of government securities as leading to moral hazard in the financial system.

3. Until 1999, commercial banks in the United States were prohibited under the Glass Steagal Act from underwriting or dealing in corporate securities for resale. This prohibition was a product of reforms enacted in the 1930s after notorious abuses in the stock market. While it is too early to speculate, similar abuses in the late 1990s and early 2000s may lead to a revisiting of the recent reforms.

4. See, for example, "Survey: Financial Centers," *The Economist,* 9–15 May, 1998. The number of exchanges may be fewer but their physical location will be less important as trading occurs wherever a computer can be plugged in.

5. As noted, the capital adequacy requirements discussed above that are used internationally favor the investment of reserves in sovereign securities. Countries are not above using this, as well as domestic laws, to build in a captive market for their own securities. These often may be sold at below-market interest rates so that the market value is much less than the par value. However, the par value is what counts in meeting the legal requirements.

6. In the Philippines, the central bank reduced the risk weight assigned to local government obligations that are backed by an intercept of their internal revenue allotment and guaranteed by the Local Government Unit Guarantee Corporation from 100 percent to 50 percent, in effect making them more attractive investments for banks (see Tirona 2003 and the Philippine case study (chapter 26).

7. Interest rates are benchmarked to U.S. Treasury bond yields (usually the 10-year or 20-year maturity). Thus a prime borrower will enjoy a small "spread," that is, will trade at a hundred basis points above the U.S. Treasury security (seen as the safest and most liquid security). High-yield borrowers will trade at large spreads, which may amount to several hundred basis points above the Treasury bill rate.