Banks or Bonds?
Building a Municipal Credit Market

George E. Peterson
Senior Fellow
The Urban Institute
Washington, DC

Acronyms

CNY	yuan
Inca	Infrastructure Finance Corporation Ltd.
MDF	municipal development fund
PRC	People's Republic of China
Rs	Indian rupees
TNUDF	Tamil Nadu Urban Development Fund

Introduction

Asian cities cannot finance the infrastructure investments they need without accessing private domestic savings. Urban growth has multiplied demand for investment in water systems, wastewater collection and treatment, roads, and other facilities. At the same time, decentralization strategies have shifted much of the responsibility for this investment to local governments. Private financing can be attracted to urban infrastructure in different ways—including direct private investment in income-earning facilities—but perhaps the most critical avenue will be the local credit market. In a world of decentralized governance, domestic credit markets must be capable of generating long-term financing for cities and their infrastructure agencies.

Two models of municipal credit markets are considered here: (i) bank lending, which financed municipal investment in western Europe throughout most of the 20th century and is still the primary source of local credit financing there; and (ii) municipal bonds, which have been the foundation of municipal borrowing in North America. In designing local credit initiatives for Asia or other parts of the developing world, policy makers do not have to choose between these two systems, which are converging in their regions of origin. Countries now building or strengthening local credit markets would do well to select characteristics from both models and, even more, to encourage competition on a level playing field between bank lending and bond issuance.

Comparing the two models is instructive. Building reliable local credit markets where they did not exist before has proven more difficult than foreseen. The experience of multilateral institutions is filled with apparent paradoxes. Large-scale use of municipal development funds (MDFs), for example, began in Brazil 30 years ago. Several states in Brazil have subsequently instituted MDFs, with a record of success that is enviable, with very low rates of nonperforming municipal loans and successful completion of local investment projects. Yet Brazil today is as far away as ever from having a functioning local credit market. Municipal bond issues are prohibited. Municipalities must obtain case-by-case approval from the central bank and national Senate for other types of borrowing. No private banks will make intermediate or long-term loans to municipalities, even when it is legally permissible, because of the perceived riskiness of such lending.

The frequent failure of international onlending initiatives to build sustainable local credit markets stems in part from lack of clarity as to what elements a subnational credit market should possess. The precedents established by the initial institutions involved in local lending can as readily retard or jeopardize local credit market development as encourage it.

Bank Lending

The banking approach to municipal lending is well illustrated by the specialty municipal banks established to provide capital and affiliated services to local governments. Worldwide, the largest of the specialty municipal banks is Credit Local de France, now the core of the Dexia Group. Dexia has recently merged with, or taken equity positions in, other municipal banks throughout Europe, including Belgium, Italy, and Spain, establishing itself as a pan-European specialized municipal lender. Dexia has also advocated municipal banking in eastern Europe, purchased an equity position in a new specialized municipal lending institution in the Republic of South Africa, and advised Pudong Development Bank of Shanghai, People's Republic of China (PRC). Variants of municipal banks can be found in many other countries.

The municipal bank philosophy can be summarized in three principles: (i) relationship banking, (ii) delegated monitoring, and (iii) bundled services and bundled pricing.

Relationship Banking

A municipal bank strives to establish permanent partnership relations with its local clients. Most European banks have a history of specialized collaboration that dates back a century or more. They provide a breadth of services to complement their lending activity. A typical municipal bank helps municipalities prepare and structure their budgets, design investment projects, and conduct financial analysis of cost recovery strategies. The bank may manage the municipality's financial accounts and maintain the municipality's deposits in addition to providing long-term lending. Municipal banks provide 15–30-year loans to finance municipal investment projects. Municipal banks may extend their relationship beyond their municipal clients to serve as the designated intermediary between the central government and municipalities by handling tax-sharing arrangements or administering local government grant allocations on behalf of the central government.

Initially, the municipal banks' special relationship was protected by legal rights. Some banks such as the Municipal Bank of the Netherlands enjoyed a legal monopoly on local government lending. All municipal banks enjoyed preferential and exclusive access to certain types of below-market, long-term savings that made it possible for the banks to provide low-cost, long-term loans to local governments. Credit Local de France, for example, had access to the long-term, below-market funds accumulated through the postal system's savings plan for small savers. Many municipal banks require, by law, that municipalities maintain their accounts and deposits with the bank. Municipal accounts of this kind typically carry below-market interest rates.

This gives municipal banks some of the character of credit unions, where members receive below-market returns on deposits in return for gaining access to below-market borrowing opportunities.

Relationship banking is also common in certain sectors of the economy, such as small-business lending, and is most valuable during a borrower's start-up stage or when an institution is first entering the credit market. A relationship bank that is protected from competition can take a long-run view of its partnership with clients. Empirical studies have found that development banks sheltered from competition tend to subsidize clients' borrowing in their early stages of development, then later recover these costs by charging more than market rates once the clients have become better established.

One argument for establishing municipal banks is that only they can afford to support municipalities in the early stages of their learning about the credit market. The learning curve applies at least as much to ancillary activities, such as preparing financial information for loan applications and project preparation, as to borrowing and loan repayment. A bank can afford to nurture communities through the learning process only if the bank is subsidized by central government policy or enjoys partial protection from competition so that it can create a long-term client.

As borrowers grow in economic strength, relationship banking becomes less important to them (Himmelberg and Morgan 1995). They no longer require the same kinds of close financial monitoring or help. In competitive markets, experienced borrowers that have established a reputation for good financial management and have compiled a record of prompt debt repayment will find other institutions willing to lend to them, often at lower cost. Such borrowers' loans will require less intensive monitoring and involve less credit risk. This maturation of borrowers can strain a closed credit system. Divergence of municipalities' interests is most likely when loans to local governments are made at a uniform interest rate, regardless of credit history.

Delegated Monitoring

The differences between bonds and bank loans are rooted in financial sector intermediation. In modern intermediation theory, banks perform what is called "delegated monitoring" (Diamond 1984). Municipalities and other borrowers can, in principle, deal directly with individual lenders by borrowing investment funds from large financial institutions, such as pension funds or insurance companies, and even from individual savers. However, unless the loan is large, it is inefficient for each saver to try to monitor financial conditions and all other factors affecting loan payment. A bank performs these intermediation and monitoring functions. It gathers savings from numerous sources, assembles specialized professionals capable of loan appraisal and loan oversight, allocates capital, and then monitors loans and borrowers' financial conditions.

Monitoring is facilitated by the partner relationship that gives the municipal bank special knowledge of the municipality's budget and finances. Where the bank handles all accounts of a municipality, its security interest can be protected by loan agreements that give the bank, as lender, automatic access to the municipality's accounts for repayment purposes. As a corollary to active monitoring, a well-functioning municipal bank will initiate loan-restructuring discussions with a borrower when the client encounters serious financial difficulty. A proactive program of loan restructuring is preferable to accumulating nonperforming loans. In the early 1990s, for example, when French cities found themselves confronted with declining revenues and large, high-interest debts when interest rates were falling, Credit Local de France negotiated workouts with some of the more financially distressed borrowers to keep its loan repayment record intact.

Bundled Services and Bundled Pricing

In a sheltered market, the bundled services that municipal banks offer rarely are broken out or priced to correspond with incremental costs for a particular service. The price of a bundle of services may be combined into the interest-rate spread between the bank's cost of funds and lending rate, or some of the costs may be subsidized by the central government as a type of public good. Price differentiation of any kind by municipal banks in developing countries is unusual, even in lending. Municipal banks lend to all municipal clients at the same interest rate. Credit assessments are used to determine whether a loan should be made at all or the amount of debt that a municipal borrower can afford to assume, but rarely to establish the risk premium that ought to be charged to a particular borrower. The reluctance of municipal banks and internationally supported onlending arrangements to differentiate interest rates according to credit risk is one factor that has made it difficult to construct self-sustaining local credit markets. Where credit risk is associated with low-income communities, the reluctance to add a risk surcharge is understandable. However, in systems with the highest rates of nonperforming loans, repayment risk appears to be primarily a matter of willingness rather than ability to pay.[1] Adding a risk premium to interest costs for local governments with a poor credit history (as well as denying new loans to local governments that are in arrears on existing loans) might well have a desirable demonstration effect.

Limitations to the Bank Lending Model for Newly Established Local Credit Systems

Municipal banks have been severely challenged by financial sector deregulation. Most have lost their legal monopolies, opening their municipal lending to competition from other financial institutions. Most have also lost their preferential access to sources of long-term savings, forcing them to compete with other financial institutions for savings. Some of the municipal banks, such as Dexia, have been able to survive competition because of their reputation as efficient providers to municipalities of a bundle of financial services and technical assistance. Dexia, formerly government controlled, has been fully privatized. It competes throughout Europe with commercial banks and bond markets as an alternative municipal capital supplier.

In countries where specialty municipal banks do not have a long history of partner relationships or a reputation to draw on, the effect of financial deregulation has been to force bank lending to municipalities within the framework of standard commercial banking, exposing municipalities to short-term savings horizons. Municipal lending is a small share of most commercial banks' total lending activity. As a result, commercial banks have subsumed municipal lending under other operations, eroding the special understanding of municipal finances found in relationship banking. Both these changes have made bank lending less attractive as a source of municipal infrastructure finance. They account in part for the growth of interest in bond financing.

Short-Term Savings and Lending

The PRC illustrates the consequences of heavy reliance on commercial bank lending. In the PRC, the bulk of municipal lending for infrastructure finance now comes from the China Construction Bank and other commercial banks. Most of these loans carry 3-year terms or less, and sometimes 5-year terms. Local governments cannot repay these loans from infrastructure project revenues. In a period of greatly accelerating urban investment, local governments cannot repay the loans at all according to their scheduled terms.[2] As borrower and lender know, the loans will have to be rolled over into new, short-term loans on maturity. In a banking system as fragile as the PRC's, and as burdened with nonperforming loans, the reliance of local infrastructure financing on the continuing ability to roll over short-term bank borrowing places future market conditions and banking reform at significant risk.

A similar changeover is occurring in India. Its special infrastructure financing intermediaries have lost their exclusive access to long-term savings and have been subjected to competition as a result of market reforms. The institutions have had to react: Industrial Credit and Investment Corporation of India Ltd. (ICICI), for example, has shifted from long-term infrastructure financing to retail banking and short-term investments. It carried out a reverse merger with its retail banking arm. Most of ICICI's new loans carry 3-year terms or less, corresponding to the short-term savings it now commands through the retail banking system. This kind of financing is unsuitable for urban infrastructure investment. ICICI, which only a few years ago was a substantial source of financing for urban infrastructure investment, has largely withdrawn from such activity.

Municipal Loans as Real Estate Lending

Commercial banks frequently treat municipal lending as a subset of an existing class of larger lending activity, such as enterprise lending or real estate lending. Many of the first-generation municipal loans of commercial banks are, in effect, real estate loans, secured by real property collateral. Sometimes the real estate is expected to provide not only back-up security but also the primary source of cash flow to repay the loan. In a typical bank loan of this kind, the Ring Road Corporation, responsible for building a ring road around Changsha, capital of Hunan Province, was given 12 square kilometers of land. The corporation will borrow CNY3 billion against this asset, and use the proceeds from long-term land leasing to repay the principal value of the loan. Similar structures of real estate-based municipal lending have been used in the Philippines, Thailand, and elsewhere in the region.

The principle of recapturing infrastructure costs through increases in land values and using borrowing to cover the advance costs of road construction is valid. However, real estate lending introduces its own risks into municipal infrastructure finance by spreading the volatility of land markets to the municipal credit market. Borrowers typically incorporate aggressive assumptions about future land market demand into their financing plans. Changsha was able to obtain an intermediate-term loan from the China Development Bank for its ring-road project. Problems are most acute when land leasing is expected to generate the revenue to repay short-term commercial bank borrowing, and when the investment projects, such as sewage treatment plants, do not directly add to land values.

The risks of commercial bank lending are only partly financial. Short-term commercial bank lending severs the nexus between project-level finances, service fees, and loan structure. In a well-functioning credit market, municipal lending should reinforce efficient service pricing by municipalities. Municipal authorities generally will plan to recover at least a portion of debt service costs from project-specific revenues, even when general obligation security is offered. This arrangement requires the lender and borrower to carefully investigate the infrastructure capacity to be financed. Reliance on land and property sales for unrelated debt service payments can undermine the discipline of project analysis, as can the use of short-term borrowing to finance long-term investment projects. For efficient service pricing, borrowing periods should approximate to the useful lives of the financed infrastructure.

Municipal Bond Issuance

Local capital financing through bond issuance offers a different approach to the three principles underlying municipal bank lending:

Competition, Not Relationship Banking. Municipal bond underwriters try to achieve a long-term working relationship with their municipal clients. However, the essence of a bond issue is (or should be) that it is freshly competed for on each occasion. Neither institutional nor individual purchasers of bonds need have a long-term relationship with the issuer. For seasoned and sizable issuers, market competition of this kind, focused on the cost of capital, is likely to produce savings. However, this kind of competition leaves an unfilled niche for smaller and less experienced local governments. This niche can be partly filled by pooling arrangements, such as bond banks, which allow smaller cities to join in combined bond issuance through an experienced intermediary. A bond bank can provide the relationship stability for infrequent issuers that otherwise would be missing from the bond model.

Public, Not Proprietary, Monitoring. Whereas banks typically seek to build loan departments that possess proprietary information and proprietary methods of analyzing creditworthiness, in a municipal bond market, information on local financial conditions is provided by issuers to the market. Bond markets rely on public disclosure of municipal financial information to function effectively. Most financial systems utilizing bond issues have extensive public disclosure requirements that issuers must comply with, as well as requirements specifying accounting standards and independent audits of financial statements. Credit-rating firms have developed a presence in every municipal bond market of significant size. They report the content of their credit analyses publicly, and exert considerable influence over the market, including the risk premium that municipalities have to pay for borrowing, based on their financial condition and credit history.

Unbundling. A municipal bond market unbundles the various support functions that a municipality can receive from a municipal bank. Local governments can make separate decisions about where to maintain their liquid deposits and where to obtain financial advisory services or technical assistance on project design. Bidding for each of these support activities can be competed for separately in their submarkets. Unbundling services and subjecting them to competition is likely to lower total costs. However, unbundling may deprive municipalities of the benefits of having a comprehensive partner familiar with how a municipality's financial activities fit together.

Limitations of the Bond Model for Countries Establishing New Local Credit Markets

The basic features of a municipal bond market are now well known as municipal bonds have become a more common instrument for raising capital for local infrastructure. It is appropriate, therefore, to focus directly on the difficulties and special requirements of transferring a credit market model that has worked well in North America and elsewhere to countries where local credit markets are just being established.

Bond Ratings before Adequate Financial Disclosure?

Almost all countries that have introduced municipal bond financing have also introduced, or supported the introduction of, credit-rating agencies. However, the role of credit ratings in newly formed local credit markets is significantly different from the public monitoring function that is so critical to efficient bond market operations over the long run. The differences lie in rating agencies' access to reliable financial information, their role in public disclosure, and the incentives that market participants have to assign importance to ratings.

Lack of reliable information on local budgets, local balance sheets, local debt service obligations, and intergovernmental fiscal flows vastly limits credit-rating agencies' ability to carry out analyses and the usefulness of those analyses to determine credit risk. Credit-rating agencies are the gatekeepers in developing countries' local credit markets. Typically, bonds can be issued in the domestic market only if they attain a minimum credit rating from an authorized credit-rating agency. This arrangement has several shortcomings as a precedent for a self-sustaining bond market. First, the arrangement substitutes a quasi-private rating process for full public disclosure. In some countries, such as the PRC, the credit-rating agency releases to the public only a one-page summary of its credit rating. Detailed information, including any adverse commentary on the issuer's financial situation, is sent as a private communication only to the issuer.

Second, the underlying information necessary for an adequate credit assessment may not be provided to the credit-rating agency and is very rarely the subject of public disclosure requirements. Inherent in the public monitoring model is the ability of multiple participants in the bond market—competing credit-rating agencies, institutional bond buyers, and individuals—to carry out independent credit analyses using reliable data. Public disclosure guidelines for financial reporting, therefore, must logically be in place prior to credit ratings. The public monitoring system should not be short-circuited by efforts to allow individual credit-rating agencies to vouch for the creditworthiness of issuers, without public access to the data from which such conclusions are drawn.

Third, the business dynamics of credit ratings mandated by government regulation need to be examined. In a typical case, a prospective bond issuer must obtain a minimum credit rating to issue its bond. The issuer hires a credit-rating agency. The credit-rating agency is almost always paid by the issuer. The business pressure to assign at least a threshold credit rating is immense. As credit-rating agencies often acknowledge, they will lose the issuer as a client if they assign a poor rating. In many transitional bond systems, institutional relationships reemerge in the triangle of underwriter, credit-rating agency, and issuer, who all share a business interest in successful bond issuance. The proper antidote to any temptation to short-cut the objectivity of credit ratings is to require public disclosure of the financial and other data that should serve as a basis for the rating, as well as public disclosure of the full rating report.

Access to Long-Term Funds

Because urban infrastructure in mature bond markets is financed through bond issues of 20–30-year maturities or even longer, bond issues are assumed to open access to longer-term sources of funds than bank loans. This is not necessarily the case. The initial rounds of bond issues frequently have terms similar to those of bank loans. In India, the initial Ahmadabad and Tamil Nadu Urban Development Bonds were 5-year bonds, with significantly shorter durations, given the annual requirements for amortization of principal. Introducing municipal bonds does not solve the problem of accessing long-term capital but provides an instrument that may make feasible tapping institutions and individuals with long-term savings. Designing a strategy to use bonds to access long-term financing is a major part of policy design.

Designing Transitional Credit Systems

Attempts by international organizations to help build sustainable local credit markets have so far had inconsistent results. For almost 30 years, Brazil has been using central government-administered municipal development funds to channel World Bank and Inter-American Development Bank funds to local governments to finance infrastructure. Loan repayment rates have been excellent—none of the central government MDFs has had nonperforming loan rates in excess of 5%, and most have nonperforming loan levels of around 1% or even less. Yet, private sector financial institutions continue to regard municipal lending as extremely risky and will not lend to local governments. The central Government views municipal borrowing as risky and potentially excessive, prohibits municipal bonds issuance, and requires case-by-case authorization for other types of municipal borrowing.

The explanation for this paradox reveals why internationally supported municipal onlending systems have not, with greater regularity, helped introduce true local credit markets. The credit security mechanisms available to central government MDFs are not available to the rest of the market. MDFs and central government finance ministries utilize an offset system, which subtracts debt service from municipalities' transfer entitlements and automatically credits the MDF account. This mechanism is not available to private market lenders. As a result, the decades of experience with municipal onlending, while financing useful projects at the local level, have contributed little to the development of a sustainable local credit market. Because of the presence of the offset system and the resultant high loan repayment rates, MDFs have had little incentive to address underlying municipal credit risk.

Internationally supported municipal onlending programs should be viewed as public experiments. The administering institutions themselves are a type of public good. Their successes in municipal lending should be generalized to the rest of the market as swiftly as possible. This is a difficult lesson to apply, for it often means deliberately helping or even creating competition that may undercut the onlending program. However, when the objective is to create a sustainable domestic credit market, easing the entry into the market of competitive lenders and competitive lending arrangements should be viewed as the highest sign of programmatic success.

One of the most successful institutions in abetting municipal credit growth, by leveraging its own positive experience, is the Tamil Nadu Urban Development Fund (TNUDF). It is a worldwide leader in designing systems to attract new financing sources and introducing instruments that are consistent with a deregulated financial sector and nascent domestic capital market. TNUDF has been able to attract domestic private financing to the urban sector through several fundamental innovations, including the following:

- A 15-year bond issue (30 crore, equivalent to $300 million) sold on the domestic capital market to finance the credit component of the Madurai ring road. The bond issue was marketed to a variety of financial institutions. The security mechanisms introduced serve as a precedent for future similar financings: procedures for earmarking toll revenues into an escrow account, establishment of an independent trustee to represent the bondholders' legal interests, and provision of a back-up guarantee from the government of Tamil Nadu to cover any shortfall in the escrow account. This government guarantee includes the guarantee on TNUDF's own bond issue extended to other lenders.

- Equity investment by a private sector firm in India's first build-operate-transfer undertaking for wastewater collection and treatment. This arrangement gives similar types of local escrow account and other protection for project revenue to a direct private investor. The TNUDF financing package also requires an up-front contribution of Rs5,000 from each household connected to the wastewater system.
- Pooled financing. Twelve municipalities that have completed water and sanitation projects, with tariff mechanisms in place, issued a pooled bond backed by (i) a debt service reserve fund, (ii) a central government security back-up to replenish the fund, and (iii) an external guarantee covering 50% of principal repayments. The arrangement allowed the borrowers to refinance TNUDF loans at lower cost by taking advantage of the decline in interest rates and by avoiding the 3 percentage point spread built into TNUDF's onlending. This financing was expressly designed to compete favorably with TNUDF's own onlending and to serve as a precedent for future similar financings by others.

Other examples of international success in introducing local credit markets include the Municipal Finance Company of the Czech Republic, which introduced a system of municipal onlending through commercial banks, which, in turn, introduced the commercial banking system to a new set of highly creditworthy clients. Commercial banks assumed all credit risk from the outset. Once the initial lending succeeded, the banks quickly began lending to municipalities from their own funds. It is now routine for Czech commercial banks, which have access to long-term savings, to make intermediate-term (8–12-year) infrastructure loans from their own funds, and to do so under competitive conditions. All the largest banks make infrastructure loans to local governments. All cities with a population of over 100,000 have also issued municipal bonds. The potential for raising funds from both sources has helped restrain interest rates and lengthened the maturities for all types of municipal credit.

One of the most impressive local credit intermediaries of the developing world is the Infrastructure Finance Corporation Ltd. (Inca) of South Africa. It was formed by a private financial group as a specialized municipal lender and now finances more than half the municipal credit in South Africa. The corporation consistently earns returns on equity in excess of 20% while charging spreads of 50–100 basis points between its own cost of capital, raised primarily through bond issues, and its municipal onlending rate.

What lessons can be learned from these and other successes in building credit markets, as well as from the failures? One clearly is the importance of the stage of development of the overall credit market. Local government borrowing will always be a relatively modest share of total credit. Successful development of the local credit market is most likely to occur when local government borrowing can advance along with the rest of the credit market, following the same basic set of legal procedures and similar disclosure guidelines, credit-rating systems, and sources of long-term funds. However, some lessons are specific to the development of the local credit market as well, and are described in the following paragraphs.

Single-Purpose Infrastructure Financing Authority Insulated from Central Government

Infrastructure finance is a sufficiently specialized subject to merit quasi-independent institutions having the mandate to operate international onlending programs and charged with furthering the development of a domestic credit market. Institutions housed within the ministry of finance or other government ministry have difficulty giving weight to this extragovernmental objective of market building. A stand-alone institution also has the opportunity to establish a stable partner relationship with the private financial sector, which can be expanded over time, as with a municipal bank.

A variety of institutional models should be adequately insulated from the central government and its pressures, budgetary and political. TNUDF solved this design problem by handing over management and partial equity ownership to a special company formed by three of the major, quasi-private financial institutions in the country. On a localized scale, the Shanghai municipal government has announced its intention to utilize the Shanghai Water Assets Operations and Development Company, a specialized holder of local water and wastewater assets, as a sector infrastructure financing agent that will issue its own development bonds, attract direct private sector investment to the metropolitan water and wastewater sector, and sell off mature water distribution systems to private investors so that proceeds may be recycled in new investments. This type of sector-wide development objective should underlie financing efforts.

Infrastructure financing agencies housed within the national ministries of finance or otherwise directly reportable to the central government have had the least success in establishing local credit markets. Such agencies necessarily aim for central government control of municipal borrowing, which, if beyond that necessary to protect aggregate debt levels, runs counter to the spirit of decentralization and of financial experimentation that animates a successful infrastructure financing authority.

Competitive Unbundling

Many MDFs and similar institutions have deterred market development by concentrating too much authority within themselves. MDFs that prepare (or sponsor preparation of) development projects approve them for financing, make loans, oversee construction, collect loan repayments, and assume credit risk, acting almost as institutional monopolies and internalizing most of the market's operations. It is unsurprising that such institutions find it difficult to step outside their own management responsibilities and work to develop competitive markets, some of whose elements may compete directly with their own.

A broad institutional mandate for MDFs may be necessary. However, one of the first acts of an MDF should be to prepare an action plan for unbundling. It should identify responsibilities that can be spun off to the market or to local governments and establish a timetable for doing so. It is remarkable that in the more than 50 countries that have received international help in setting up MDFs, no MDF has voluntarily gone out of business by declaring itself unneeded in light of overall credit market development. An unbundling action plan will identify straightforward measures, such as encouraging the development of independent consultants for project preparation so that municipalities can competitively procure technical assistance without going through the MDF or securing MDF approval.

More ambitious unbundling will involve the essentials of a local credit market. In countries strongly committed to decentralization, project review at the MDF level can be simplified to focus on health, safety, and environmental issues, while such matters as discretionary design options and project costs, below some threshold, can be left to the local decision-making and political process. The Czech system was designed in this fashion from the outset. Municipal engineers were good enough to oversee local project designs. Accountability to local constituents was considered to be a good measure for assessing whether local political authorities had made the right investment choices and carried out construction efficiently. Commercial banks were charged with assessing credit risk, since they were assuming that risk. The infrastructure financing agency, or onlending fund, was left with the simple task of determining whether all planning approvals were in place, whether the projects complied with program rules, and how the onlending mechanics would work. In this unbundled onlending model, the onlending agent was able to approve a project and deliver funds to the commercial bank within an average of 31 days from receipt of project application. The speed of action had as much impact as anything else on the willingness of commercial banks to expand into the local credit market through this vehicle.

Financial Monitoring and Early Warning Capacity

The basic measure of a municipal financial intermediary's success in building a local credit market is its own loan repayment record. A good repayment record does not guarantee market development. However, a poor loan repayment record, which signals high credit risk to other potential lenders, will always set back market development. Some MDFs have set back local credit market development by introducing a new class of risk—political risk—into municipal lending. Inca, for example, will not lend jointly with government, however much its subsidized lending rates might lower the costs of capital to municipal borrowers. Inca justifies this stance on the ground that once government is involved, loan repayment becomes a matter of political negotiation that will inevitably carry over to repayments to the private lending partner.

Aggressive monitoring of local borrowers' financial and other conditions is a prerequisite to maintaining strong repayment rates in the absence of special mechanisms, such as offset or intercept arrangements. MDF performance in this respect has been weakest. Aggressive monitoring implies constant personal contact with municipal authorities to identify early warning signs of financial difficulty or reluctance to pay. Such monitoring needs to be complemented by swift action to enforce security arrangements and, when necessary, a willingness to restructure loan agreements to avoid defaults. Inca enjoys no government-supported loan security and has a small staff, but contacts each borrower weekly. Most repayment problems are headed off at this early stage. If a problem persists, Inca obtains within days of any missed or late loan payments a court order authorizing the seizure of loan collateral. With the court order in hand, Inca then negotiates with the municipality a specific loan workout that will avoid the seizure of collateral. The possibilities for applying this precise approach elsewhere are limited because it depends on the willingness and ability of the courts to act swiftly in enforcing security pledges. Constant and aggressive monitoring establishes the expectation that municipalities must make loan repayments on time, and that if extreme circumstances arise, a municipality must identify the situation at an early stage and agree to a voluntary workout.

Municipal Disclosure Rules

Full, prompt, and continuing disclosure of municipal budgets and of municipal financial conditions is essential to the operation of credit markets, especially a bond market that relies on public monitoring. The implementation of financial reporting and disclosure guidelines is a prerequisite for the effective operation of credit-rating agencies. International organizations sometimes have been remiss in not prioritizing financial reporting and disclosure reforms in designing the framework for a transparent credit market.

Accessing Long-Term, Cheap Capital

An infrastructure financing authority must raise capital as efficiently as possible, which involves accessing long-term savings. The largest and fastest-growing holders of long-term savings in most countries are pension funds. Priority should, therefore, be given to strategies to tap pension funds for municipal lending. The first step is often to modify the legal rules governing investment possibilities of pension funds. When Poland changed its regulations to allow pension funds to invest up to 5% of their assets in municipal bonds, the local bond market exploded, in volume and in bond maturities. Even though pension funds in much of Asia are modestly funded compared to other sources of capital, pension funds are growing at an exceptional pace. A forward-looking plan to increase capital flows to local infrastructure must connect with this special source of long-term savings.

Creating a secondary market for bond trading is another means of tapping into long-term savings. The existence of a secondary market allows households or institutions whose circumstances have changed to sell their long-term bonds even before maturity. Such flexibility increases market demand for long-term securities. Bonds are the best instrument for this kind of trading. In many countries, transferring one bank's municipal loan to another buyer is extremely cumbersome.

An equal challenge to accessing long-term savings is efficiently connecting borrowing from the private market with government subsidies to bring down the cost of capital for investments possessing strong externalities. Virtually no government in the world requires users to pay the full cost of wastewater collection and treatment, in view of the widely shared public health benefits. Such facilities should, therefore, be subsidized at the investment stage. The bond market offers an efficient vehicle for blending below-market capital with market-rate capital. The Government of India recently announced two initiatives to create substantial opportunities for state infrastructure development funds. One large national initiative is the National River Conservation program, aimed at cleaning urban rivers through investments in wastewater collection and treatment, before returning treated water to the rivers. The financing plan contemplates blending government grants with beneficiary contributions, urban local body contributions, and market-rate borrowing. A second national program, announced in September 2002 for fast tracking, is a pooled financing program modeled after the state environmental revolving funds in the United States. This program will combine 5% financing from government-supported sources with commercial-rate loans from private sector financial institutions and bond issues to finance underground sanitation projects. Both programs offer infrastructure financing agencies, such as TNUDF, the chance to greatly magnify the scale of their financing by assembling financing packages that take advantage of these terms.

Banks or Bonds?

There is no need to choose a single instrument as the "right" way to handle local government credit. Many countries simultaneously use bank lending to municipalities and local bond issuance. The policy rationale, however, justifies emphasizing development of local bond markets. The public monitoring and public disclosure required for efficient bond market operation are consistent with greater transparency for all public financial transactions. Financial sector deregulation has eliminated the possibility of having quasi-monopoly municipal banks draw on especially protected government allocations of low-cost, long-term savings to finance local infrastructure. In a competitive world, bonds have more ways to tap institutional and household long-term savings. Even when the ultimate credit extended to a local government continues to be a loan from a bank or other financial institution, the financial intermediary will increasingly raise its own capital for onlending from bond issues. That is the direction of change for the most successful intermediation vehicles. Even Credit Local de France, the original municipal bank, now raises the bulk of its financing on the bond market.

Footnotes

[1] For example, analyses of the 51% of arrears (at the end of 2001) in Indonesia's regional development account and subsidiary loan agreement reveal no correlation between arrears and fiscal capacity.

[2] For example, the annual debt service of Guiyang, the capital of Guizhou, a poor province, is projected to rise from CNY20 million in 2000 to more than CNY1.2 billion within the next 5 years, given the investment projects approved by the Municipal Planning Commission and the sources of financing projected by the Finance Bureau.

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