BANKS OR BONDS:
BUILDING A MUNICIPAL CREDIT MARKET

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INTRODUCTION

One of the starting points of this conference is the recognition that 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, so that these institutions can carry out their investment responsibilities.

This paper considers two “models” of municipal credit markets—a bank lending model that was used to finance municipal investment in Western Europe throughout most of the 20th century and still is the primary source of local credit financing in that region, and a municipal bond model that has been the foundation of municipal borrowing in North America. In designing local credit initiatives for Asia or other parts of the developing world, policymakers do not have to choose between these two models. In fact, the two systems are converging in their regions of origin. Countries now embarking on measures to build or strengthen 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.

Nonetheless, comparing the two models is instructive. Building reliable local credit markets, where they did not exist before, has proved more difficult than many foresaw. The experience of multi-lateral institutions is filled with apparent paradoxes. Large-scale use of Municipal Development Funds (MDFs), for example, began in Brazil almost exactly 30 years ago. Several states in Brazil have subsequently instituted MDFs, with a record of success that in many respects is enviable—very low rates of non-performing 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. There is a prohibition on municipal bond issues. 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 on-lending initiatives to build sustainable local credit markets stems in part from lack of clarity as to what elements a sub-national 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. In recent years Dexia has merged with, or taken equity positions, in other municipal banks throughout Europe, including Belgium, Spain, and Italy, establishing itself as a pan-European specialized municipal lender. It has also advocated the municipal banking model in Eastern Europe, purchased an equity position in a new specialized municipal lending institution in South Africa, and provided advisory services to Pudong Development Bank of Shanghai. Variants of Municipal Banks can be found in many other countries.

The Municipal Bank philosophy can be summarized in three principles:

- **Relationship Banking**
- **Delegated Monitoring**
- **Bundled Services and Bundled Pricing**

**Relationship Banking.** A Municipal Bank strives to establish permanent, partnership relations with its local clients. Most of the European banks have a history of specialized collaboration that dates back a century or
longer. They provide a breadth of services to complement their lending activity. A typical Municipal Bank provides financial advisory services to help municipalities prepare and structure their budgets. They provide assistance in investment project design and associated financial analysis of cost recovery strategies. The Bank may manage the municipality’s financial accounts and maintain the municipality’s deposits. These services are in addition to its long-term lending. Municipal Banks provide 15 to 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 State and municipalities, by handling tax-sharing arrangements or administering local government grant allocations on behalf of the State.

Initially, the Municipal Banks’ special relationship was protected by legal rights. Some of the Banks, like the Municipal Bank of the Netherlands, enjoyed a legal monopoly on local government lending. All of them enjoyed preferential and exclusive access to certain types of below-market, long-term savings that made it possible for them 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 other sectors of the economy, like small business lending. It has been found to be 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 longer-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.
In the municipal sector, one argument for establishing municipal banks has been that only a relationship bank of this kind can afford to support municipalities in the early stages of their learning about the credit market. The learning curve applies at least as forcefully to ancillary activities, like preparing financial information for loan applications and project preparation, as it does to actual borrowing and loan repayment. A bank can afford to nurture communities through the learning process only if it is subsidized by State policy or if it enjoys partial protection from competition, so that it sees itself as creating a long-term client with which it will do more profitable business in the future.

As borrowers grow in economic strength, the advantages to them of relationship banking tend to diminish. They no longer require the same kinds of financial hand-holding from their bank. 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 costs. Their loans now require less intensive monitoring and involve less credit risk. This maturation of borrowers can place strain on a closed credit system. A 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.” Municipalities and other borrowers could, in principle, deal directly with individual lenders, by borrowing investment funds from large financial institutions like pension funds or insurance companies. They could even borrow from individual savers. However, unless the loan at stake is large, it is inefficient for each saver to try to monitor financial condition and all the other factors affecting loan payment. A bank performs this intermediation and monitoring function. It gathers savings from numerous

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sources, assembles specialized professional capable of loan appraisal and loan oversight, allocates capital, and then monitors both its loans and the financial condition of borrowers.

In the case of Municipal Banks, monitoring is facilitated by the partner relationship that gives the bank special knowledge of the municipality’s budget and finances. Where the Bank handles all of a municipality’s accounts, 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 it recognizes that the client is encountering serious financial difficulty. A pro-active program of loan restructuring, where necessary, is preferable to accumulating non-performing loans. In the early 1990s, for example, when French cities found themselves confronted with declining revenues and large outstanding debt obligations incurred at high interest rates, in an interest-rate environment that had changed to lower rates, Credit Local de France negotiated workouts with some of the more financially distressed borrowers in order 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 its lending rate. Or some of the costs may be subsidized by government as a type of public good. Price differentiation of any kind by Municipal Banks in developing countries is unusual, even in lending activity. Municipal Banks in these countries tend to 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 magnitude 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 on-lending arrangements to differentiate interest rates according to credit risk is one factor that has made this experience difficult to build upon in constructing 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 the systems with the highest
rates of non-performing loans, repayment risk appears to be primarily a matter of willingness to pay rather than ability to pay.\textsuperscript{3} 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 currently 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 de-regulation. 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, like Dexia, have been able to survive financial-sector competition because of their reputation as an efficient provider to municipalities of a bundle of financial services and technical assistance that is in demand. Dexia, formerly State controlled, has been 100\% privatized. It competes throughout Europe with commercial banks and bond markets as an alternative type of municipal capital supplier.

In countries where specialty municipal banks do not have a long history of partner relationships or reputation to draw on, the effect of de-regulation within the financial sector has been to force banks’ lending to municipalities within the framework of standard commercial banking. This has exposed municipalities to shorter-term savings horizons. Moreover, for most commercial banks municipal lending is a small share of their total lending activity. As a result, commercial banks have tended to subsume municipal lending under other operations, eroding the special understanding of municipal finances found in relationship banking. Both of 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 Short-Term Lending.* China illustrates the consequences of greater reliance on commercial bank lending. In

\textsuperscript{3} For example, analyses of the 51\% arrears (at the end of 2001) in Indonesia’s Regional Development Account and Subsidiary Loan Agreement reveal virtually no correlation between arrears and fiscal capacity.
China, the bulk of municipal lending for infrastructure finance now comes from the China Construction Bank and other commercial banks. The majority of these loans carry three-year terms or less. Occasionally, they extend to five years. Local governments cannot repay these loans from infrastructure project revenues. In fact, in a period of greatly accelerating urban investment, they cannot repay the loans at all according to their scheduled terms.\(^4\) As both the borrower and lender know, the loans will have to be rolled over into new, short-term loans upon maturity. In a banking system as fragile as the Chinese system, and as burdened with non-performing loans, the reliance of local infrastructure financing on the continuing ability to roll over short-term bank borrowing, places the system at significant risk—both to future market conditions and to future banking reform.

A similar changeover is occurring in India. The country’s special infrastructure financing intermediaries have lost their exclusive access to long-term savings and have been subjected to financial-sector competition, as a result of market reforms. The institutions have had to react. ICICI, for example, has shifted away from long-term infrastructure financing toward retail banking and shorter-term investments. It carried out a reverse merger with its retail banking arm. The great majority of its new loans carry three-year terms or less, corresponding to the shorter-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 counted upon as a substantial source of financing for urban infrastructure investment in particular, now has largely withdrawn from such activity.

**Municipal Loans as Real Estate Lending.** Commercial banks frequently treat municipal lending as a sub-set 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 the primary source of cash flow to repay the loan. In a typical bank loan of this kind,

\(^4\) For example, the annual debt service of Guiyang, the capital of poor Guizhou Province is projected to rise from Y20 million in 2000 to more than Y1.2 billion within the next six years, given the investment projects approved by the Municipal Planning Commission and the sources of financing projected by the Finance Bureau.
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 Y3 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 observed 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. It spreads 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. Potential problems arise most acutely when land leasing is expected to generate the revenue to repay shorter-term commercial bank borrowing, and when the investment projects undertaken, like sewage treatment plants, do not directly add to land values.

The risks of commercial bank lending are only partly financial risks. More fundamentally, 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 that both the lender and the borrower investigate carefully the market for the infrastructure capacity that will be financed. Reliance on land and property sales for unrelated debt service payments can undermine the discipline of this project analysis, as can the use of short-term borrowing to finance long-term investment projects. For efficient service pricing purposes, borrowing periods should approximate the useful lives of the infrastructure facilities being financed.
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 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, it leaves an unfilled niche for smaller and less experienced local governments. This niche can be partially filled by pooling arrangements, like 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 Monitoring, 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 at large. 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 requiring 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, where to obtain financial advisory services or technical assistance on project design. Bidding for each of these support activities can be competed separately in a sub-market of its own. 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 TO 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 therefore is appropriate to focus more 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 tends to be 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 for assigning importance to ratings.

Where reliable information on local budgets, local balance sheets, local debt service obligations, and intergovernmental fiscal flows is not available, credit rating agencies are vastly constrained in the types of analysis they can carry out or the usefulness of that analysis for determining credit risk. There has been a tendency to rely on credit-rating agencies as 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, it substitutes a quasi-private rating process for full public disclosure. In some countries, like China, the credit rating agency releases to the public
only a one-page summary of its credit rating, along with the actual 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 very rarely is 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 are logically 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 in order to issue its bond. It hires a credit rating agency. In almost every case, the credit rating agency is 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 fact, in many transitional bond systems, institutional “relationships” re-emerge in the triangle of underwriter-credit rating agency—and issuer. All of these parties 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.* It often is assumed that, because in mature bond markets, urban infrastructure is financed through bond issues of 20-30 year maturities, or even longer, bond issues inherently open access to longer-term sources of funds than bank loans. This is not necessarily the case. In fact, the initial rounds of bond issues frequently contain terms very similar to those of bank loans. In India, the initial Ahmedabad and Tamil Nadu Urban Development Bonds were 5-year bonds, with durations that were significantly shorter, given the annual
requirements for principal amortization. Introducing municipal bonds does not solve the problem of accessing long-term capital. It provides an instrument which may make it more feasible to tap institutions and individuals having long-term savings. Designing a strategy for using 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 thus far have had spotty results. As noted in the Introduction, Brazil for almost 30 years has been using state-administered Municipal Development Funds to channel World Bank and Inter-American Development Bank funds to local governments to finance infrastructure investment. Loan repayment rates have been excellent—none of the state MDFs have had non-performing loan rates in excess of 5 percent, and most have non-performing loan levels of around 1 percent, or even less. Yet private sector financial institutions continue to regard municipal lending as extremely risky and will not make loans to local governments. Central government views municipal borrowing as both risky and potentially excessive. It has prohibited the issuance of municipal bonds, and required case-by-case authorization by central government for other types of municipal borrowing.

The explanation for this paradox also reveals why internationally supported municipal on-lending systems have not, with greater regularity, helped introduce true local credit markets. The credit security mechanisms available to the states’ Municipal Development Funds are not available to the rest of the market. The MDFs and state 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 on-lending, while financing useful projects at the local level, has contributed very little to the development of a sustainable local credit market. In fact, 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 on-lending 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 put into practice, for it often means deliberately assisting or even creating competition that may undercut the on-lending program itself. 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, has been the Tamil Nadu Urban Development Fund (TNUDF). TNUDF has been a worldwide leader in both designing systems that will attract new financing sources and introducing instruments that are consistent with the new reality of a de-regulated financial sector and a nascent domestic capital market. TNUDF has been able to attract domestic private financing to the urban sector through several fundamental innovations, including:

- A 15 year bond issue (30 crore) sold on the domestic capital market to finance the credit component of the Madurai Ring Road financing. The bond issue was marketed to a variety of financial institutions. The security mechanisms introduced serve as a precedent for future similar financings. These include 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 state government guarantee represents generalization to other lenders of exactly the same type of guarantee used to add security to TNUDF’s own bond issue.

- Equity investment by a private sector firm in India’s first BOT for wastewater collection and treatment. This arrangement extends similar types of local escrow account and other protections for project revenue to a direct private investor. The financing package assembled by TNUDF also requires the up-front contribution of 5,000 rupees from each household connecting to the wastewater collection system.
• Pooled Financing. Twelve municipalities which have completed water and sanitation projects, with tariff mechanisms in place, issued a pooled bond backed by (a) a Debt Service Reserve Fund, (b) a state government security back-up to replenish the Debt Service Reserve Fund, and (c) an external guarantee covering 50% of principal repayments. The arrangement allowed the borrowers to refinance TNUDF loans at lower cost, both by taking advantage of the decline in interest rates and by avoiding the 3 percentage point spread built into TNUDF’s on-lending. This financing was expressly designed to compete favorably with TNUDF’s own on-lending and to serve as precedent for future similar financings by others.

There are, of course, other examples of international success in introducing local credit markets. The Municipal Finance Company of the Czech Republic introduced a system of municipal on-lending through commercial banks, which 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 met with success, the banks quickly began lending to municipalities from their own funds. It is now routine for Czech commercial banks, which have access to longer-term savings, to make intermediate-term (8-12) year infrastructure loans from their own funds, and to do so under competitive conditions. All of the largest banks make infrastructure loans to local governments. All cities over 100,000 population also have issued municipal bonds. The potential for raising funds from both sources has helped constrain 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 of South Africa, INCA. It was formed by a private-sector financial group as a specialized municipal lender, and has grown to the point where it finances more than half of municipal credit in South Africa. It has been able to consistently earn Returns on Equity in excess of 20% while charging spreads of 50 to 100 basis points between its own cost of capital, raised primarily through bond issues, and its municipal on-lending rate.
What lessons can be learned from these and other successes in building credit markets, as well as from the failures? One lesson clearly is the importance of the stage of development of the overall credit market. Local-government borrowing always will 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, similar disclosure guidelines, similar credit rating systems, and similar sources of long-term funds. However, there are lessons specific to the development of the local credit market as well, and it is these I would like to focus on.

Desirability of Establishing a Single-Purpose Infrastructure Financing Authority with Insulation from General Government

Infrastructure finance is a sufficiently specialized subject that it merits quasi-independent institutions having the mandate to operate international on-lending programs and charged with furthering the development of a domestic credit market. Institutions housed within the Ministry of Finance or another Government ministry have a difficult time giving weight to this extra-governmental objective of market building. A self-standing institution also has the opportunity to establish a stable “partner relationship” with the private financial sector that can be expanded upon over time, as with a Municipal Bank.

A variety of specific institutional models meet the criterion of having adequate insulation from general-purpose government and its pressures, budgetary and political. The Tamil Nadu Development Fund (TNUDF) solved this design problem by handing over management and partial equity ownership in the Fund to a special company formed by three of the major, quasi-private financial institutions in the country. At 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 sectoral 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-sector 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 national Ministries of Finance or otherwise directly reportable to general-purpose government have had the least success in establishing local credit markets. Their perspective necessarily is that of government control and politics. Central control of municipal borrowing, beyond that necessary to protect aggregate debt levels, runs counter both to the spirit of decentralization and to the spirit of financial experimentation that animates a successful Infrastructure Financing Authority.

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

A broad institutional mandate for MDFs may be necessary in the first instance. However, one of the first acts of an MDF should be preparation of an action plan for unbundling. This plan would 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 Municipal Development Funds, none of the MDFs has voluntarily gone out of business by declaring itself unneeded in light of overall credit market development. An unbundling action plan would identify relatively straightforward measures such as encouraging the development of independent consulting markets in project preparation, so that municipalities could turn to these markets and hire technical assistance directly through competitive procurement, without going through the MDF or securing the MDF’s approval.
More ambitious unbundling would involve the very essentials of a local credit market. In countries where a strong commitment to decentralization has been made, project review at the MDF level could be simplified to focus on health, safety and environmental issues, while such matters as discretionary design options and project costs, below some threshold, could be left to local decisionmaking and local sanctions through the political process for unwise choices. The Czech system described earlier was designed in this fashion from the outset. It was judged that municipal engineers were of good enough quality to oversee local project designs. Local accountability to voters was judged to be the right venue for deciding 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 on-lending fund, then was left with the simple decisions of determining whether all planning approvals were in place, whether the projects put forward complied with program rules, and how the on-lending mechanics would work. In this unbundled on-lending model, the on-lending 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 most 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 will always set back market development. It signals high credit risk to other potential lenders. Some MDFs, in fact, have set back local credit market development by introducing a new class of risk—political risk—into municipal lending. As one measure of the seriousness of this risk, INCA, the South African private-sector financing intermediary, will not lend jointly with government, however much government’s subsidized lending rates might lower the costs of capital to municipal borrowers. It justifies this stance on the grounds that once government is involved, loan repayment becomes a matter of political
negotiation that inevitably will carry over to repayments to the private sector lending partner.

Aggressive monitoring of local borrowers’ financial and other conditions is a pre-requisite to maintaining strong repayment rates, in the absence of special mechanisms such as offset or intercept arrangements. It is one of the areas where MDF performance 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 of South Africa enjoys no government-supported loan security. However, its small staff contacts each borrower weekly. Most repayment problems are headed off at this early stage. If a problem should persist, INCA’s practice is to obtain 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 work-out that will avoid the seizure of collateral. The possibilities for applying this precise approach elsewhere are limited, because it depends upon the willingness and ability of the courts to act swiftly in enforcing security pledges. However, the value of constant and aggressive monitoring is universal. It establishes the expectation that municipalities must make loan repayments in a timely manner, and that if truly extreme circumstances arise, a municipality has the obligation of identifying the situation at an early stage and agreeing to a voluntary workout.

Municipal Disclosure Rules. Full, prompt, and continuing disclosure of municipal budgets and municipal financial condition 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 assigning higher priority to financial reporting and disclosure reforms in designing the framework for a transparent credit market.

Accessing Longer-Term and Cheaper Capital. An Infrastructure Financing Authority ultimately has the job of raising capital as efficiently as
possible. One part of this task involves accessing long-term savings. The largest and fastest-growing holders of long-term savings in most countries are pension funds. Priority therefore should be given to strategies for tapping pension funds for municipal lending. The first step in such a strategy often involves modifying the legal rules governing the investment possibilities of pension funds. When Poland changed its regulations to allow pension funds to invest up to five percent of their assets in municipal bonds, the local bond market exploded, both in volume and in bond maturities. Even though pension funds in much of Asia are modestly funded at present compared to other sources of capital, they are growing at an exceptional pace. A forward looking plan for increasing 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 longer-term savings. The existence of a secondary market allows households or institutions whose circumstances have changed to sell their long-term bonds in the marketplace. They do not have to hold until maturity. The greater flexibility tends to increase market demand for long-term securities. Bonds are the most appropriate instrument for this kind of trading. In many countries it is extremely cumbersome to transfer one bank’s municipal loan to another buyer.

An equal challenge to accessing longer-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 that users pay the full cost of wastewater collection and treatment, in view of the widely shared public health benefits. These therefore are appropriate investments to subsidize at the investment stage. The bond market offers an efficient vehicle for blending below-market capital with market-rate capital. The Government of India has recently announced two initiatives that 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 of India grants with beneficiary contributions, Urban Local Body contributions, and market-rate borrowing. A second national program, announced in September for fast tracking, is a pooled financing program modeled after the State Environmental Revolving
Funds in the United States. This program would 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 like 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. As shown throughout this paper, 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 specially protected government allocations of low-cost, long-term savings to finance local infrastructure. In a competitive world, bonds have more ways to tap institutions’ and households’ 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, it will increasingly be the case that the financial intermediary raises its own capital for on-lending from bond issues. That is the direction of change for the most successful intermediation vehicles examined in this paper. Even Credit Local de France, the original Municipal Bank, now raises the vast bulk of its financing on the bond market.