Metropolitan Economic Strategy

EXPANDING LOCAL GOVERNMENT RESOURCES FOR CAPITAL PROJECTS THROUGH MUNICIPAL BORROWING AND OTHER MARKET-BASED FINANCING

Charles J. Billand

Introduction

An exciting paradigm shift is emerging in developing and transitional economies. With increased decentralization and urbanization, local governments have taken on greater responsibility in the provision of basic municipal services. To help fund education, solid waste management, water and sanitation, and other economic development projects, municipalities have turned to innovative financing mechanisms to meet local demand. Since central government support cannot finance the service needs of most municipalities, local governments are increasingly turning to: (1) own-source revenues such as taxes, licenses and permits, user fees for services, and municipal assets; and (2) borrowing from private capital markets.

This article provides an overview of the paradigm shift that is occurring in many developing countries and the movement towards market-based municipal financing, and serves to assist public officials in designing strategies that increase the supply of local government resources to finance infrastructure, housing, health care, education, economic development, and other services. The article focuses heavily on the process of capital markets borrowing, either through borrowing from banks or issuing debt instruments to investors. Own-source revenues and cash transfers are examined only when needed to articulate the interface between borrowing and the other two sources of funds (own-source and transfers).

The Paradigm Shift

Many developing countries are in the midst of a paradigm shift on how to generate resources to increase the delivery of municipal services such as drinking water, sanitation, roads, and schools. Conventional thinking and practice has been that the central government is the primary funder of municipal projects. This attitude was further supported by an international development community focused on grant funding and concessionary loans. However, this model for development finance was unsustainable given limited budgets of both central governments and donor organizations.

Fiscal deficits and other investment priorities have significantly reduced central government transfers to local municipalities, limiting the provision of basic municipal services. This situation is compounded by rapid urbanization. Demand for municipal services, which already exceeds supply, is increasing exponentially as more people live in urban environments. The inability of municipalities to meet demand has resulted in the spread of diseases such as cholera and typhoid, the failure of cities to realize economic development potential and generate own-source revenues, and the increased cost of building infrastructure within existing settlements.

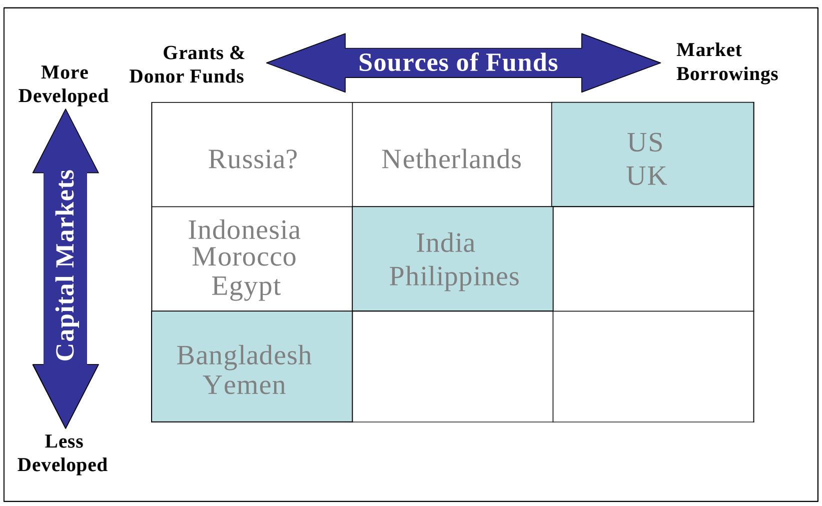
A new paradigm is emerging given that cash transfers from central governments and grants and concessionary loans from bilateral and multilateral donors can only meet a small portion of total local government infrastructure and services needs. Local governments have become more innovative in obtaining sources of funds to finance economic development, with many municipalities turning to the local capital markets to fund municipal projects. In Mexico, alone, local governments have raised US$10 billion from the domestic capital market to build municipal infrastructure. Governments and development organizations alike are beginning to realize the potential of local capital markets.

Sources of Funding for Building Municipal Facilities	
Old Paradigm Cash transfers from higher levels of government, and/or grants and below-market-rate loans from bilateral and multilateral donors.	**New Paradigm** Leveraging market-based local currency loans through strategic use of cash transfers, grants, and concessionary loans.

The prospects of utilizing local capital markets are tremendous. In most developing and transitional economies, the supply of capital available from the domestic private economy greatly exceeds the opportunity for investment. Investors in many countries are seeking alternative investment vehicles. Tapping into private capital markets is not only good for municipalities, but also for economic development. A significant portion of local funds is invested in low-paying central government bonds, unproductive real estate assets, or sent abroad.

Paradigm Shift Diagnostic

A diagnostic analysis of a country's capital market development status shows where a given country fits within the old-to-new paradigm shift. The figure below provides a simple comparative matrix for the diagnostic analysis:



In countries with less developed capital markets, such as Bangladesh and Yemen, municipalities must rely primarily on the old paradigm approach: cash transfers from central government, grants and concessionary loans from donors, and municipal revenues that can be generated through increased collections and/or reduced operating costs.

Many municipalities, such as those in India and the Philippines, have reduced their reliance on government cash transfers and donor loans and grants through own-source revenues. Increasing own-source revenues provides new funds to pay for building critical infrastructure. To increase own-source revenues, local governments have adopted programs to: improve billing and collections; reduce operating costs by implementing energy efficiencies; and, in the case of water supply, minimize lost water due to leaks. These actions are all within the manageable interest of municipal elected officials and managers and do not require difficult political decisions such as raising rates. In some instances, where there have been improvements in service delivery, governments have been able to raise service rates and tariffs to increase local revenues.

In countries with more developed capital markets, municipalities are able to rely more on new paradigm approaches — raising funds directly from market-based sources such as banks and investors (generally with the support of grants and concessionary loans). As an example, the total development cost of a municipal facility is determined. A feasibility analysis is used to determine the sources of funds available for market-based borrowing. The gap between market-based sources and total development costs is filled with grants and below-market-rate loans. An example is the Chesapeake Bay Foundation in the eastern United States where grants are competitively awarded to local governments within the watershed to help finance wastewater treatment facilities. The grants provide an incentive for municipalities by decreasing borrowing costs, while achieving a larger policy objective of reduced pollution for all residents living in the watershed.

Grants and below-market-rate loans may be structured on a competitive basis to achieve policy objectives. The U.S. Environmental Protection Agency provides grants to help states establish state bond banks. The bond banks use the funds to reduce the cost of borrowing for municipalities through pooled finance and revolving funds. These are described in Section 5: Municipal Finance Strategies.

Countries between the two extremes rely on carefully mixing old paradigm sources of funds to prepare them for eventually realizing new paradigm sources of funds.

Unless thoughtfully applied, the use of bi- and multilateral donor loans with below-market-rate terms and conditions will preempt the development of domestic capital markets, and make it more difficult to realize the new paradigm approach of municipal private market-based borrowing. The below-market-rate terms and conditions will crowd out private sector lending, as municipalities will always borrow at the lowest possible cost. Moreover, municipalities will only postpone the arduous process of coming to terms with the reforms and discipline needed to access sustainable supplies of domestic private loan funds.

Diagnostic Indicators

There are several markers that can be examined to determine where a country fits within the paradigm shift matrix:

Interest Rates

Interest rates and their close relative inflation provide one clue. Long-term interest rates are set, to a great degree, on estimates of long-term inflation. Interest earned over time on the principal amount of a loan will help to offset the depreciation in value of the loan principal due to inflation. It is difficult to borrow long-term in countries with high rates of inflation and interest, as the amount to be repaid may be as much as three to four times the amount of principal borrowed. Countries with low inflation and long-term interest rates are prime candidates for new paradigm strategies.

Loan Repayment Period

The repayment period for loans, especially on government borrowing is another sign. Unless a country is subjected to directed credit where the government sets interest rates and repayment terms, the market for central government borrowing establishes the longest repayment period. In other words, capital markets set long-term interest rates for non-governmental borrowing by observing the market reaction to government borrowing. Another factor is that infrastructure to a municipality is similar to a house to a family. Very few can afford the entire cost upfront; and the longer the repayment period the more affordable it is to repay the loan. Repayment periods of at least seven to 10 years are required to use new paradigm approaches in municipal finance.

Stock Market and Debt Market Development

The level of development in a country's capital markets is also an important factor. Capital markets are essential to the mobilization of private long-term capital since they are the place where investors and investment opportunities come together. Most capital market development starts with creation of a formal market for launching and trading equities (stock) and the related institutional structures of brokers, analysts, and market regulators. For municipal finance, the subsequent development of a debt market is crucial, although it need not be highly sophisticated to start. The emergence of investment banking (either within or outside of commercial banks), the use of credit rating agencies (domestic or international), and the broadening of financial securities regulatory systems to cover debt as well as equity securities will facilitate long-term municipal borrowing.

Pension Fund and Insurance Deregulation

To promote long-term lending, there should be sources of long-term funds. Long-term funds are the result of long-term savings within a country's financial system, and hence the existence of pension funds and life insurance are a good indicator that long-term savings are taking place. If these two types of financial services are controlled by the central government, the long-term savings they generate are normally directed into long-term central government treasury bonds and state-owned enterprises. As pension funds and insurance companies are given more independence and eventually become privately owned and managed, they will seek to diversify their investment portfolios and look for long-term securities with a predictable risk and return. Long-term municipal bonds can benefit from this evolution if they are introduced to investors as an opportunity for them to diversify (and hence reduce the risk to) their portfolios.

Credit Rating

A credit rating system has three primary actors. The first is that a municipality is in need of external resources, and has the authority to raise revenues, borrow funds, and pledge collateral. The second is a credit rating agency with the motivation and experience to examine the financial condition of the municipality and draw conclusions about the municipality's capacity to effectively raise revenues, repay debt, provide good financial management, and maintain a stable political environment. And, the third is private sector investors who have the resources and the incentive to invest in municipal debt. Credit rating agencies are independent third parties that offer a simple to understand credit score of a potential borrower or issuer of debt such a municipal bond. Investors compare credit scores across similar types of debt. They rely on the score to make judgments about investment risk because they cannot evaluate the creditworthiness of every potential investment opportunity.

Market-Based Financing Strategies

Several market-based financing strategies may be used to provide municipal services, including: micro and small enterprise loans, bank loans, municipal bonds, pooled finance, and revolving funds. For most of these strategies to succeed, however, several enabling conditions need to be accomplished and are discussed further in Sections 7 and 8.

Micro and Small Enterprise Loans

Micro and small enterprise loans are often used to provide basic municipal services, primarily for the poorest slum households. For example, a tea stall vendor will borrow to connect to a reliable supply of clean drinking water. A small-scale manufacturer will borrow to develop a dependable source for electricity to run machines. Access by slum dwellers to microenterprise finance is especially important, as this market is most difficult to service by conventional lenders such as banks. Some reasons are:

- Slum dwellers require weekly, sometimes-daily repayment schedules.
- Traveling long distances to branch bank outlets to make payments is difficult.
- Slum dwellers are unable to secure loans with assets.
- Group loans do not meet standard credit underwriting criteria.

Other examples of small-scale municipal service providers utilizing microenterprise financing include private sector medical clinics, taxi services, solid waste collectors, and child-care early education providers.

Bank Loans

Banks represent the simplest strategy for providing loans to municipalities; the repayment period, however, is likely to be three to five years, much shorter than needed for large capital projects. This is because banks rely primarily on deposits to make loans. Proper portfolio risk management requires that deposit terms be matched with loan terms. Like a home mortgage loan, to be affordable capital projects such as water, sanitation, and roads often require longer repayment periods; this is difficult for banks given portfolio management risk restrictions. Banks rely on standard loan agreements. These agreements often have terms and conditions that are not in the best interests of a municipality as a borrower. For instance, banks may restrict the use of loan funds or require a pledge of assets in excess of the amount borrowed, which will limit further borrowing by the municipality.

Municipal Bonds

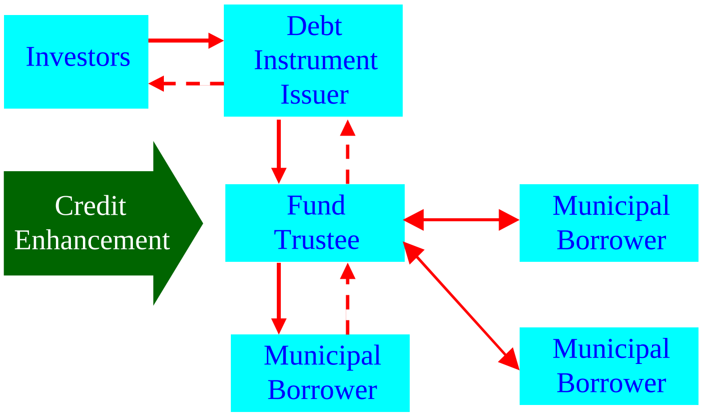
Municipal bonds are a bit more complex. Municipal bonds are an improvement over bank borrowing, as the municipality creates a debt instrument with term and conditions that meet its needs and the needs of the investor. The interest rate and repayment period are negotiated. The use of funds and collateral requirements can meet the needs of both the municipality and the investors. Upon completion of the economic and financial viability analysis, credit rating, and legal agreements, a bond prospectus is prepared. The purpose of the prospectus is to inform investors of the risks they undertake by purchasing shares in the bond transaction. Thereafter the debt instrument is sold to investors. An example is a municipal bond transaction sold to investors by the City of Ahmedabad in India. To improve its water supply, a municipal bond was sold by the government of Ahmedabad to institutional and individual investors located in the city. In addition to a market rate of return, investors also gained because their businesses derive economic benefits from the water improvements. In addition to the financial incentives, individual investors were attracted because they personally benefit from increased water supply.

Credit enhancements are essential for municipal bonds. They provide comfort to investors by providing layers of protection against non-payment by the borrower. The typical credit enhancement is a reserve fund. The first layer is an initial deposit equal to 1.25 times the annual debt service payments held by a trustee. The municipality pledges a stream of income to ensure that the fund is always at 1.25 times the annual payment. If the municipality is unable to make subsequent payments into the reserve fund, a second layer of credit enhancement is often used. The second layer is an intercept of cash transfers from higher levels of government to the municipality. If the municipality is unable to keep the reserve fund at 1.25 times the annual payment, the trustee intercepts sufficient funds to cover the municipality’s payment.

Large-scale capital projects require longer repayment periods. Life insurance companies and pension funds prefer investing in long-term securities. Both collect streams of income from individuals over many years before payout occurs due to death or retirement. Investing these funds in long-term securities like municipal bonds is the best way for them to manage their portfolio risk. Vast amounts of resources are tied up in pension funds and life insurance companies. Because of this, many central governments place rigid controls over their investment choices. The need to finance municipal facilities combined with the inability of central governments to transfer sufficient funds needed by local governments will drive the policy reforms needed to unlock these funds.

Pooled Finance

Pooled finance is a more complex variation of a municipal bond. A new entity (a special purpose institution) is created to issue a bond to investors. The proceeds of the investment are passed through a trustee to a number of



municipal borrowers. The borrowers use the proceeds to build projects, and pledge a stream of income to pay the trustee. The trustee passes the repayments to the debt instrument issuer, which in turn pays the investors. Credit enhancements, financial viability analysis, credit ratings and offer prospectus are similar to those used for municipal bonds. An example of a pooled finance transaction is the city of Bangalore in India.

Bangalore is India's Silicon Valley. Due to the rapid expansion of India's information technology (IT) sector, several municipalities surrounding Bangalore were unable to provide drinking water to meet the needs of the growing population. With the assistance of private sector consultants, eight municipalities identified and prepared water supply projects for financing. The Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) developed the physical and financial standards for the pool of projects to be included in the bond transaction. Upon completion of the legal documents, prospectus, and a credit rating, KUIDFC will sell the bond to the investors. The municipalities will use the proceeds of the bond transaction to construct the facilities.

Pooled finance works best where a series of municipalities have smaller projects and are willing to structure the projects in a similar fashion. This provides significant savings in loan origination costs to each municipality issuing its own individual bonds. The pool sets the standards for the projects (e.g. all are water supply), and defines the collateral requirements to be met by each individual municipal borrower. Pooled finance is less of a repayment risk to investors, then a single municipal bond. The risk is spread among all the borrowers in the pool.

Revolving Funds

Revolving funds are a variation of the pooled finance theme. Under pooled finance a special purpose institution is created for each bond transaction. The revolving fund approach is to create a long-term financial intermediary with assets that will be contributed to the pooled finance transactions.

The best examples are the state bond banks established in the US to finance municipal water and waste water treatment facilities. By the early 1990s, it was evident that the US government did not budget sufficient resources to fund municipal water and sewer needs throughout the nation. Federal legislation was created that allowed the US Environmental Protection Agency to provide grant funds to states as seed capital for state bond banks.

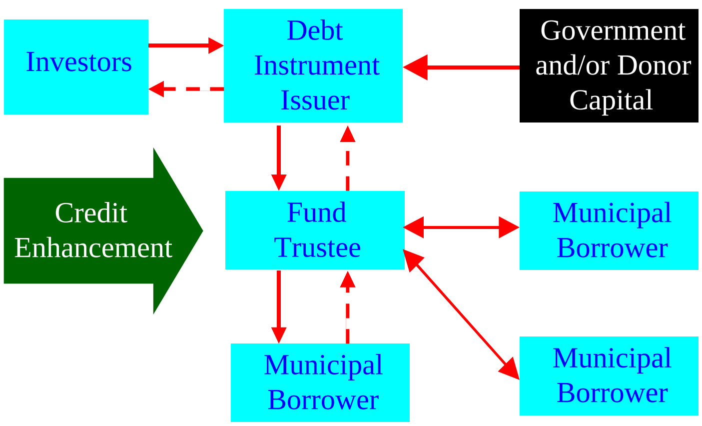
The seed capital is used in several ways:

• Providing assets for bond banks to demonstrate sufficient net worth to attract investors.

• Mingling bond bank funds with funds from investors to reduce the overall interest rate to the municipality.

• Reducing the proportion of total project development cost covered by investors.

• Providing additional layers of credit enhancements in addition to those provided by municipalities.



Revolving funds are particularly well-suited as an approach to avoid bilateral and multilateral funds distorting domestic capital markets. Instead of financing individual municipal projects, donors can provide concessionary loans to help establish revolving funds that will attract private capital market investors into the municipal finance sector.

USAID's Development Credit Authority

While not a financing strategy per se, USAID's Development Credit Authority (DCA) is an invaluable tool for developing sustainable supplies of municipal financing from indigenous capital markets, and can be used in combination with the strategies described above. Many projects are financially viable because the income from the venture is sufficient to pay operating costs and repay the loan. Lenders, however, are reluctant to make the loan due to:

• Unfamiliarity with the market for the product or service.

• Lack of adequate collateral to guarantee repayment.

DCA can be used to share the risk with lenders to help them move into new loan products and sectors. This is beneficial to the financier as significant business expansion opportunities may arise as a result of taking a partial risk with the US government.

With DCA involvement, the mission will have access to additional human resources to structure the transaction and undertake the risk analysis. To assist missions with achieving their strategic objectives, USAID's Bureau for Economic Growth, Agriculture and Trade (EGAT), Office of Development Credit (ODC), will assist the mission with utilizing a US government partial guarantee of local currency loans. The explicit cost to the mission is the funds needed to provide an initial deposit into a loan loss reserve (called a subsidy). The amount is based on a credit risk analysis provided by ODC. Depending on the host country and inherent project default risks, the subsidy amount generally varies from 3 percent to 10 percent of the amount to be guaranteed. In high risk countries, it can be much higher. The guarantee cannot exceed 50 percent of the total project development cost and can only be used to guarantee private sector investors and banks.

The DCA has been successfully used to provide additional layers of credit enhancements for municipal finance transactions such as the Local Government Unit Guarantee Corporation's (LGUGC) municipal bond transactions in the Philippines.

Another example is the KUIDFC pooled finance transaction in Bangalore, India. For the KUIDFC transaction described above in the pooled finance example, the DCA partial guarantee is a third layer of credit enhancement. The DCA guarantee is not called upon unless the first two layers fail. The first layer of credit enhancement is the reserve fund that contains 1.25 times the annual debt service payments. The second layer is the unrestricted ability of the trustee to intercept of cash transfers from higher levels of government to the municipality. The DCA provides the third level of credit enhancement. If for any reason the cash transfers were unavailable to be intercepted by the trustee, the US government would provide 50 percent of the funds needed to pay into the reserve account. KUIDFC is a government entity. Its assets are majority-owned by the government of the State of Karnataka and its management is majority-controlled by the government. DCA provides a partial guarantee of repayment to the private investors who purchase the bonds.

Understanding Debt Risk

In structuring municipal finance programs, it is important to understand debt risk. Municipal projects are potentially risky. The following section provides a list of possible risk factors that underlie municipal finance transactions:

Repayment Risk

There is a risk that the borrower may not be able to repay the loan. In spite of extensive analysis and financial modeling, unlikely events such as political upheavals and natural disasters may disrupt loan repayment. This risk can be mitigated through a reserve fund held in escrow by a trustee. Most reserve funds usually have an initial capitalization greater than the first year's debt service payment. Other credit enhancements such as intergovernmental transfer interceptors and credit guarantees may be used. An intercept of transfers funds an additional escrow account for debt repayment. A credit guarantee mitigates losses to lenders should the borrower fail to make its payment obligations.

Construction Risk

Another primary risk is construction risk associated with completing construction on time and within budget. If the time to complete a project exceeds the initial estimate, the project may require additional investment resources — potentially increasing debt levels. Construction delays also prevent the project from generating revenues that will likely add to already higher costs. In the Philippines this risk is mitigated by the LGUGC, which requires municipalities to hire professional construction management services in order to ensure completion on time and within budget.

Foreign Exchange Risk

Foreign exchange risk is a major concern with internationally financed capital improvement projects such as those developed under build-operate-transfer (BOT) approaches. The principal amount of foreign currency loans will rise or fall in value over time, as exchange rate values of foreign and local currencies fluctuate. Historically, developing country currencies fall in value. Under the old paradigm, this is a major concern. Loans in foreign currency denominations are converted to local currencies to build municipal facilities at an initial exchange rate and reconverted to the foreign currency at time of repayment. Over time, local currency devaluation results in ever an increasing principle amount to be repaid.

Wrongly, foreign exchange risk is often borne by the individual borrower. Unless a borrower such as a municipality has access to a supply of foreign currency, which is not the norm, the loan is more likely to be in default at one point or another.

Under the new paradigm, loans are made in local currencies. Donors use credit enhancements such as guarantees (DCA), or foreign currency grants and equity as seed capital to establish local currency revolving loan funds. This is why it is critical to develop local currency markets to finance municipal projects. Local currency financing means that foreign exchange risk is not a factor in the risk analysis.

Enabling Conditions at the National Level

Moving from the old to the new paradigm in terms of sources of funds requires a series of policy and regulatory actions at the central government level. Reforms are needed to establish the enabling conditions that are required across a country for a successful municipal finance sector to emerge. An early diagnostic will help to set priorities for allocating technical assistance and training resources.

For international donors that wish to support a municipal finance agenda in developing countries, the enabling conditions at the national and local level provide a menu of activities to pursue a policy reform agenda with host country governments. A detailed list of technical assistance and training activities that can help move the reform agenda forward includes the following elements:

1) level of decentralization;

2) legal and regulatory environment;

3) municipal accounting and financial reporting standards;

4) regulatory reforms;

5) revenue generation; and

6) clearinghouse and training network.

Level of Decentralization

Decentralization of authority to local governments is a worldwide phenomenon. Many central governments are in the process of shifting responsibility for providing basic services to local governments. This is good, as local officials can be held accountable for the quality of service delivery. And shifting responsibility for the provision of services is politically appealing. What also is required to complete the process is shifting authority for raising resources and managing costs. Higher levels of government, however, are often reluctant to shift revenue-generation authority to local governments. Unless local governments have both the responsibility for delivering services and the authority to raise revenues and manage costs, it will be difficult to apply new paradigm approaches.

Legal and Regulatory Environment

Legal and regulatory authority is required for local governments to borrow funds and pledge collateral. Municipalities must have the legal authority to:

- Enter into loan and bond agreements.

- Pledge revenues from taxes and fees as credit enhancements.

- Mortgage assets such as land.

Regulatory constraints often can be overcome by convincing approval authorities at higher levels of government that initial municipal finance transactions are trial or pilot activities to better understand what, if any, reforms will be needed to replicate the transactions.

Municipal Accounting and Financial Reporting Standards

Municipal accounting and financial reporting standards are the bedrock for:

- More accountable and transparent local government.

- Increased civil society participation in local government affairs.

- The establishment of a municipal credit rating system.

Key actors involved in setting policy and implementing regulatory aspects include the central government ministry responsible for local governments and the national certifying body for chartered accountants. Most countries follow generally accepted accounting principles for private sector corporations. It is necessary to promote similar accounting standards and guidelines for use by local governments.

Clear municipal accounting standards and reporting guidelines should be based upon double entry accounting, meaning that local government financial management will be standardized. Municipal managers will be able to understand the consequences of decisions, higher levels of government will be able to monitor local government performance, and civil society will be able to hold local elected officials accountable.

Credit rating agencies are independent third parties that offer a clearly understandable credit score of a potential borrower or issuer of debt such as a municipal bond. Municipal accounting standards enable rating agencies to compare financial performance across local governments and make judgments about risk. As a result, investors are able to compare credit scores across similar types of investments.

Depending on the type of transaction, the credit rating agency may rate the debt issue, the municipality, or both. The primary benefits of a credit rating for the municipality are:

- With a credit rating a municipality has access to a broad number of potential investors, which reduces the municipality's borrowing costs as investors will compete for more creditworthy borrowers.

- The municipality will understand why and how it earned its creditworthiness score and can decide what changes are needed to improve its credit rating and thereby reduce its borrowing costs.

Regulatory Reforms

Independent regulatory frameworks are essential for pricing of municipal services and for setting standards for performance and privatization. A fundamental issue is setting the price for municipal services. In the case of municipal water supply the process is highly politicized as individual households and businesses have a strong stake in the outcome. An independent regulatory authority places responsibility for regulating pricing with a third party that does not have a conflict of interest in terms of the outcome.

Setting prices requires that there be minimum performance standards for municipal service delivery. Using water supply, some examples of performance standards include:

- Twenty-four hour supply.
- Minimum percentage of unaccounted-for water lost due to leaks.
- Target ratios for operating costs as a percent of billable income.
- Minimum response time on requests for maintenance.

Standards for private sector participation in the delivery of municipal services also are essential. It is very easy for uninformed local government officials to enter into contracts that give too many advantages to the private sector. Standards provide a level playing field for both public and private sector entities to achieve their objectives.

In addition, changes to regulations for municipalities and debt markets may be needed to undertake municipal finance transactions. This is especially true for the municipal authority to borrow funds, pledge collateral, and generate own-source revenues. The initial diagnostic will identify the key regulations that need changing. In many cases, the first financial transactions can be used as pilot projects to better understand the regulatory issues. In other cases, changes in legislation such as laws establishing municipalities may be needed.

Revenue Generation

Matching responsibility for provision of municipal services with the authority to raise revenues is critical. Technical assistance for designing regulations to increase local government revenue generating powers may be needed. Technical assistance may include something as simple as business licenses, or as complicated as the ability to issue debt instruments.

Cash transfers from the national government based on incentives for municipalities to undertake reforms are needed, because local government officials and staff are often reluctant to change. In many cases central governments use ad hoc approaches to allocate revenue sharing funds. The aim is to carefully target these cash transfers to achieve needed reforms. For instance, funds may be allocated on a competitive basis to municipalities that pledge to institute double entry accounting systems, or develop pro-poor policies to ensure that people living in slum settlements have access to clean water and sanitation. A portion of the cash transfer can be used to pay for local accounting firms to provide assistance to the municipality. Other examples of criteria for competitive allocation of transfer funds include decreasing operating costs, increasing customer services, and instituting energy savings improvements.

Clearinghouse and Training Network

Creating an information clearinghouse and training network within a national municipal finance resource center is essential to scale up the initial successes accomplished with international donor support, and to ensure long-term sustainability of the municipal finance system. An information clearinghouse will be able to disseminate the lessons learned from donor supported best practices. The resource center will act as a primary source of information on municipal finance including conferences and training opportunities. It can act as a market place to bring together municipal projects being planned with:

- Private sector consultants to help conceptualize them.

- Private sector municipal service providers and financial institutions.

- Investors interested in participating in the project.

The resource center will use the clearinghouse to develop and implement a unified municipal finance training network. The network will build on existing training institutions, providing them with content and access to a market of potential trainees. Institutions participating in the training network will be provided with an assessment of municipal training needs around which to develop new courses. New training institutions can be created based on an analysis of gaps in training provided by existing institutions, combined with the need for training on the part of local elected officials and staff. The resource center will help develop course material based on lessons learned from best practices, and if needed provide training for trainers to support the development of the network. The clearinghouse and training network may be self-sustaining through membership fees, services, and central government cash transfer incentives for local government to support the training of municipal officials.

Enabling Conditions at the Local Level

There are a series of enabling conditions that are required to accomplish successful municipal finance transactions. Technical assistance and training will be required to achieve the reforms needed to create these enabling conditions.

City development strategies are useful for identifying a municipal vision and prioritizing strategies needed to achieve the vision. Through a successful process proven by the World Bank in numerous countries around the world, stakeholders representing citizens, civil society organizations, businesses, and governmental agencies are convened to reach a consensus on what the long-term image of the city should be. Is it a manufacturing hub, a university center of higher learning, or a tourism dominated economy? Once this is decided, a series of strategies to support the vision are identified and prioritized. Many of these will include capital projects such as water and sewer, housing, health, and education facilities. A participatory approach to strategic planning is essential to develop committed stakeholders willing and interested in carrying out these strategies.

Capital improvement plans are needed to estimate the cost, and to prioritize which basic service improvement projects to undertake within budget resources that are available to the municipality. Building on the priorities identified through the city development strategy process, the capital improvement plan will estimate the total development cost of each project. It will match the cost of the projects with the resources available over the coming five years to fund projects. For countries relying on old paradigm sources of funds, projects in the early years will rely on cash transfers and own-source revenues. As the paradigm shifts, municipal finance will play an important role in increasing the number of projects to be undertaken.

The last process is comparing project costs against funds available and identifying which projects can be undertaken within one year, two years, and up to five years. The first year is clearest, with the later years being less clear. The capital improvement planning process is repeated every year to take into account changes in project costs, priorities, and resources available to build the projects.

Financial management and accounting improvements are essential to identify collateral to be pledged to finance projects in the short-term, and to help build the credit rating system and replicate initial municipal borrowings over the long-term. The support needed here is to install and train municipal staff on using a double entry accounting system. Initially a series of municipalities may be identified based on willingness to participate in reforms needed to increase the supply of municipal resources through borrowing. Cash transfer incentives will help them move forward through greater revenue sharing, including a portion to pay for local accounting support. A national resource center can offer training courses and facilities for training.

Focusing resources on a few municipalities to create some initial successes will provide incentives to other municipalities and gather momentum towards replication. Achieving creditworthiness, a credit rating, municipal borrowing, and the construction of a much-needed facility will demonstrate the results of initiating accounting reforms to other municipalities.

Operations and maintenance improvements are needed to ensure that the asset's value will not diminish due to physical deterioration. Once substantial human and financial resources are invested in providing the basic services, they must be operated and maintained properly or the asset's value will diminish due to physical deterioration.

Management contracts may be an effective way to benefit from private sector participation. Privatization strategies where the private sector owns the asset have mostly failed. With technical support, management contracts are easier to develop and negotiate because the physical asset remains in the hands of the municipality. For instance, billings and collections, and/or operations and maintenance for a water and sewer facility can be contracted to local firms on a performance fee basis:

- Increased revenues will determine how well the contractor has performed under the contract.

- The municipality will benefit from sharing the increase in revenues with the private sector contractor.

Project preparation by effectively conceptualizing the financial and physical aspects of basic services projects, and planning for their implementation, will help make them much more bankable. As described earlier there is sufficient capital available from local investors. And there are overwhelming needs for the construction of municipal facilities. The problem is that municipalities lack the capacity to identify, package, and describe municipal projects in a manner that is understandable to lenders and investors. Outside technical assistance can help demonstrate to municipalities how this is accomplished. It can help build a market between municipalities and private sector financial consultants, architects, and engineers to replicate financing transactions in other municipalities.

Effectively procuring contractors to spend the proceeds of the long-term borrowing will ensure that additional interest costs will not accrue due to construction delays once the money has been borrowed. Municipalities need capacity-building on how to efficiently and effectively contract for goods and services. Model procurement documents combined with on-the-job training on how to solicit, evaluate, negotiate, and award contracts will help accomplish the task. Support for a few municipalities can demonstrate the way for others. A more open and transparent process will reduce costs and help alleviate corruption in the procurement process.

Budget and scheduling overruns can be mitigated through construction management services. Once the contract is awarded to build the facility, the main risk is completing construction within budget and on schedule. The local government must be ready to initiate procurement of contractors to spend the proceeds of the long-term borrowing. Otherwise additional interest costs will accrue due to delays starting construction. Donor support can help the municipality contract with local architects and engineers to provide construction management services.

Increasing own-source revenues will provide the municipality with the financial capacity to undertake priority projects without waiting to borrow funds. As described in Section 3, there are several areas that are well within the manageable interest of municipalities. Donor support to a few municipalities can demonstrate this approach for others by helping create a market between municipalities needing services and private sector consultants adept at this approach.

Observations on Municipal Financing

As more developing countries shift towards the new paradigm on municipal finance, several key observations may be useful in designing and implementing municipal projects.

1. Creating bankable infrastructure projects is the key to facilitating development of viable capital markets for municipal finance.

The lack of bankable projects is one of the primary constraints to the development of municipal finance markets. There are many examples of lenders, both internationally and in the US, that were unable to make loans due to a lack of loan applications. Increasing the supply of applications can be achieved through helping potential borrowers identify why they are borrowing, how they will repay the loan, and what collateral they are willing to put at risk if the loan is not repaid.

For municipal finance, USAID has successfully addressed this issue in South Africa by supporting the development of the Municipal Infrastructure Investment Unit (MIIU). The MIIU allocates grants on a competitive basis to municipalities to hire local consultants to help with project development such as:

- Project identification.
- Preparation of economic and financial analyses.
- Preparation of preliminary engineering sufficient to develop a realistic total development cost analysis.
- Preparation of legal documents.
- Management and operating plans.

If the project does not reach a financial closing the grant is forgiven by MIIU. If the project proceeds to construction the grant is repaid from the loan proceeds. With large-scale municipal projects the cost to prepare a project for financing is enormous; perhaps 5 to 10 percent of the total development cost. If the project turns out to be not feasible for financial or other reasons, the project preparation costs will not be repaid. Few project developers, either municipalities or private developers, are willing to assume these levels of risk. The MIIU support mitigates this risk for South African municipalities by forgiving the grant if the project turns out to be not feasible. Another benefit of the program is that MIIU's activities have helped to build a market where municipalities and project development service providers come together to form project development teams. MIIU has stimulated the development of a whole host of private sector businesses offering project development services to municipalities. This in turn has provided the impetus for more projects submitted for financing by municipalities.

2. Developing larger capital facility projects requires financing strategies utilizing long-term repayment periods that result from municipal bond, pooled finance, and revolving fund strategies. Examples of projects include large-scale water distribution, sewer collection, bridges, hospitals, housing, schools, commercial complexes, and industrial parks.

An objective of widely replicating increased supplies of potable water, housing development, school construction, or industrial parks will be more appropriate in countries where new paradigm strategies are possible. Longer repayment periods, lower interest rates, decentralization of authority and responsibility to local governments, and the ability of municipalities to borrow funds and pledge capital are important for these strategies to succeed.

Where the "paradigm shift diagnostic" shows that conditions exist for moving from the old to the new, it is possible to start strategically by developing one-time projects, while applying multi-year technical assistance and training resources to promote policy reforms and establish enabling conditions at the national and local government levels.

Large-scale project development during the startup period requires a commitment of cash transfers from higher to lower levels of government, plus international donor support. A good example of donor collaboration is the US-Japan Clean Water Initiative. The Japan Bank for International Cooperation (JBIC) has agreed to work with USAID missions in India, the Philippines, Indonesia, and Jamaica to combine the use of DCA partial guarantees with JBIC sovereign loans to increase the supply of drinking water, especially for the poor.

3. It is also wise to begin with smaller-scale capital facilities that can be undertaken with bank financing. Examples are improvement projects tied to increasing municipal revenues: reducing water leakage combined with energy improvements to water supply systems, school repairs to increase enrollment, hospital expansion, and improvements to public markets. Income-generating projects are important starting points as they result in a stream of new revenue for the municipality to make the payments on the loan.

Another good example is solid waste collection and management. With the exception of acquiring a site for controlled solid waste disposal, there is little required in the way of capital improvements. And the immediate benefits to the population are immense. Lack of solid waste collection was found by India's Supreme Court to be the primary cause of the 1996 outbreak of bubonic plague. Uncontrolled landfills contaminate rivers and aquifers, the primary sources of drinking water. The actions needed to improve clean and fresh water supply conditions can be financed with short-term loans from banks, and with much less sophisticated technical support and training.

4. Private sector delivery of municipal services provides new skills and resources to municipalities. It is also possible to utilize micro and small enterprise businesses to provide the services. And credit enhancement from international donors can be used to help leverage bank financing.

Two examples of health care services are private healthcare clinics where doctors are the owners and borrowers, and mother-and-child health care and family planning clinics owned and operated by midwives. The doctors can borrower from banks. The midwives need assistance to borrow from micro and small enterprise lenders.

Some capital facilities can also be provided by the private sector. Housing is normally a private sector endeavor. Municipalities should help facilitate this process by providing infrastructure such as water, sanitation, roads, and surface water management. The housing developer includes the cost of the site, municipal sewer and water connections, the house, and utility connections to the municipal infrastructure in the cost of the house. Purchasers borrow from lenders such as banks to repay the cost for the house.

Private sector hospitals and emergency care clinics can be built and operated by groups of doctors. The private sector can build and operate toll roads, electric power generating capacity, and natural gas supply networks. Long-term local currency loans will help make these facilities less expensive with reduced risk of repayment due to foreign currency valuation.

Appendix 1 is an illustrative analytic framework that can be applied at an early stage to assist in determining which financing strategies are most appropriate to pursue when designing a municipal finance program. The framework identifies the strategic public and private sectors, and pinpoints the facilities and services that will be improved through technical assistance, training, and capital investment leveraged through partial donor guarantees. The framework links facilities and services with the most appropriate financing strategies.

Appendix 1: Illustrative Analytical Framework

	Micro and small enterprise loans	Banks	Municipal Bonds	Pooled Finance	Revolving Funds	Development Credit Authority
Public Infrastructure facilities consist of:						
Water supply and sewer collection networks		✓	✓	✓	✓	✓
Water treatment and sewer treatment and disposal		✓	✓	✓	✓	✓
Solid waste disposal sites		✓	✓	✓	✓	✓
Roads, bridges, and underpasses		✓	✓	✓	✓	✓
Parks and recreation facilities		✓	✓	✓	✓	✓
Surface water drainage		✓	✓	✓	✓	
Electric supply		✓	✓	✓	✓	✓
Natural gas supply		✓	✓	✓	✓	✓
Community level improvements for slum upgrading projects		✓	✓	✓	✓	✓
Public/Private Infrastructure services include:						
Solid waste collection	✓	✓				
Facility operations and maintenance		✓				
Street lighting	✓	✓				
Street cleaning	✓	✓				
Private Housing includes:						
Individual residences		✓		✓	✓	✓
Utility connections		✓		✓	✓	✓
Public/Private slum upgrading includes:						
Housing improvement and expansion	✓	✓				
Utility connections	✓	✓				
Community improvements	✓	✓				
Informal sector commercial and industrial activities	✓	✓				
Public Health care facilities include:						
Hospitals		✓	✓	✓	✓	✓
Emergency clinics		✓	✓	✓	✓	✓
Public sector health clinics		✓	✓	✓	✓	✓
Public sector drug outlets		✓	✓	✓	✓	✓
Private Health care services include:						
Private sector well family, child care, and family planning	✓	✓				✓
Private sector doctors' clinics	✓	✓				✓
Private sector drug outlets	✓	✓				✓
Medical equipment providers and servicers	✓	✓				✓
Medical testing laboratories	✓	✓				✓
Public/Private Education facilities include:						
Public schools		✓	✓	✓	✓	
Private schools		✓	✓	✓	✓	✓
Maintenance and administration facilities		✓	✓	✓	✓	
Facility operations and maintenance		✓				
Early child care and education centers	✓	✓				✓
Public Economic development facilities include:						
Commercial developments		✓	✓	✓	✓	✓
Industrial developments		✓	✓	✓	✓	✓

***Charles J. Billand** is President of TCG International in Washington, DC, and a member of the Advisory Board of Global Urban Development. His article is adapted from a background paper prepared in 2005 for the US Agency for International Development (USAID), and is reprinted by permission of the author.*