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## Sub-sovereign bonds for infrastructure investment

This policy brief deals with the potential of subsovereign bonds in infrastructure finance. Sub-sovereign bonds are issued by state, provincial or local governments to finance essential capital projects. Increased urbanization, fiscal decentralization and volatile private funding have led to enormous municipal infrastructure financing needs around the globe. Moreover, the need for capital to finance projects targeted at either mitigation of or adaptation to climate change has further promoted the idea to tap the domestic capital market for green infrastructure investments through municipal debt issuances sold in local currency.

### Sub-sovereign bond issuance: more global data needed

With limited reliable information available on these financing mechanisms outside the US, better monitoring of sub-sovereign bonds remains urgent. While the market for sub-sovereign bonds in the US is roughly 40 times larger than for the rest of the world combined, domestic sub-sovereign bonded debt markets have deepened significantly in many countries over recent decades. While there are few domestic bond issuances by municipalities in developing countries, recent successes in Mexico, South Africa and India suggest that this form of finance may have some potential in less developed economies.

#### Policy options to promote sub-sovereign bond markets

A wide range of factors that influence a government's capacity to issue bonds or access long term finance, as well as investor willingness to invest in these instruments. We focus on issues that lend themselves to immediate and concrete policy interventions. On the issuer side, we emphasize the importance of capacity for project development, debt service and management, as well as use of credit enhancements. On the investor side, we highlight the importance of a diversified (but not necessarily deep) financial sector, issuer familiarity and

<sup>i</sup> Platz, Daniel, "Infrastructure finance in developing countries—the potential of sub-sovereign bonds", DESA Working Paper No. 76, July 2009.

confidence, and a suitable regulatory and legal environment.

### **Issuer recommendations**

# Create "project development facilities" to help develop bankable projects

Clearly, a shortage of domestic capital in financial markets is not the limiting factor. The constraint is good projects and good securities in which to invest. Infrastructure projects need to be carefully planned, engineered, and costed to be successfully debt financed. This requires up-front investment in project development services from market demand analysis to detailed engineering design. Most municipalities and public utilities in developing countries do not have the resources to pay for this initial work. They may also lack the experience managing project development.

Lack of funds and management capacity means most cities cannot translate their need for infrastructure into To overcome this problem, bankable projects. specialized "project development facilities" can be created. A project development facility can take many forms and perform different roles depending on the need. In smaller or centralized countries, the facility may be In larger or decentralized national in character. countries, the facility may operate at a regional or state/provincial level. For instance, the Municipal Infrastructure Investment Unit (MIIU) in South Africa and the state level Urban Infrastructure Development Funds in India provide financial, technical, and managerial support to municipalities and public utilities. The project development facility may also help to carefully structure and market the sub-sovereign bond to meet domestic investor community needs.

#### Improve debt service and management capacity

The capacity to support sub-sovereign debt depends on the ability of the borrower to maintain a reliable surplus of revenues over expenditures. Sub-sovereign revenues are derived from local taxes, fees and service tariffs or from the central government. In developing countries, the revenue potential of taxes is often low, given the prevailing low average income, large informal sector activities, weak tax administration capacities, low tax awareness and liberal tax incentives and exemption schemes. The collection of taxes is even more challenging at the municipal level where tax bases are usually confined to property taxes. Reform of tax policies and administration are thus critical for increasing debt service capacity. Equally important is the introduction of modern accounting and financial management systems at the municipal level in order to control expenditures and maximize revenue derived from assets such as municipal facilities.

The composition of the financial sector as well as tax regulations are critical to evaluate the revenue effect of tax exemptions. National government tax exemptions on sub-sovereign bonds, common in the US, effectively reduce the cost of municipal debt. The tax exempt security trades at a premium and the higher price corresponds to a lower yield, and thus reduces debt repayment for the issuer. However, exemptions will also decrease national revenues and may lower the potential for federal financial transfers to the municipality. Moreover, exemptions must be judged against their potential impact on the investor base as they will attract some new investors and divert others.

## Provide credit enhancements and pool issuances to lower risk

In order to avoid potentially costly risk exposure to exchange rate fluctuations driven by external factors, debt issuances should be geared towards the domestic investor community and issued in local currency. Different forms of credit enhancements can further help sub-sovereign issuers lower default risk. Credit enhancement mechanisms can take on the form of revenue cushions for payback (e.g., "sinking funds" in the US, "federal tax-sharing grants" in Mexico, or "bond service funds" in India), partial or 100% external guarantees for bond repayment (e.g., USAID partial guarantees for repayment of the Johannesburg bond), or the use of pooled financing. A well structured bond may make use of several credit enhancement mechanisms at the same time.

Pooled financing could be particularly promising in developing countries with heterogeneous issuers. In this scenario, a credible intermediary, such as the national or state government can establish a bond bank that collects the borrowing needs of a group of municipalities and issues a single class of bonds backed by a diversified pool of loans to municipal utilities and covered by a debt

service fund established before the bond is issued. This technique offers investors access to a diversified, geographically dispersed portfolio of borrowers, thus limiting exposure to narrowly focused credit problems.

#### **Investor recommendations**

#### Promote a diversified financial sector

Financial sector composition matters more than relative size. For example, whereas in India and South Africa, financial sectors are deep (measured in terms of the ratio of liquid liabilities to GDP), Mexico's financial sector is significantly shallower. However, one feature Mexico, India and South Africa have in common is a diversified financial sector.

Financial intermediaries with long-term portfolio needs, like pension funds, the insurance sector and mutual funds, are well-developed in all three countries. This suggests that careful surveys and studies on financial sector composition and investment needs should inform decisions on whether to promote subsovereign bonded debt.

Policy interventions can promote further financial sector diversification. However, first and foremost, the potential of municipal financing providers depends on the confidence in the system as a long term store of value. Reform efforts must be multifaceted and involve both supply and demand sides. For example, better records of taxes and benefits as well as performance standards and program efficiency are critical for the development of pension funds, while active government and corporate bond markets provide critical investment opportunities that can serve as benchmarks for investors interested in sub-sovereign bonded debt. Moreover, national development banks (e.g., Banobras in Mexico) invest in municipal securities and can be critical in helping to promote the sub sovereign debt market.

# Enhance investor confidence by promoting local rating agencies

Rating agencies can bridge the information gap, where investors are not familiar with the creditworthiness of the sub-sovereign issuer. Yet, in poor countries without a local credit rating industry, even creditworthy sub-sovereign issuers often cannot afford to pay for ratings. Initial fees may be in the range of several hundred thousand dollars, despite relatively small issuances.

International development agencies can play a critical role in lowering the entry barrier of rating agencies by paying for the first few municipal credit ratings so that the first issuers do not have to bear the extraordinary costs of developing a national rating scale

and adapting the rating methodology to data available in the country. USAID's use of this approach in India led to jumpstarting a local public finance credit rating industry. Once that industry develops, fees may decrease dramatically as the case of Mexico has shown. Moreover, linkages between local and international agencies can enhance the reputation of domestic ratings companies.

Provide suitable regulatory and legal environments The legal and regulatory environment shapes the development of the municipal bond market. Effective judicial frameworks, including a government bankruptcy framework (chapter 9 in the US) helped sustain the municipal bond market in the US by protecting the rights and obligations of creditors and debtors at the subnational level.

Moreover, debt ceilings, introduced in the earlier stages of the US municipal bond markets, have helped keep municipal debt in check. However, important exceptions to debt limits were made for essential revenue -generating public improvements, like water supply systems. Overly stringent credit ceilings should not impede the development of the municipal bond market, which can channel productive investment to providing essential local services of municipalities that would otherwise have no access to long term finance.

Other less market oriented type regulations may also help the development of the municipal bond market. In the US, certain state-owned banks have long been obliged to invest a certain share of their assets into government-owned securities, including at the state and municipal levels.

Finally, Mexico provides a powerful example of how regulatory measures can actively promote subsovereign debt. Mandatory provisions for municipal revenue cushions ("master trusts") and mandatory issuer ratings have promoted investor interest in municipal bonds and increased access of municipalities to long term bank loans. Regulatory changes that enhance the creditworthiness of the issuer and promote the local rating industry are therefore important reform measures to deepen the market for sub-sovereign bonded debt.

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