

# GRID LINES

Sharing knowledge, experiences, and innovations in public-private partnerships in infrastructure

## Enhancing the creditworthiness of municipal bonds

### Innovations from Mexico

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**I**n 2001–03 the municipal bond market in Mexico was among the most active in the developing world. Government officials had found a way to dramatically enhance the creditworthiness of local government debt without using sovereign guarantees. The technique, adapted in part from private sector “future flow” financing deals, enabled a state or local government to earn significantly higher credit ratings for bond issues than for its normal balance sheet debt. Many other developing countries have turned to Mexico as a source of innovation that may have application in their own markets.

Many central governments in the developing world are looking for alternatives to sovereign guarantees to help municipalities and local utilities access capital markets. One well-known enhancement involves intercepting intergovernmental transfers to pay subnational debt service if the borrower proves to be unwilling or unable to make normal payments.

The Mexican government introduced a variation of this technique at the end of the 1990s, which allowed states and municipalities to use sophisticated revenue intercept mechanisms to create credit enhancements of a type pioneered by private financial institutions. The added confidence these enhancements provided to investors and rating agencies led to a sudden blossoming of the municipal bond market in Mexico. Starting in December 2001, with no previous experience in municipal bond issuance, the market registered 10 subsovereign bond issues in less than two years.

### Looking for a better way

The 1994–95 financial crisis in Mexico led the federal government to take stock of its public financial health. Among many other things, federal officials began to look for better ways of financing investment by state and local governments.

The most popular existing method involved loans by development and commercial banks backed by intercepts of the intergovernmental tax-sharing grants managed by Banobras, the largest state development bank. Loan agreements typically allowed creditors, in case of default, to ask the federal government to deduct debt service payments from the borrower’s monthly tax-sharing grants. The deduction amounted to an intercept of payments, executed through Banobras, before the funds reached the state or local government.

The intercept arrangement created an implicit federal guarantee of state and local borrowing—and a massive contingent liability for the federal government. Lenders, viewing such loans as backed by the federal government’s creditworthiness, paid little attention to the purpose of the borrowing or the credit standing of the borrower.

As part of decentralization reforms in the late 1990s, Mexico’s federal government sought to increase the financial autonomy and accountability of state and local entities by clearly separating the finances of different levels of government.

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Beginning in March 2000, no state or municipal debt could be backed by federal intercepts of tax-sharing grants. The grants would continue to flow to states and municipalities and could be pledged for debt repayments, but new loan agreements could no longer involve direct federal participation or any implied federal guarantees. In addition, changes in bank capitalization requirements encouraged banks to scrutinize the credit standing of local government borrowers by seeking two ratings from nationally recognized credit rating agencies before making loans.

The need to provide adequate assurances without the federal government's implicit guarantee challenged subsovereign borrowers to find innovative solutions. U.S.-style general obligation borrowing, backed by the full faith and credit of local governments, was not attractive to investors because of the short term limits for state and local elected officials (usually three or six years). The rapid turnover of officials created concerns that promises to pay debt service could be amended or retracted for political reasons.

Revenue bonds, backed by cash flows from projects financed by bond proceeds, were even less attractive, because of a perceived lack of sound local administration. Years of relying on tax-sharing grants to back borrowings had allowed state and local officials to ignore problems in local revenue management. State and municipal services were often run inefficiently, leading to volatile or otherwise unreliable cash flows.

Tax-sharing grants remained a large and predictable source of local government revenue. In the late 1990s they accounted for more than 90 percent of revenue for states and more than 70 percent for municipalities. The challenge was to find a way to convince investors that state and local officials would be willing to use those revenues to make future debt repayments even during financial downturns or after new elections.

## A solution in future flows

A solution was found by looking at how future flow securitizations allowed public and private companies in below-investment-grade countries to access affordable international finance. Traditional asset-backed securitizations involve repackaging diversified pools of home mortgages or car loans for resale as tradable securities. In contrast, future

flow transactions usually involve borrowings backed by future revenues (such as expected future sales) rather than existing assets. These revenues typically come from sources that investors regard as highly reliable.

The first major future flow securitization in a developing country was structured in Mexico by Citibank in 1987. The transaction involved securitizing telephone service receivables owed to Telmex, Mexico's monopoly phone company. The receivables arose when Telmex completed more calls for AT&T customers calling into Mexico than AT&T completed for Telmex customers calling into the United States. These net international settlement receivables were relatively easy to estimate because of the market histories of the two companies. Moreover, they originated from a highly reputable U.S. company.

Telmex was therefore able to issue investment-grade bonds at a time that Mexico was restructuring its sovereign debt and Mexican companies, particularly state-owned ones, were unable to access international capital markets. Telmex sold its AT&T receivables to a U.S.-based trust and instructed AT&T to pay its Telmex invoices to that trust. This arrangement isolated debt service payments to bondholders from any possibility of misdirection by company or government officials and guaranteed the bondholders first access to reliable cash flows. That allowed Telmex securities to earn a higher credit rating than Mexico's sovereign debt.

## The idea catches on

Mexican officials realized that the future flow mechanism offered a way to simulate the federal intercept arrangements that had made borrowing possible for states and municipalities before 2000. Rather than the federal government intercepting grant flows on behalf of lenders or investors, administrative trusts run by professional financial managers could receive tax-sharing grants and make debt service payments to bondholders before any of the grant funds flowed to local officials (figure 1). This mechanism could allow municipal bond issues to receive higher ratings than the parent municipality's general obligation debt.

Federal officials proposed that states and municipalities create such trusts. They envisioned two possibilities: The local government entity

**New rules on implicit guarantees led to a need for new solutions**

could issue debt securities and use the trust to make debt service payments. Or the trust itself could sell securities and pay them off with tax-sharing revenues assigned to it by the state or local government. Either way, trusts could isolate debt service payments from general government expenditure accounts. As legal, tax-neutral entities under Mexican law, trusts could be created relatively easily by local officials. And master trusts could allow management of several debt obligations at the same time, with funds going into designated subaccounts.

Such trusts quickly caught on beginning in late 2000, with many Mexican states and municipalities using master trusts as payment mechanisms for local-currency-denominated infrastructure bonds. The bonds had relatively high ratings, low interest rates, and terms ranging from five to seven years.

These Mexican deals stopped short of actual securitization. Most of the trusts were debt repayment vehicles only, and not structured as full guarantee trusts. Importantly, debts managed by the trusts remained direct obligations of the state or municipal borrowers. Their revenues were simply used by the trusts to make debt service payments. The revenues were not packaged and sold to investors, as they would be in a genuine future flow securitization.

### A web of internal enhancements

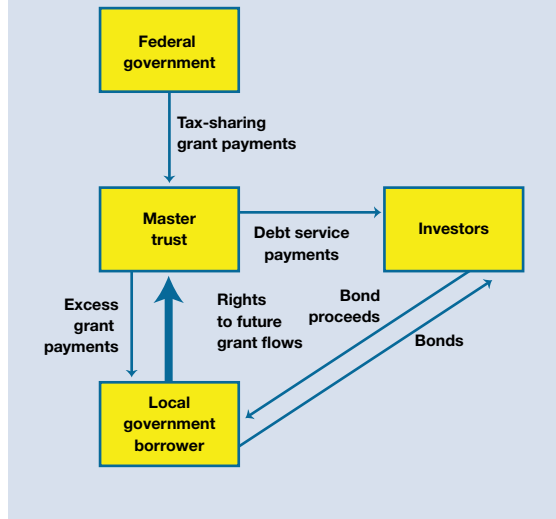
Perhaps the most important aspect of Mexico's version of the future flow mechanism is that it enables rating agencies to give higher ratings to state or municipal projects than they normally would to state or municipal governments. Fitch's credit ratings for the five master trust financings completed by April 2003 averaged nearly five rating grades higher than its ratings for general obligations of the parent state or municipal entity (table 1).

The future flow mechanism achieves such rating improvements because of features that function as a web of sometimes overlapping internal credit enhancements—mitigating precisely the kinds of borrowing risks that concern Fitch and the other credit rating agencies.

- The *administrative trust structure* isolates debt service payment from normal municipal budgets

**FIGURE 1**

#### How funds flow in master trust borrowing



Features of the future flow mechanism create a web of enhancements

and expenditure processes. Because the money used to pay debt service does not pass through the hands of municipal officials, it cannot be diverted or withheld. That sharply reduces the basic risk that future municipal governments might be unwilling or unable to pay creditors.

- *Irrevocable instructions* to the federal government to direct tax-sharing grants to the trust rather than the municipality provide additional credit strength. The state or local legislature often issues these instructions, adding to their effect.
- Trusts always involve *overcollateralization* of debt: the tax-sharing grant revenues pledged to support the outstanding debt are typically several times the face value of the debt. This surplus assures investors that if tax revenues fall, or federal allocation policies change, a trust will still be able to repay bondholders.
- *Covenants* with bondholders require that unfavorable “credit events”—such as rating downgrades or reductions in debt service reserve accounts—trigger specific remedial actions by the trust. Remedial actions can include larger contributions to reserve accounts, the creation of additional reserve accounts to serve as a first line of defense against revenue problems, acceleration of debt repayment, or immediate repayment of all debt using all pledged revenues as they become available.

## A recent decline in bond sales

The number of future flow municipal bond sales in Mexico has declined in recent years, for several reasons. Mexico's economic growth has led to higher subnational credit ratings, reducing the need for the added assurances that future flow mechanisms provide. Favorable investor sentiment toward emerging market debt has reduced the perceived risk of default for more traditional securities and standard loans. And because of added complexity, future flow bond issuances often involve higher transaction costs for municipalities. These costs, along with the overcollateralization of the debt, make the future flow deals expensive, even with the lower interest rates made possible by the enhancements.

The high costs of bond issuance have encouraged local commercial banks and local, privately managed pension funds to move into the sector by taking advantage of the same credit-enhancing administrative trust structures developed for use with bonds. Banks have been particularly effective in competing for the business of medium-size and small municipalities, whose issue sizes are typically too small to warrant the relatively high issuance and collateral costs of future flow deals. Issuance costs for these deals have stabilized at roughly Mex\$10–15 million—as much as 10 percent of the average loan size for these smaller municipalities. Larger municipalities and states, with much larger borrowing needs, can more readily afford the all-in costs of these bond sales. But these too are increasingly attracted to cheaper bank or pension fund borrowing.

In addition, the Mexican government has become concerned about imprudent lending and borrowing practices. The future flow mechanism succeeded in part because it re-creates some of the moral hazard that plagued municipal borrowing backed by federal government intercepts in the 1990s. Thanks to the ironclad repayment promises, lenders are not

**TABLE 1**

**Ratings of local-currency general obligations and master trust financings, April 29, 2003**

Government entity	General obligations	Master trust financings
State of Morelos	A	AA+
San Pedro Garza Garcia, Nuevo León	AA	AAA
State of Mexico	BB+	AA
Guadalajara, Jalisco	AA–	AAA
State of Guerrero	A–	AA+

Source: Fitch Ratings, Duff & Phelps 2003.

particularly interested in assessing the overall creditworthiness of the borrower or the reasonableness of the projects that will use the bond proceeds.

## Conclusion

Whatever the future mix of bond issuance and bank lending—and the federal government's evolving role in overseeing subnational finance practices—the municipal future flow mechanism is clearly a powerful financing tool. It has helped Mexican states and municipalities access badly needed capital at affordable interest rates. And it may have application in other countries, particularly those considering the use of revenue intercepts to facilitate municipal debt issuance.

### Note

The authors are grateful for comments from Enrique Villatella, former governor of Bancomext, and Sabino Escobedo, TAG Financial Advisors.

### Reference

Fitch Ratings, Duff & Phelps. 2003. "Boom Times at the Rio Grande: U.S.-Mexico Border Region Expands." Fitch Ratings, International Public Finance, New York.



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