Asking the right questions
Johannesburg completes a groundbreaking municipal bond issue

Jason Ngobeni

In 2004 the City of Johannesburg sold two municipal bond issues, among the very few such issues in Africa. The bond issues marked the city's recovery from near bankruptcy in the mid-1990s. They have been followed by several more—as well as an even more ambitious capital financing program. Preparing for a first-time bond issuance is complicated and time consuming. Johannesburg navigated its way with remarkable success by asking the right questions and insisting on credible answers. Its path offers guidance and insights to other local governments considering the use of municipal bonds to finance infrastructure.

By the mid-1990s the City of Johannesburg was close to bankruptcy. Infrastructure was deteriorating, and this city of 4 million residents had a capital budget of less than $50 million. But a visionary municipal management team was put into place, and it promptly began corporatizing utilities, selling off commercial enterprises, and contracting out services.

The city had many of its operating problems largely under control by 2003, but it needed huge amounts of capital investment. Under apartheid, capital expenditures had been dealt with through a government-backed “prescribed investment regime”: institutional investors were required to hold 54 percent of their investment portfolios in a range of government securities, including municipal bonds. The high, fixed percentage and an implied sovereign guarantee meant that virtually all municipal securities could be sold quickly through private placement.

While the system fed capital to municipalities and helped to build and maintain western-style urban infrastructure services for the white minority, it did little to address the needs of the disadvantaged majority population. Nor did it encourage the development of a viable municipal bond market. There was virtually no trading of bonds; investors simply bought and held the bonds to fulfill their portfolio requirements.

The prescribed investment regime ended in the early 1990s as government leaders began to realize that a perceived sovereign guarantee of local government borrowing was creating large contingent liabilities for the national government. Municipal bond sales stopped entirely after 1993. Private bank lending to municipalities also began to decline after the end of apartheid in 1994, largely because municipalities were expanded to incorporate disadvantaged areas and as a result became much less attractive to private lenders.

The government used South Africa’s Development Bank of Southern Africa (DBSA) to fill some of the infrastructure investment gap in the late 1990s. But the DBSA could not supply all municipal investment needs, and once the national government stopped contributing to its operations in the mid-1990s it sometimes avoided risky investments to maintain its credit rating. A private, nonbank investment fund, the Infrastructure Finance Corporation (trading as INCA), began operation in the mid-1990s, raising money in the capital markets and lending to municipalities at commercial rates.

Jason Ngobeni is executive director of economic development, and former city treasurer of the City of Johannesburg.
The questions

By 2003 Johannesburg city officials were asking and getting answers to a series of basic questions about whether bond financing or bank loans was a better way to meet the city’s infrastructure financing needs. These questions and answers were followed by more as the city navigated its way.

What were the advantages of bonds?

Size. Bond issues can be substantially larger than typical bank loans, depending on the appetite of the investing community.

Interest rates. Interest rates on bonds depend on the creditworthiness of the issuer and the effectiveness of marketing the issue to underwriters and investors, not on commercial lending rates. In essence, the interest rates reflect a premium over the rate on the most risk-free bond of the same maturity, typically some form of national treasury debt. Most important, interest rates on bonds can be lower than those on bank loans, and that potential seemed to exist in South Africa.

Maturities. Bonds typically have longer maturities than bank loans. That means that debt service costs are spread over longer periods, making them easier to pay. For infrastructure projects, extending the repayment period also makes good public policy sense, because it matches the life of the assets being built with the liability to be paid back. In effect, longer maturities ensure that the users of the infrastructure are contributing to the repayment (through taxes or charges).

Collateral requirement. In contrast with bonds, traditional bank loans require matching collateral, increasing their true cost to the municipality. A typical example: In South Africa, nearly 20% of every $1 borrowed would have to be invested in an escrow account, usually with the lender, and the return on the account is generally below market rates.

What were the disadvantages of bonds?

Issuance costs. Bond issues, particularly first-time issues, can involve higher costs than loans. These costs include advisory and underwriting fees and legal due diligence in addition to disclosure costs, trustee fees, and so on. Most of these costs can be paid from the proceeds of the issue, so they do not typically cause cash flow problems for the issuer. But they are burdens for taxpayers or ratepayers.

Credit issues and interest costs. Bonds can be more expensive than commercial loans if investors perceive the credit quality as poor. In 2003 most investors in South Africa viewed municipal debt as inherently risky. Johannesburg would have to work hard to market bonded debt at attractive interest rates. Credit enhancements, including financial guarantees or special structuring of the issue, could help reduce interest costs.

Market limitations. Early in the 1990s the South African capital market was volatile: interest rates were relatively high, investors were not particularly knowledgeable, few financial intermediaries had experience with bonds, and rating agencies were rarely used. There was virtually no secondary market, so investors had difficulty selling bonds before maturity (an option every investor wants to have when interest rates are volatile). All this promised to make selling bonds with long maturities difficult.

Amortization of payments. While municipalities typically use amortizing bank loans to fund their capital programs, South African investors and underwriters largely prefer bullet bonds because of their simplicity. Yet while municipalities can repay a portion of a bank loan (interest and principal) each year, bullet bonds require rigorous financial planning to ensure that they can be repaid when they mature.

Could the city sell bonds for infrastructure investment?

By 2003 Johannesburg had huge capital investment needs, particularly in the former townships, which lacked adequate access to water and electricity. Yet the city was already heavily indebted to the DBSA, INCA, and most of the major commercial banks, which had limited appetite for more debt from the city. To compound matters, much of this earlier debt was expensive because it had been secured when the municipal finances were much more tenuous. Finally, despite significant management reforms, the city still had not earned unqualified audit reports on its financial statements.

All these factors together suggested that the city would face serious challenges with a standard debt issue. As a result, securing new debt, on top of outstanding, expensive obligations, did not seem possible.
Could the city use a bond issue to refinance existing debt?

After reviewing the situation, city officials and their advisors realized that they might be able to sell a municipal bond to refinance much of the outstanding debt. Ideally, such a bond issue could produce cost savings by lowering the overall interest rate on the city’s debt, extending the maturity on the debt and thereby lowering annual debt service repayments, and freeing assets that had been ceded to lenders as collateral for earlier loans. Moreover, refinancing presented much less credit risk for investors because the city already had a successful track record of servicing this debt at a higher cost.

The city hired consultants to examine the outstanding loan book, to determine the size and characteristics of outstanding loans and identify which were backed by redemption instruments or affected by prepayment penalties. The results were somewhat startling: almost $430 million in redemption instruments had been ceded to lenders, held in reserve in case of default. If structured correctly, a municipal bond could liberate these municipal assets. The city decided to go ahead with a bond issue.

What characteristics needed to be clarified before issuance?

Type of bonds. Should the city issue “general obligation” bonds, to be repaid from any and all city revenues? Or should it issue revenue bonds, to be repaid from the revenues of the projects built with the proceeds? Because the city had already created semiautonomous utilities, there was a possibility for using revenue bonds for much of the infrastructure needed. But close review showed that the city needed more money than could be raised by the utilities, which were not yet fully self-sufficient. Moreover, the city would need to use all sources of revenue—including taxes, which were not available to the utilities—to support new debt. The city decided to use general obligation bonds.

Credit quality. The better the credit quality of the issuer, the lower the interest costs. This simple rule confronted the city with a question: should it invest in improving its financial accounting and reporting systems so as to achieve unqualified audit opinions and better credit ratings? Because credit ratings still played a minor role in investors’ decision making, the city decided that rather than depend solely on credit ratings, it would explain to investors what it was doing to improve financial management. Johannesburg already had a domestic credit rating of A− from Fitch and, while not exceptionally strong, this was considered adequate given market appetite at the time.

Maturity. The longer the maturity of the bond, the more likely that its term would match the life of the infrastructure being built with the proceeds. But South Africa’s lack of a strong secondary market meant that investors probably would not favor long maturities restricting their ability to shift into other investments as market conditions changed. In addition, investors were still concerned about the potential for default or downgrading of the bond in later years—and they were likely to decide that the reward of higher interest was not worth the risk of default on a longer-term bond.

Method of sale. Bonds can be directly placed with a preselected group of investors or competitively sold. Competitive sales normally are more transparent and, because of the greater competition, result in a better price for the issuer, though they also generally involve higher issuance costs. Because Johannesburg’s issue would involve significant refinancing and many existing lenders could require penalties for early redemption of debt, the city decided to directly place some of the debt with existing lenders, to replace debt being redeemed and avoid some of the potential penalties.

Approach to managing the issue. One approach to selling bonds is to hire a single firm to manage and coordinate the deal-making process, structure and market the transaction, and act as underwriter. Another is to hire a specialist firm to act as a financial advisor, with no possibility of being an underwriter. This firm would manage and coordinate the issuance and oversee the procurement of underwriting services. Because the Johannesburg bond was uncomplicated, the city chose the first option, to minimize costs.

Credit enhancements. Did the city need a guarantee or some other form of external credit enhancement to make the sale successful? Guarantees, typically issued by third parties with higher credit ratings, improve the credit quality of a bond issue and, if structured properly, can reduce the cost of borrowing. Several factors, including the city’s modest credit rating and qualified audit reports, argued in
favor of a guarantee. Moreover, a guarantee would allow the city to increase the size of the bond and extend the maturity. The city therefore began to explore options for credit enhancement.

**The deal**

The city decided to purchase a partial credit guarantee from the DBSA and the Municipal Fund of the International Finance Corporation (IFC). The guarantee was to be split equally between the DBSA and IFC, a major lender to the city. But the time needed for due diligence and other processing meant that the guarantee would not be in place by the time of the scheduled issuance. The city therefore split the bond issue into two parts.

The first was a R 1 billion ($159 million) issue sold without enhancement in April 2004. The issue had a six-year maturity, reflecting the fact that it carried the city’s A− credit rating. Still, the issue was modestly oversubscribed and placed with many of the city’s existing debt holders. It was priced at a respectable 230 basis points over risk-free government securities.

Two months later the city sold a second R 1 billion issue. IFC and the DBSA guaranteed 40 percent, improving the deal’s Fitch rating to AA−, three levels above the city’s normal rating. The enhancement allowed a doubling of the maturity, to 12 years, and a much improved price of 164 basis points over treasuries. The transaction was heavily oversubscribed.

**Conclusion**

In 2005 and 2006 the City of Johannesburg sold more bond issues, again with a 12-year maturity but this time with no external enhancements. The city now sells debt under the capital market’s Domestic Medium-Term Note Program, which allows a series of borrowings without the costs of new disclosure documentation for each transaction. And the city has engaged an underwriting consortium under a long-term contract to plan, structure, and sell future debt.

Most recently the city offered the first municipal retail bonds in Africa—again demonstrating its creativity. Retail bonds are sold in modest denominations and offer residents of Johannesburg an opportunity to invest in the city’s future. They also carry a return of about 10 percent a year, significantly higher than commercial savings rates. The bonds were purchased through the post office, a local commercial bank, and the Internet. The bonds are also listed and actively traded on the stock exchange. These “Jozi Bonds” raised more than $22 million in the first month, and the city plans to raise more capital through these retail bonds.

Overall, the bond issues succeeded beyond the city’s expectations, establishing a stable foundation of financing that has allowed the city to extend its infrastructure investments far into the future. How Johannesburg tackled the challenges involved holds valuable lessons for other local governments seeking new ways to raise debt in an emerging market.