

**MUNICIPAL CREDIT ENHANCEMENT
IN SOUTH AFRICA:
STRATEGIC OPPORTUNITIES FOR USAID**

By
George E. Peterson
and
Priscilla M. Phelps

April 1997
Revised May 1997

For USAID/South Africa
Joel Kolker, COTR

Environmental and Urban Programs Support Project
Contract No.: PCE-1008-I-00-6005-00
Project No.: 940-1008
Contract Task Order No. 06
Sponsored by the Office of Environment and Urban Programs (G/ENV/UP)
U.S. Agency for International Development
Washington, DC 20523

About the Authors

George E. Peterson is a senior fellow at the Urban Institute. He specializes in public finance and urban development in transitioning and developing countries (Address: 2100 M Street NW, Washington, DC 20037; Telephone: (202) 833-7200; Fax: (202) 466-3982; E-mail: gpeterso@ui.urban.org).

Priscilla M. Phelps is a senior finance advisor to the Urban Program at the United States Agency for International Development Global Bureau Environment Center in Washington, DC. She is employed by Research Triangle Institute (Address: 1601 N. Kent Street, Suite 409, Arlington, VA 22209; Telephone: (703) 875-4219; Fax: (703) 875-4384; E-mail: pphelps@usaid.gov).

Abstract

This report examines the current and potential role of the municipal credit market in helping finance the investment needs of South Africa's local authorities. At present, private suppliers of credit are largely unwilling to lend to local authorities because of the uncertainty surrounding municipal finances. It will be necessary, however, for local authorities to attract large volumes of municipal credit if South Africa is to meet its local infrastructure investment objectives. The report weighs current obstacles to municipal credit market development and recommends a strategy for using the United States Agency for International Development (USAID) Housing Guaranty Program to enhance municipal credit market growth.

Contents

ACRONYMS	iii
EXECUTIVE SUMMARY	v
1. Introduction	1
1.1 The Municipal Capital Finance System	2
1.1.1 Municipalities' Reliance on Own-Source Revenues	2
1.1.2 Importance of Service Revenues in Local Budgets	3
1.1.3 Nature of Future Municipal Capital Investment	4
1.1.4 The Infrastructure Financing Challenge	4
1.2 The Municipal Credit Market in South Africa	5
1.2.1 The "Old" Municipal Credit Market	5
1.2.2 The Current Municipal Credit Market	6
1.3 Municipal Finance and Policies to Reduce Financial Risk	8
1.3.1 Government Monitoring of Local Fiscal Condition	8
1.3.2 Government Policy to Deal with Local Financial Problems	10
2. Municipal Credit Enhancement Strategies	13
2.1 Introduction	13
2.2 A Strategic Framework for Financing Municipal Infrastructure	13
2.2.1 The Spectrum of Financing Strategies	14
2.2.2 South Africa's Government Policy toward Local Capital Financing	16
2.3 Maintaining Appropriate Incentives for the Entire Financing System	18
2.4 Obstacles and Opportunities in Developing the Municipal Credit Market	18
2.4.1 Assessing Municipal Credit Risk	19
2.4.2 Reducing Municipal Credit Risk	20
2.4.3 Reducing Liquidity Risk	23
2.5 Conclusions for a USAID Capital Program	25
3. Opportunities for a HG Program	27
3.1 Description of the Housing Guaranty Mechanism	27
3.2 General Options	28
3.2.1 Provision of Onlending Capital	28
3.2.2 Sovereign Policy-Based HGs	28
3.2.3 Financial Leveraging	28
3.3 Options for Use of HG for Credit Enhancement in South Africa	29
3.3.1 Options Not Considered Appropriate	29
3.3.2 Creation of Guarantee Fund	29
3.3.3 Partial Financing of Credit Insurance Mechanism	31
3.3.4 Partial Financing of Market-making Mechanism	31
3.3.5 Investment in Public Intermediary	32

3.3.6	Investment in a Private Intermediary	33
3.4	Recommended HG Design	35
3.4.1	Background on INCA and its Capital Structure	35

APPENDICES

A.	Municipal Loan Structure and the Efficiency of Local Investment: International Experience	39
B.	International Experience with Co-Financing and “Graduating” Local Government Borrowers to Private-Sector Credit	43
C.	Bundling Technical Assistance and Credit	49
D.	South Africa’s Capacity for Collections and Cost Recovery	53
E.	Persons Interviewed	55

TABLES

1.	Effect of Amalgamation on Municipal Demography and Fiscal Capacity	9
2.	Outstanding Arrears as Percentage of Annual Property Rates and Service Charges	9
3.	Municipal Infrastructure Financing Strategies	14
4.	HG Investment Options	36

Acronyms

ABSA	ABSA Bank
BIS	Bank of International Settlement
DBSA	The Development Bank of Southern Africa
DCD	Department of Constitutional Development
DEG	Deutsche Investitions und Entwicklungsgesellschaft (German development agency)
EPIQ	Environmental Policy and Institutional Strengthening Indefinite Quantity Contract
FNB	First National Bank
HG	Housing Guaranty Program
IBCA	IBCA South Africa Ltd. Rating Agency
IGG	Intergovernmental Grants
INCA	Infrastructure Finance Corporation Limited
LALF	Local Authorities Loan Fund
MDF	Municipal Development Fund
MIIF	Municipal Infrastructure Investment Framework
PPS	Public-Private Partnerships
RSC	Regional Services Council
RSA	Republic of South Africa
RDP	Reconstruction and Development Programme
SAIF	South African Infrastructure Fund
USAID	United States Agency for International Development

Executive Summary

Local governments in South Africa face a large investment challenge. The investment goals laid out in the document, *Towards a National Infrastructure Investment Framework*, imply that, even under a relatively conservative scenario in which the backlog of basic urban infrastructure needs is satisfied over a 7- to 10-year period, municipal investment will have to climb by 10 percent in real terms in 1997/98 and by more than 17 percent, 16 percent, and 12 percent, respectively, in the years thereafter. Much of this investment—roughly half—will have to be financed by local authorities themselves.

Government policy guidelines recognize that to achieve this level of investment municipalities will have to borrow substantial volumes of long-term funds from the private sector through the municipal credit market. It is estimated that almost R5 billion of annual private-sector borrowing by local authorities will be necessary. This magnitude of borrowing results both from the size of the local investment backlog and from government's determination to finance local investment within a fiscally responsible framework that limits the use of capital grants and avoids entangling the public sector in providing heavily subsidized loans to local authorities.

At present, however, private suppliers of long-term credit are largely unwilling to lend to local authorities. Bank lending for local capital investment has fallen. The municipal bond market has largely disappeared.

Municipal Credit Risk

Underlying the decline in the municipal credit market is the uncertainty that surrounds future fiscal relations as well as deterioration in the financial condition of those local authorities that historically have borrowed on the private market. Township amalgamation has simultaneously raised local investment needs and weakened local authorities' tax bases. The impact of financial stress can be observed in climbing "problem loan" rates for local governments.

Nonetheless, overall loan and bond repayment experience by local authorities in South Africa remains favorable. The government, through Project Liquidity, has introduced a financial monitoring system that can lead to intervention in the financial management of local authorities when this is necessary. It is hoped that these measures will arrest fiscal deterioration. Meanwhile, sorting out the final arrangements for metropolitan sub-structures should restore predictable revenue flows that can be used for capital financing purposes in many urban jurisdictions.

Capital Financing Framework

Government has adopted a three-tier approach to local capital financing. The financially weakest municipalities, many of them small or rural, will finance most of their capital investment through grants from central government. These grants are highly targeted on poor communities and basic infrastructure facilities. A second tier of local authorities, in better financial position, will finance their capital investment needs through a combination of own source revenues plus borrowing from parastatal authorities, such as the Development Bank of Southern Africa, partial matching grants from government, or privatization capital for projects that can stand on their own financially. A top tier of local authorities that are in relatively good financial shape are expected to finance their capital investment almost entirely from their own resources plus borrowing on the private market. Many of these local authorities are located in metropolitan regions.

An efficiently functioning municipal credit market is critical to meeting the financing needs of this final tier of local authorities, which houses a large proportion of the urban poor and faces the biggest investment demands. Over time, government policy is designed to make more municipalities capable of financing their local capital budgets through the private credit market, without substantial government subsidy.

Opportunities for a USAID Loan Program

USAID's Housing Guaranty (HG) Program offers a tool—a long-term loan guaranteed by the US Government—that can be used to help build a municipal credit market for the new South Africa. Four basic strategies for using HG resources were considered in this study:

- # Providing credit for on-lending to municipalities through a parastatal body, such as the Development Bank of Southern Africa (DBSA)
- # Providing loan co-financing in support of privatization initiatives
- # Using HG funds to address specific blockages in the current municipal credit market, such as the lack of secondary market liquidity or the lack of municipal bond insurance
- # Supporting the growth of a private-sector intermediary that can specialize in raising domestic funds for municipal lending, by tapping pension funds, insurance funds, and other investors reluctant to lend directly to municipalities in today's conditions

DBSA is a financially strong institution fully capable of raising capital on domestic and international markets. The relatively modest capital resources available through USAID would not significantly affect DBSA's financing capacity or lending policies.

Credit availability does not seem to be a significant constraint on privatization initiatives in South Africa. International investors interested in privatizations often have their own access to international credit markets. DBSA has offered a line of credit to support the first municipal water privatization in Nelspruit.

Straight municipal lending, either on a general obligation basis or a project basis, appears to represent the greatest unfilled need in local authority capital financing. The report examines several specific obstacles to expansion of the municipal credit market and the suitability of using the HG resources to address each.

The report concludes that the greatest opportunity for encouraging growth of an efficient municipal credit market is through support of a 100 percent privately financed infrastructure intermediary, the Infrastructure Finance Corporation (INCA). INCA has raised equity and sold bonds on the capital market, largely to insurance companies and pension funds that do not want to take the risk of direct lending to local authorities. INCA then on-lends to local authorities to finance infrastructure projects. As an intermediary, it has the scale to specialize in municipal risk assessment and actively monitor its lending portfolio.

INCA also offers an efficient way to address many of the specific obstacles in today's municipal credit market. Its bonds are listed on the Johannesburg stock exchange, with First National Bank as a market-maker. This arrangement provides liquidity to the market. INCA will collaborate with an international credit rating agency, IBCA, to assess municipal credit risk and to restrict its lending activities to relatively low-risk borrowers. This promises to help build credit rating as a support for the municipal credit market. On appropriate projects, INCA may co-finance lending with DBSA or other governmental agencies, thus establishing precedent for public/private co-financing of municipal credits.

The report concludes with a discussion of the specific way HG resources could be used most effectively to support INCA in its mission.

1. Introduction

Local governments in South Africa face a large investment challenge. The investment goals laid out in the document, *Towards a National Infrastructure Investment Framework*, imply that, even under a relatively conservative scenario in which the backlog of basic urban investment needs is satisfied over a 7- to 10-year period, municipal investment will have to climb by 10 percent in real terms in 1997/98 and more than 17 percent, 16 percent, and 12 percent, respectively, in the years thereafter, before the rate of growth subsides below 10 percent. Much of this investment—roughly half—will have to be financed by local authorities themselves.¹

Local authorities will be able to finance a portion of their own-source investment requirements from restructured Regional Services Council (RSC) levies paid at the metropolitan level, from reserves now held in local authorities' Capital Development Funds, and from asset sales. They will benefit from some private-sector equity investments as a result of privatization of municipal infrastructure projects. As the *Framework* notes, however, "it is envisaged that most [of the financing] will have to be borrowed from public and private intermediaries." Under government policy guidelines, even the public intermediaries providing credit to municipalities will have to raise the bulk of their financing by borrowing from the private market or from multi-lateral lending agencies. Very little of government's fiscal revenues have been targeted for on-lending to municipal authorities.²

This paper does not attempt to quantify precisely the need for private-sector financing or private-sector credit to fund South Africa's municipal infrastructure investments. The magnitude is very large. It is constrained primarily by:

- # The absorptive capacity of local government to handle investment projects
- # The ability of households to pay the running costs of infrastructure networks once they are built

¹ Ministry in the Office of the President, *Towards a National Infrastructure Investment Framework* (March 1996).

² The principal exception is the callable capital of the Development Bank of Southern Africa, which can potentially be used for financing municipal infrastructure. As of year-end 1996, DBSA had the right to draw on R1.8 billion of government equity capital. This drawing right was raised in 1997 to a total of R5 billion. However, current policy is to not actually call the capital.

- # The macroeconomic capacity of the public sector to repay debt at tolerable levels of taxation and service fees³

As a rough guide to financing magnitudes, the *National Infrastructure Investment Framework* projects that approximately R5 billion per year of new borrowing by local authorities will be necessary to meet the municipal investment objectives contained in the conservative investment scenario.⁴

If local authorities are to access the private credit market on this scale, local governments' borrowing positions will have to be strengthened or "enhanced" through fundamental changes in the municipal credit market. Over the last two years, private-sector, long-term lending to local governments has been declining, to the point where most of the private institutions interviewed for this report said that they either were not supplying new long-term credit to local authorities or had substantially reduced their lending and municipal bond purchases.

This report examines the principal obstacles to expanding municipal credit market activity in South Africa, and weighs options for the involvement of the United States Agency for International Development (USAID) in strengthening the market.

1.1 The Municipal Capital Finance System

Three features set South Africa's municipal sector apart from the structure of local government capital financing commonly found in other parts of the world. These features need to be taken into account in program design.

1.1.1 Municipalities Reliance on Own-Source Revenues

In South Africa, roughly 90 percent of municipal revenues consist of "own-source" revenues, raised at the local level. This implies much lesser use of intergovernmental grants (IGG) and tax sharing than in most countries, whether developing or developed. Further, intergovernmental grants from central government have been declining in real terms from the levels achieved at the beginning of the Reconstruction and Development Programme (RDP). Intergovernmental grants to provinces to help finance provincial recurring costs as well as finance operating assistance to local governments

³ The *National Infrastructure Investment Framework* estimates that if all of the municipal priority investments identified in government sectoral studies were to be financed (Scenario 1), local authority borrowing would have to increase at the rate of 39 percent per year (in real terms) over the next five years. This rate of borrowing obviously is unachievable. However, it indicates that "need" is not the effective constraint on municipal investment or credit demand.

⁴ At the time of the study, US\$1.00 = South African Rand 4.40, approximately.

have declined from R1,115.8 million in 1993/94 to a budgeted level of R800 million in 1996/97. Ministry of Finance and the Department of Constitutional Development are currently trying to identify the exact magnitude of assistance passed on by provincial governments to local authorities, and how these transfers have changed in recent years. Capital grants from central government to local authorities also have declined (see below Section 1.2.4).

The fiscal independence of the municipal sector has several implications for capital financing and the structure of the municipal credit market. It means that local governments in South Africa potentially have more control over the revenue side of their budgets than is true in other countries. It also means that local governments do not receive large, predictable revenue-sharing transfers, which can be collateralized to secure municipal borrowing. Pledging as loan collateral future intergovernmental transfers, whose amounts are spelled out in constitutional amendments or fundamental national legislation, has been one of the most successful strategies in jump-starting local borrowing for capital finance in other nations. In South Africa, loan repayments will be tied far more tightly to municipalities' own revenues. This magnifies the importance of local revenue generation, local tax and fee collection, and local budgetary management in improving credit market access.

South Africa does not at present have a matching grant structure, under which local authorities of limited fiscal capacity can have their own-source revenues or borrowing matched by intergovernmental capital grants. Current practice, with rare exceptions, is to finance capital projects either entirely through government grants or entirely through local authorities' own revenue sources supplemented by near market-rate borrowing. Given the difficulty of obtaining intermediate-term credit for capital purposes, many municipalities are now financing investment from short-term lines of credit at local bank branches.

1.1.2 Importance of Service Revenues in Local Budgets

South African municipalities are almost unique in the extent to which their budgets are financed by fees for services. More than 60 percent of gross municipal recurring revenue comes from fees for electricity, water, sewerage, and refuse collection. Electricity fees alone account for more than 40 percent of gross municipal revenues nationwide. The share of service fees in *net* local authority revenue is less, of course, since purchases of bulk electricity and bulk water from regional suppliers are also among the largest expenditure items. Nevertheless, the income and expenditure pattern of local authorities in South Africa demonstrates that their finances are, to an unusual degree, tied to their ability to operate successfully as retailers of basic utility services.

Local authority income from local taxes is correspondingly modest. Revenues from property tax rates—by far the single largest local tax source—generate less than 20 percent of aggregate municipal income.

1.1.3 Nature of Future Municipal Capital Investment

Municipal investment now and in the intermediate-term future will be overwhelmingly concentrated on extending basic infrastructure access to populations previously excluded from service coverage. According to the *Municipal Infrastructure Investment Framework*, the priority sectoral claims on municipal investment will be for Roads and Stormwater Drainage, Sanitation, Commuter Transportation, and Water Distribution in declining size of expected investment. Some of these investments, such as spending on roads and commuter transportation, however, are highly concentrated in the large metropolitan areas, and likely to be financed from metropolitan-scale revenue sources and/or private investment. For most local authorities, expansion of water and wastewater systems to reach presently unserved populations is the most urgent investment priority.

1.1.4 The Infrastructure Financing Challenge

The special mix of revenue sources and investment needs found in South Africa creates several challenges for financing local capital investment. Local investment needs are highly redistributive. The populations obtaining new access to infrastructure networks will be primarily low-income households, who will be hard pressed to meet the government's goals of having users pay for the full operating costs of services, even when infrastructure standards are adjusted to make service provision more affordable. There is little possibility of recovering full capital costs from these service users.

Government capital grants will pay for some of the costs of infrastructure network expansion, especially in rural areas and small towns. These grants, however, are projected to remain constant in real terms from 1996/97 to 2000/01, and to be more than a third lower than the capital grant level of 1995/96. The low level of intergovernmental transfers means that South African municipalities will be undertaking high levels of social (re-distributive) investment, within a financing framework where:

- # Central government financial support for municipalities is relatively low. Consequently, much of the responsibility for financing re-distributive capital investment will be borne at the local level.
- # Local government budgets are highly reliant on service fees. To generate the operating surpluses necessary to finance borrowing, municipalities will have to extract significant surpluses from middle- and upper-income service users and from property tax rates payers.
- # The lack of a matching capital grant program places special pressure on the municipal credit market. Municipalities that use the private credit market to finance local capital projects essentially have to finance the entirety of a project through a combination of own resources and market-rate borrowing. The Development Bank of Southern

Africa (DBSA) does make modestly concessional loans to finance local infrastructure projects, but its policy is to move toward market-rate pricing.⁵

1.2 The Municipal Credit Market in South Africa

South Africa appears to have a vigorous history of municipal lending; however, this history is deceptive. A relatively strong and active municipal bond market did previously exist. There is a substantial track record of commercial bank lending to local authorities, both for investment and cash-flow purposes. However, the rules under which the municipal credit market formerly operated have now been changed (see below). As a result, there is considerable difference of opinion among market participants as to how the “old” South African municipal credit market does and should relate to today’s market.

1.2.1 The Old Municipal Credit Market

According to figures from the South Africa Reserve Bank, South African investors hold approximately R9 billion (+/- US\$2.1 billion) of local authority bonded debt. Roughly two-thirds of this amount is held by the private non-banking sector, primarily pension funds and insurance companies; governmental bodies hold most of the rest. Total “local sector” debt, including bank and parastatal loans to municipalities and the bonded debt of other sub-national authorities, such as water boards, is considerably larger—in the vicinity of R21 billion. Three of the private financial institutions interviewed as part of this study reported holding total local sector debt of more than R3 billion each.

In view of the magnitude of local government debt outstanding, observers sometimes speak of a need to “revive” or “re-activate” the municipal credit market. Previous municipal lending, however, took place under a special set of circumstances that will not be repeated. Most of the local authority debt now outstanding was issued as part of a prescribed investment regime. Financial institutions were required to invest designated percentages of their portfolios in government debt, either national government debt or local government debt. In this environment, municipal debt was an attractive investment. It carried a moderate interest-rate premium over central government debt. Yet local government debt was widely viewed as nearly risk free. Municipal bonds were issued solely by well-funded white local authorities. Municipal bonds and municipal loans also were widely viewed as “guaranteed” by the national government, in the event that an issuing authority should encounter financial trouble. The guarantees were implicit but assumed to be valid by most institutional purchasers.

⁵ Municipal lending rates as of March 1997 are well illustrated by four loans made in the first week of the month. INCA, a purely private-sector intermediary (see Chapter 3) on-lent funds to two first-tier (highest level of municipal creditworthiness) borrowers at the rate of 16.1 percent. At the same time, the Development Bank of Southern Africa, a government-owned intermediary, made loans to two intermediate-sized cities, of presumably higher credit risk, at 14 percent. As of April 1997, DBSA’s concessional-rate lending has been set at 15%.

Moreover, white local authorities operated conservatively in their financial management. They were endowed with ample resource bases, and during much of the apartheid era, were required by government regulations to participate in a forced savings program, which further strengthened their balance sheets. Under these circumstances, white local authorities could count on buyers for whatever debt they chose or were legally entitled to issue.

Municipal debt during the apartheid era in fact proved to be a very low-risk investment. Over the 18-year history of the Local Authorities Loan Fund (LALF), up to 1995, there had been no defaults on LALF loans. Defaults on municipal bonds also were nil.

1.2.2 The Current Municipal Credit Market

Today's municipal credit market operates under a very different set of conditions.

- # The domestic financial sector has been liberalized. There is no government-prescribed allocation of private-sector credit to the municipal sector or to the public sector at large. Financial reform thus has removed the “automatic” demand for local authority debt.
- # Government has clearly announced that it does *not* guarantee local authority debt. It does not provide explicit guarantees for local borrowing, and it has warned that it does not implicitly guarantee such debt. It has stated that no guarantees attach to “old” municipal debt either. As in other countries, some private-sector participants in the municipal credit market believe that the largest cities are “too big for government to allow to fail,” and that in the end government will not permit defaults in this segment of the market. This is speculation, however. Market opinions differ.
- # Perceptions of the underlying financial risk involved in municipal debt have changed drastically. Amalgamation of former black local authorities with former white local authorities has weakened the fiscal base of local governments that have private-sector debt outstanding. It is difficult to sort out how much of the “perception” of greatly increased municipal credit risk is based on actual debt repayment experience to date; how much is a projection into the future of recent deterioration in municipal finances and debt repayment; and how much is a generalized fear about the changed circumstances of local authorities and the substantial uncertainty that surrounds the future character of the local authority financing system.

Municipal default experience and risk rating. There undoubtedly are signs of increasing credit risk. As noted, until June of 1995, the Local Authority Loans Fund had an 18-year history of no defaults. Since that time, defaults have accelerated. By December 1996, 48 of the 425 local authority borrowers participating in LALF were in default. In the 18 months ending December 1996, payments in arrears at LALF climbed from R25,000 to R9,100,000. Some large private institutional

holders of local authority debt also reported to us that missed payments from local authorities had escalated dramatically in the final quarter of 1996.

At the same time, actual default experience in the local authority sector remains relatively low, especially for private lenders. This is reflected in the BIS (Bank of International Settlement) ratio that is applied by bank regulators to local authority loans in calculating capital adequacy ratios. Local authority loans carry only a 10 percent additional risk weighting over loans to central government, which is among the lowest risk ratings for the local government sector anywhere in the world. It is common to find BIS risk weightings of 80 percent and 100 percent for local authority debt, for example, in Eastern Europe.

Some of the uncertainty surrounding local authorities' finances, and their ability and willingness to repay debt, is inevitable during this period of fiscal transition. The future revenue structure of local authorities has not been fully clarified. Nor has the sector's complete range of expenditure obligations. Uncertainty has been exacerbated, however, by a lack of generally available information on the financial condition of individual local authorities. South Africa has credit rating agencies that have operated in the domestic market for a number of years (see Chapter 2), but they presently rate only 5 or 6 municipal authorities. The information that the government obtains on local financial condition, as a result of its own monitoring (see below), is not released to the public.

Moreover, the financial institutions holding local government debt do not appear to actively monitor individual authorities' financial condition. Many of these institutions purchased local authority debt in the expectation that it would be a "low maintenance" holding. They do not have the staffs, or in many cases the expertise or interest, to monitor the financial condition or other factors affecting the ability and willingness of individual municipal issuers to meet debt-service obligations.

Even the legal status of the outstanding local authority debt is often unclear. The debt was issued by local authorities, which are likely to have been subsequently amalgamated with other authorities. These other authorities are now operating under an interim fiscal and legal structure, and for which basic legal questions—such as the priority of claims in the case of insolvency, the legal steps available to enforce debt payment, or the procedures to be followed in the case of municipal "bankruptcy"—are presently unresolved and likely to be the subject of future national and provincial legislation.

As a result, a number of the current institutional holders of local authority debt can be characterized as "reluctant holders." They would sell their holdings if there were a secondary market or if there were buyers at what they regard as an acceptable discounted price.

This overhang of outstanding local authority debt connects the "old" local authority credit market with the "new" market. It is especially important given the institutional character of South Africa's financial sector. A relatively small number of financial institutions, and an even smaller number of different financial groups, historically have dominated the municipal credit market as well as the financial sector in general. The institutions now holding "old" local authority debt will have to

play a significant role in providing “new” credit to local authorities. This makes it impossible to simply walk away from the “old” debt while designing a new municipal credit system for the new South Africa.

1.3 Municipal Finance and Policies to Reduce Financial Risk

Behind the change in perceived municipal credit risk lies the fundamental change in municipal finances that has accompanied amalgamation of the formerly black and white townships. Relative to the demography of the former white townships, which were the sole users of long-term private-sector credits, amalgamation has expanded the total municipal population and lowered average incomes and tax collection capacity. At the same time, it has vastly increased credit and capital financing needs by bringing into the amalgamated towns large populations that do not have access to infrastructure services.

The fiscal impact of amalgamation is illustrated in Table 1 by three representative towns of different sizes. The weakened fiscal capacity of towns (relative to former white local authorities) has been compounded by difficulties in local collections of service fees and rates. During the apartheid era, rent and service-payment strikes were one of the most successful weapons township inhabitants used to protest government policy. The habit of non-payment has carried over to the newly amalgamated local authorities, despite a nationwide Masakhane campaign to educate households in the importance of paying service fees to finance local governments’ budgets.

1.3.1 Government Monitoring of Local Fiscal Condition

Project Liquidity, operated by the Institute of Municipal Treasurers and Accountants on behalf of the Department of Constitutional Development, has monitored payment of rates and service charges to local authorities, since this became a major policy concern in 1995. Table 2 provides information on outstanding customer and taxpayer arrears, as a percentage of total scheduled annual service charges and rates income. The table shows that for the local authorities providing information over the entire period, outstanding arrears have held fairly constant at slightly more than 25 percent of total income due. Arrearage rates have declined moderately in the largest local authorities (Grades 10-15), while continuing to climb in all other local authorities.

Table 1
Effect of Amalgamation on Municipal Demography and Fiscal Capacity

Town	Population	Annual Income per Capita
Bloemfontein	178,132	R7,188
Mangan	123,477	2,064
Amalgamated Total	301,609	5,090
<i>Percent Change from Bloemfontein</i>	+59.1	-29.2
Kroonstad	37,640	R6,756
Maokeng	71,441	1,812
Amalgamated Total	109,081	3,518
<i>Percent Change from Kroonstad</i>	+189.4	-47.9
Warmbaths	6,696	6,720
Bela-Bela	11,983	1,680
Amalgamated Total	18,679	3,487
<i>Percent Change from Warmbaths</i>	+178.8	-48.1

Population and income data are for 1991.

Source: Barry M. Jackson and Mike W. Marler, *Infrastructure Needs in South Africa's Towns* (Paper presented at IMIESA conference, October 1996).

Table 2
Outstanding Arrears
as Percentage of Annual Property Rates and Service Charges

Date	All Municipalities	Large^a	Medium^b	Small^c
June 1995	25.7	26.8	20.1	29.3
December 1995	26.8	27.7	22.0	30.3
March 1996	25.8	26.5	22.5	27.0
June 1996	28.3	28.1	28.7	33.0
August 1996	26.6	25.9	28.7	38.2
October 1996	25.1	23.9	29.1	38.2

a Grades 10-15

b Grades 6-9

c Grades 0-5

Source: Department of Constitutional Development, *Project Liquidity - October 1996* (February 1997)

It is likely that Table 2 understates the collections problem for the nation as a whole. The data reported there are based on fewer than one third of the total number of urban and rural authorities to which questionnaires were sent (those which responded to all of the questionnaires covering the different dates). Early studies by Project Liquidity found that those local authorities not responding to the full questionnaire or not responding in a useable manner were far more likely than those who did respond to describe their financial situation as “poor” or “very poor.”⁶ The exclusion of these local authorities from Table 2 therefore is likely to underestimate the national scale of the arrears problem.

Another measure of collections difficulty is the percentage of regular payers among service and rates accounts. The monitoring performed by Project Liquidity has found an essentially constant rate of regular payers in the country as a whole at 68 to 69 percent. This implies that almost a third of those receiving accounts do not pay them regularly. Non-payments are concentrated in the poorer, formerly black local authority areas. Recently, however, a much-publicized rates strike has broken out in Sandton, one of the wealthiest Johannesburg suburbs, as a protest against the increase in property tax levies.

1.3.2 Government Policy to Deal with Local Financial Problems

Project Liquidity is intended to be a monitoring, or advance warning, system for government to use in identifying local financial problems. It is accompanied by a set of guidelines—still being completed and incorporated into legislation—defining how government will intervene in local financial management to help bring local budgets back into balance.

One control measure that government now possesses is the Ministry of Finance’s review and approval of all local government budgets. Through this process, government can limit the rate of spending growth in municipalities identified as having financial problems. During the course of 1997, it is planned to turn over to the provinces the responsibility for reviewing and approving individual local authority budgets. The Ministry of Finance, however, will retain controls over the rate of growth in local personnel expenditures.

In September 1996, government approved a “Framework for Intervention” for local authorities found to have more serious financing difficulties. The first step in this process is to appoint provincial task force teams, consisting of municipal treasurers and private-sector experts to conduct management audits. If the audit confirms that a particular municipality has severe financial problems, government can implement a financial management support program, which typically will consist of management advice on cutting expenses or raising revenues, implementation of credit control procedures, re-structuring of cash management, establishment or improvement of metering and billing systems, training in local financial management, etc.

⁶ Institute of Municipal Treasurers and Accountants, in Association with the Department of Constitutional Development, *Project Liquidity, Local Government* (June 27, 1996).

Bridge loans may be provided to local authorities by government, as long as there is firm evidence that corrective measures are being undertaken to establish sound long-term financial management. In extreme cases, where financial self-sufficiency seems impossible to achieve, there may be further amalgamations of local authorities.

In March 1997, the government also announced that special steps would be taken in response to municipal defaults on loans or bonds. Municipalities defaulting on loans or supplier payments will not be permitted to take on new loans or overdraft facilities. Information on loan defaults will be shared throughout governmental agencies that have lending functions and will also be shared with commercial banks.

2. Municipal Credit Enhancement Strategies

2.1 Introduction

The Scope of Work for this assignment asks the consultants to “identify market based mechanism(s), which could be supported by the Housing Guaranty (HG) program, that will provide South African institutional investors with financing opportunities in the provision of [local] environmental infrastructure.” Specifically, the consultants are asked to “explore a range of financial enhancements that could be used to facilitate private investment” in such infrastructure.

This chapter analyzes the market obstacles that financial enhancements could be designed to overcome in supporting private financing of municipal infrastructure in South Africa. It starts, however, with an overview of how private financing fits with public financing in South Africa’s overall policy design for municipal infrastructure finance. Increasing private-sector participation in infrastructure finance is a pre-requisite for reaching South Africa’s municipal investment goals. Private financing of infrastructure, however, is not an end in itself, desirable on any terms. The bottom-line objective is to increase the overall *system s* capacity for efficient infrastructure financing. Private financing does not serve a public purpose if it merely snips off certain projects for private finance, without increasing the overall availability of capital for infrastructure investment and without promoting greater efficiency in project design and operations.

2.2 A Strategic Framework for Financing Municipal Infrastructure

South Africa in 1996 had 821 recognized municipal authorities, consisting of 30 Metropolitan Councils and Substructures, 513 Transitional Councils, and 278 District Councils and Rural Councils.⁷

As one would expect, the financial weight of local budgets is highly concentrated in the larger urban regions. The 30 Metropolitan Councils and Substructures contain 13 million people (some 30 percent of the population) but account for well more than 50 percent of total local government expenditures. In contrast, the 278 District Councils and Rural Councils account for less than 6 percent of local government spending.

⁷ The number of “local authorities” sometimes is reported as modestly larger because of the inclusion of other kinds of local governmental bodies. The figures reported here are based on the number of councils and substructures reporting their budgets to the Ministry of Finance, as required by law. It should be pointed out that the number of councils is far from stable. Some of the metropolitan areas in particular still are in the process of jurisdictional re-organization. This process is likely to continue, at least through the transitional period.

Municipal investment needs are similarly concentrated. Government has assigned high priority to providing rural villages with basic infrastructure, but the volume of anticipated municipal investment, as well as the volume of private credit and other forms of private financing that is needed, will be highly concentrated in the larger urban areas.

2.2.1 The Spectrum of Financing Strategies

In thinking of private financing for municipal infrastructure, it is useful to visualize the entire array of local authorities as presented in Table 3. The table gives a quick picture of the distribution of local authorities in South Africa and the kind of capital financing strategy that is likely to be appropriate for each class of authority, based on its financial strength.

Table 3
Municipal Infrastructure Financing Strategies

	Financially Weak Municipalities	Intermediate Financial Conditions	Relatively Strong Municipalities
Number of Authorities	600-650 (?)	100-150 (?)	25-50 (?)
Capital Financing Strategies	Full Government Grants	1. Own Financing Plus Matching Grants 2. Own Financing Plus Parastatal Loans 3. Privatization (Equity + Credit) 4. Project-based lending	1. Own Financing Plus Private Credit 2. Privatization (Equity + Credit) 3. Project-based lending

Although Table 3 is presented as if there were a static distribution of municipalities by financial strength, there is in fact a good deal of movement among categories. Indeed, government policy is aimed at “graduating” as many local authorities as possible over time to stronger financial capacity where they can make greater use of market financing for capital investment.

At this point, the greatest number of local authorities belong in the first column, where they are classified as Financially Weak. These municipalities are unable to contribute significant amounts of capital financing toward meeting their infrastructure needs. In these localities, the government policy priority is to design infrastructure schemes that, once put in place, the population can afford to maintain and operate through user charges and local taxes. It is recognized that capital expenditures, even for affordable infrastructure, will have to be financed largely through central

government grants, or through metropolitan-scale financing in the case of poor Substructures that are part of a metropolitan region.

It merits repeating that, although by far the largest number of South African communities are financially weak, these communities represent a drastically lower portion of the country's total population and total prospective local investment financing needs.

In the second column of Table 3 appear a smaller number of local authorities that can afford to pay for part of their own capital expenditures. In these cases, the municipalities' own-source revenues or private-sector borrowing could be augmented with matching capital subsidies of some type from the public sector. For projects of national priority that cannot be expected to generate sufficient revenues to recover capital costs, some or all of the public subsidy may come in the form of a matching capital grant. For projects that have better prospects for revenue generation, the matching funds may come primarily in the form of parastatal loans.

The third column in Table 3 covers a still smaller universe of local governments, most of them belonging to the larger urban areas. The municipalities in this tier are in significantly stronger financial condition. They can afford to pay for most local capital projects from their own resources. Their local revenue streams can be leveraged so as to obtain capital financing from the private credit market, either for individual projects or for a broader local capital investment plan. Although the number of municipalities currently able to obtain and repay purely private-sector credit is small, they include some of the largest jurisdictions. A corresponding large share of their total municipal capital spending over the next five to seven years will be much larger. A large proportion of the urban poor also lives in these areas.

Establishing effective access to private-sector infrastructure financing for Tier 1, or the financially strongest, municipalities is critical to making the entire financing framework succeed. This is especially true since the number of relatively "strong" local authorities should increase in coming years. Once metropolitan substructure issues are fully sorted out, many of the larger local authorities should be able to stabilize their budgets and enter the private credit market. The national policy of forgiving large portions of former black township debt will also help strengthen local authority finances.

For municipalities in the second and third columns of Table 3, there are other options, besides general obligation borrowing on the private market, for raising private financing for local infrastructure investment. Privatization of municipal infrastructure, or joint public-private partnerships (PPPs) in infrastructure ownership and management, is one option. PPPs can potentially raise both private equity funds and private credit financing. Private investors can be required to inject equity capital into infrastructure expansion as part of the privatization process. International investors, in particular, often also have connections to worldwide credit markets that allow them to complement their equity contributions with cost-effective access to international borrowing. These investors can borrow through their own channels to finance projects, without having to go through the domestic "municipal" credit market.

Within the municipal credit market, there is potential for “ringfencing” project revenues and dedicating these revenues to repay municipal credits used specifically to finance the project investments. Revenue-bond financing of this kind can increase private-sector credit flows whenever there are financially feasible projects. If revenue-generating local institutions, such as water authorities, are separated out from general government and forced to become self financing, many of the same benefits of administrative rationalization that come from full privatization also can be achieved.

2.2.2 South Africa s Government Policy toward Local Capital Financing

The divisions described above correspond broadly to government’s policy toward local capital financing as it is emerging in South Africa. A variety of government programs have been formulated to provide grant financing or direct government construction of essential infrastructure projects in rural areas and poorer communities. Within the water sector, for example, the Department of Water Affairs and Forestry, has clearly enunciated policy guidelines that target grant assistance on small and poor communities, while requiring that better-off local authorities tap the private sector for financing at market rates. The Financial and Fiscal Commission have generally endorsed the same principles.⁸

For the second category of better-off municipalities, government has embraced the principles of co-financing. One objective is to introduce municipalities in this tier to the discipline and terms of private-market financing. The Development Bank of Southern Africa (DBSA) has announced that it will seek out opportunities for co-financing municipal credits with the private sector. As part of its institutional transformation, DBSA has been given the mission of serving as a wholesale infrastructure development finance institution. The share of its financing directed to local governments has been increasing and is expected to rise more sharply in the future. DBSA also has been assigned the role of stimulating private financing of infrastructure. In February 1997, it formally adopted policy guidelines indicating that it would actively co-finance local infrastructure projects with the private sector, whenever DBSA credit participation was deemed both necessary and sufficient to make a project financially feasible.

Under its new loan pricing policies, DBSA is expected to price its loans according to its cost of capital plus a margin to cover risk and operational expenses as well as with consideration of a project’s developmental impact. As a result, DBSA’s interest rates are only modestly below market rates for good-quality borrowers. Its subsidy primarily takes the form of lending at the same rates for

⁸ Financial and Fiscal Commission, *The Financial and Fiscal Commission s Recommendations for the Allocation of Financial Resources to the National and Provincial Governments for the 1997/98 Fiscal Year* (May 1996).

higher-risk projects and higher-risk borrowers and for longer periods than would otherwise be available in the market.⁹

Some municipal borrowers in Tier 2 will need more substantial subsidies from government to make their projects financially feasible. Government has discussed the possibility of introducing a formal matching-grant capital program similar to that found in some other countries. This strategy would lower the total cost of capital projects for municipalities, while exposing them at the margin to the full market cost of capital and to the private market's expectations about financial discipline in project design.

For local authorities in the first or highest tier of financial capacity, government has supported full private-sector financing. It has encouraged the private financial market to come up with new financing instruments that can mobilize market-rate funds on behalf of the larger metropolitan areas and municipalities whose finances make them creditworthy borrowers. It has announced that it will not provide government subsidies to borrowers who can access the private credit market without subsidy. Government also has encouraged local infrastructure privatizations and public-private infrastructure partnerships as ways to access private capital for municipalities in this highest tier.

One of the local privatization initiatives, currently underway with support from DBSA, promises to establish a valuable precedent for using privatization to meet the infrastructure expansion needs of amalgamated municipalities. Nelspruit is a municipality whose household water service coverage has expanded by almost 10 times (from a population of 24,600 to 244,000) as the result of amalgamation. Most of the newly added population does not have access to formal-sector water and waste services. The privatization competition now being conducted requires bidders to submit both investment plans for expanding service coverage and tariff proposals for financing the costs of investment.¹⁰

DBSA has helped Nelspruit analyze its needs for investment as well as its needs for control over water pricing and other factors. It has worked with the municipality to put together bidding documents that reflect the town's priorities and protect its interests. DBSA has also offered to provide long-term financing and long-term participation in the project to any private financing consortium that bids on the project. DBSA would provide the same share of financing, on the same terms, to all potential bidders that desire its participation.

⁹ Development Bank of Southern Africa, "Transforming the Bank's Financial Policies," in *Headway, Newsletter of the Development Bank of Southern Africa* (December 1996).

¹⁰ Nelspruit Transitional Council Assisted by DBSA, *Proposed Concession for Water Supply and Sanitation Services*, Request for Proposals (December 1996).

2.3 Maintaining Appropriate Incentives for the Entire Financing System

The financing system schematized in Table 3, to function effectively, needs to be a dynamic system. The public policy objective is to “graduate” as many local authorities as possible from one category to another, thereby moving the entire system toward the right-hand side of the diagram where there is greater reliance on private-sector financing.

The financing and other incentives built into each tier need to be designed carefully to support this right-hand movement. This is especially important for local authorities and lending institutions operating at the margin between one tier and another. Without careful design, there will be a natural reluctance on the part of a parastatal lender like DBSA to relinquish its most creditworthy borrowers to the private-sector credit market, while shifting its own lending “down market” where there is more risk. Municipalities may face perverse incentives not to appear financially strong, so that they do not lose eligibility for matching capital grants or concessionary loan funds. Private lenders will have an incentive to over-estimate the risks involved in their municipal lending to qualify for concessional co-financing from government that enhances their credit position.

In short, whenever a capital financing system provides greater subsidies to jurisdictions that are financially risky, there is a moral hazard that municipalities (and lenders to them) will classify themselves as belonging to a higher risk class, and thereby lay claim either to deeper risk protection or public subsidies that offset the risk. This incentive already is evident in South Africa, where many private lenders have proposed co-financing strategies that require substantial public subsidy to support their entry into the municipal credit market.

Other countries with emerging municipal credit markets have had to face similar challenges in designing their capital financing systems. Appendix B summarizes some of the useful lessons from this experience regarding incentive structures that have and have not worked elsewhere.

2.4 Obstacles and Opportunities in Developing the Municipal Credit Market

USAID’s principal goal in this activity has been to help South Africa make greater and more efficient use of privately financed municipal credit in meeting local authorities’ investment needs. Its emphasis therefore has been on local authorities in the two upper tiers of Table 3.

A number of specific obstacles to private-sector municipal credit market development became apparent during the team’s interviews. Addressing these obstacles, either singly or as part of a combined strategy, provides USAID with constructive opportunities for assistance through the HG program.

2.4.1 Assessing Municipal Credit Risk

The capacity to accurately identify the credit risk of different local authorities and differently structured credit instruments issued by local authorities is a pre-requisite for making the capital financing system outlined in Table 3 successful. It also is key to boosting the flow of private capital to the municipal credit market.

Unfortunately, the financial risks emerging in the new municipal sector are difficult to appraise. The exact nature of the future intergovernmental financing system has yet to be determined. The effectiveness of national or local campaigns to increase collections for property tax rates and service fees is uncertain, but efforts to date have fallen short of expectations (see Appendix D). The value of provincial or central government intervention in the case of local authority financial emergencies has yet to be tested.

Some of the private-sector officials interviewed thought that government's response to the currently rising rate of municipal defaults would be critical in establishing future precedents. They expressed fears that if municipal defaults proved to carry no negative consequences for borrowers, in terms of their eligibility for government grants or concessionary loans, they might trigger a wave of future defaults. The fear of losing access to the private credit market might not be sufficient discipline for defaulters, since many of them have no realistic hopes of obtaining private market credits in the intermediate term in any event.

This inherently uncertain situation is exacerbated by the very limited flow of municipal financial information available to the public at large or the private financial sector. Published municipal financial reports are released too late to be of much use in local financial monitoring. The government has sought to address this situation by quarterly monitoring through Project Liquidity, which also requests cash-flow information not normally reported by municipalities in standard documents. However, information from Project Liquidity is not shared with the market. All information obtained from individual local authorities is treated as confidential. Confidentiality restrictions also limit information flows from other sources. DBSA, for example, treats the financial information obtained from its local project appraisals and technical assistance as proprietary and confidential.

Need for active credit analysis. In this environment, pro-active credit analysis and vigorous financial monitoring of local financial conditions by lenders becomes imperative. Unfortunately, most lenders to South Africa's local government sector do not have this active monitoring mentality. They have been accustomed in the past to treating municipal bonds as long-term holdings that do not require surveillance. Moreover, their potential involvement in the municipal sector is modest enough that it does not justify, in their judgment, creation of a specialized credit-rating and surveillance capacity within their institutions.

These factors create an opportunity for organizations that specialize in municipal credit ratings and municipal financial surveillance. South Africa already has two credit rating agencies engaged in

the municipal sector—IBCA, Europe’s leading international credit rating agency, and Duff & Phelps, a leading U.S. credit rating agency. Both of these organizations currently have a modest presence in the municipal market. IBCA formally rates only five or six local authorities. Due to underlying fiscal uncertainties, it has even withdrawn its rating of Johannesburg. Duff & Phelps presently carries no municipal ratings, but is preparing for entry into the sector.

Both IBCA and Duff & Phelps plan aggressive coverage of the municipal sector in the future. Both organizations, however, acknowledge that municipal ratings will only gradually acquire market impact. It is likely to require some two years to assemble enough information on municipal finances, and to have a long enough period of observation concerning municipal financial risk in the new South Africa, to formally rate a significant part of the local authority universe beyond the top tier of local governments.

Meanwhile, IBCA has joined with the Infrastructure Finance Corporation (INCA) in an interesting initiative to create a purely private-sector financial intermediary to support on-lending to the municipal sector (see Chapter 3). At the core of this operation is a credit-rating model that builds on First National Bank’s municipal lending analysis, then has IBCA perform a shadow rating for each potential local authority borrower as well. Over time, as the universe of formally rated local authorities grows, formal ratings will play a more important part in INCA’s credit allocations.

2.4.2 Reducing Municipal Credit Risk

In addition to accurately measuring credit risk, private-sector suppliers of municipal credit have a strong interest in *reducing* the risks of municipal lending. Reducing credit risk in the municipal market is perhaps the most natural definition of “credit enhancement.”

There are a number of different possible approaches to reducing municipal credit risk, some of which are more valuable to overall market development than others, especially in the South African context.

Reducing project risk at the local level. Both sides of the municipal credit market (municipal borrowers as well as the financial institutions supplying credit) share an interest in structuring local investment projects so that they are inherently more creditworthy. Essentially all municipal bonds in South Africa, as well as long-term bank loans, now represent balance-sheet borrowing or general obligation borrowing. The bonds or loans are secured by a general claim on the assets of the borrowing municipality.

Project finance, in the form of ring-fencing utility revenues and dedicating the revenues as bond security, has not been used until very recently, and then only in the context of privatization of municipal utilities. Municipal revenue bonds have not been employed in South Africa. In this form of borrowing, municipal bonds are secured by the revenue stream produced by a specific service, such as water provision or trash collection, but the service itself remains within municipal government. If

desired, the specific revenue stream can be reinforced by a general obligation claim on all of the municipality's revenues and assets.

Given the composition of South African municipal budgets, introduction of revenue bond financing, initially backed by a general obligation pledge, would seem to be a natural step in credit market development. The availability of a specifically defined revenue source as the first line of debt repayment would add transparency to local infrastructure financing deals and simplify lenders' claims for payment. The use of revenue bonds also would make clear that the *debt-financing choice* can be made independently of the choice between public and private ownership or management of a service. At present, most of the discussion in South Africa has tied project financing exclusively to privatization, creating the impression that the only way to raise financing secured by project revenue streams is through privatization. Availability of municipal revenue bonds would give local authorities more choices in structuring local utility services, while helping reduce financial risk to lenders. Revenue bonds, like general obligation bonds, can be rated by credit-rating agencies, based upon the credit risk of a particular project structure.

Other forms of specific collateral apparently are rarely used in South Africa to support municipal bonds or municipal loans. The team was informed that it is not common practice to pledge specific property as collateral, for example. Any form of specific collateral that has immediate market value would be likely to reduce credit risk in today's environment, since part of the perceived risk in municipal lending involves uncertainty as to the legal process and timeliness of settling general obligation claims. Although South African local authorities do not have as wide a range of income-producing property as municipalities in some other parts of the world, most of the larger urban authorities do hold valuable parcels of municipal land and other kinds of assets that have immediate market value. Introducing the practice of specific property collateral could reduce bond and loan risk.

Local-level project risk could also be reduced by better financial structuring of loan deals, including the creation of local reserve funds that provide financial protection for lenders. Reserve funds are becoming common practice in financing that supports privatization deals, but for some reason the practice has not carried over to straight municipal borrowing.

Government guarantees. A mechanism that serves to reduce (or nearly eliminate) lender's risk in municipal borrowing is a government guarantee. Chapter 3 reviews some of the pragmatic arguments against this form of credit enhancement. The South African government has announced that it will provide local authorities with loan guarantees only under the most exceptional circumstances, largely out of concern for the contingent liabilities that loan guarantees create for the fiscus.

From a developmental perspective, government guarantees typically create perverse efficiency incentives. They encourage lenders to dispense with project review and even to ignore local financial conditions. As long as a loan is adequately covered by central government guarantee commitments, the lender has no reason to limit its lending to economically feasible projects. On the contrary, there is every incentive for profligate lending and for inefficient local spending. As a result, one of the

primary rationales for encouraging private-sector financing—instilling financial discipline in project design and operation—is defeated. Some of the international experience with perverse incentives created by government guarantees is summarized in Appendix A.

Bond insurance. Private-sector bond insurance shares some of the characteristics of a government guarantee. However, local authorities pay up-front for the insurance protection they obtain. The price of insurance, in turn, reflects the risk characteristics of the municipality and the debt instrument. For this reason, the perverse incentives provided by a one-sided government guarantee do not arise. It is in both parties' interest to reduce the underlying project risk as much as possible. Often, municipal bond insurers assist localities in structuring infrastructure financings so as to reduce initial credit risk. They also vigorously monitor local conditions after bond issuance.

In the South African context, the assistance bond insurers provide in reducing local project risk and providing monitoring and surveillance is probably more important to market development than the pure insurance component. Bond insurers are aggressive in identifying early signs of financial weakness and proposing work-out solutions that are satisfactory to both lender and borrower. A similar institutional role in the South African municipal market would be extremely valuable.

There presently is not a large enough pool of municipal debt issues in the South African market to make pure bond insurance feasible without public subsidy. Moreover, the “risks” of municipal bonds have as much to do with uncertainty about future fiscal rules, the future legal environment, and the future political situation as they do with known and measurable financial risks. This makes the pricing of insurance extremely difficult, if not impossible in the intermediate term. The payoff to municipalities from buying insurance is also highly uncertain. At present, market interest rates charged to different borrowers within a given sector are not greatly influenced by credit rating differences. It therefore is difficult to imagine that bond insurance, whose principal impact on interest rates is realized indirectly through better credit ratings, could be cost effective to issuers without substantial subsidy.

Co-financing with parastatal authorities. Private-sector lenders can reduce their own credit risk by sharing this risk with parastatal or public sector lenders. In the case of South Africa, the logical partner for co-financing of this kind is DBSA.

Pari-passu co-financing can reduce risk by sharing the risk among different credit suppliers. Further credit enhancement is provided to the private lender if the parastatal authority is willing to take a junior or subordinated debt position. In this case, the first funds at risk in case of a revenue shortfall are the parastatal's. The risk position of the private (senior) lender is improved by the cushion that the junior debt provides. DBSA has said that in principle it is willing to provide junior debt as part of a co-financing arrangement in cases where the developmental payoff to a deal is sufficiently great and the additional protection provided to the private lender is necessary to attract private financing. Otherwise, DBSA will lend in an equally senior form with its private-sector partners.

DBSA as a co-financing partner is likely to bring additional forms of risk reduction, apart from its purely financial role. At present, DBSA is the best informed and most active manager of local

credit risk. It can reduce project risk through its project appraisal process. It can reduce financial risk by helping local authorities design and implement tariff increases or other actions necessary to pay back debt. DBSA's continuing presence in a project over the long term, by virtue of its co-financing role, can also provide political protection for a project and an indirect form of partial insurance against political or legal risks.

Co-financing with DBSA is a logical and important way to provide private-sector credit enhancement and to attract additional private-sector funds into municipal infrastructure investment. It is especially important for Tier 2 local authorities.

Lending through a private-sector intermediary. Pooling private-sector municipal credit financing through a specialized private-sector intermediary is another way of reducing risk.

Properly structured, a private intermediary facility can combine almost all of the risk enhancement features discussed in this section. By virtue of its scale, an intermediary can afford to create a specialized capacity in municipal credit risk assessment, like a credit-rating agency. It can carry out active surveillance of municipal borrowers, and intervene at an early stage to minimize repercussions from signs of financial weakness. It can enter into co-financing agreements with a parastatal lender, when and if appropriate. It can, and should, work with municipal borrowers to help them structure local investment projects in a way that lessens financial risk.

An actively managed, specialized financial intermediary responds to many of the weaknesses identified in the South African municipal credit market. One or more intermediaries of this kind are likely to be critical to the private sector's capacity to finance Tier 1 municipalities' credit needs and to expanding the private sector's role in aggregate local infrastructure financing.

As discussed in Chapter 3, South Africa now has the developing world's first 100 percent privately financed municipal credit intermediary, the INCA. The success of INCA, or a similar private-sector intermediary, is likely to be critical to private financing of municipal credit in the new South Africa. In effect, an actively managed, large-scale intermediary can afford to invest in becoming a municipal lending specialist. Other, passive investors could lend to the intermediary, secured by its capital position, rather than directly to municipal governments. INCA now stands as a worldwide model of private-sector initiative in aggregating private-sector funds to finance local governments' investment needs.

2.4.3 Reducing Liquidity Risk

One form of municipal credit risk that emerged as more important than the consultant team had anticipated is liquidity risk.

Traditionally, South African lenders to the municipal sector did not worry greatly about liquidity risk. They purchased municipal bonds so as to match their long-term liabilities (such as fixed

pension payment obligations) against assets having the same maturities. In this environment, pension funds and insurance companies could afford to be “buy and hold” participants in the municipal market. They basically put their municipal bonds in the safe and did not have to worry about them until they matured.

Liquidity risks in the new municipal market. Several factors have combined to increase liquidity risk in the new municipal credit market. For one thing, as in other parts of the world, defined contribution pension plans are swiftly displacing defined benefit plans. This means that pension fund managers do not merely have to make sure that they can cover defined payment obligations, but must compete with other pension funds on the basis of returns. A competitive environment of this kind, where pension fund or insurance company holdings are marked to market, increases the importance of liquidity, because investment managers want to be able to sell when they think the market dictates selling.

Even more important is the new level of credit risk that has emerged in the municipal market. Without a secondary market in municipal bonds, holders have no way to get out of a position, even if they accurately identify that a municipality’s financial position is deteriorating. Purchasers essentially are forced to buy into, and accept, all of the future credit risks that develop in a particular local authority, without being able to take action to reduce their risk exposure.

Most of the insurance companies and pension funds that the consultant team interviewed stated that liquidity risk was now a major deterrent to their purchase of municipal bonds.

Options for increasing liquidity. The small size of municipal bond issues in South Africa is one major obstacle to creating liquidity in the market. Almost all of the local authority bond issues are too small to make it worthwhile for a market maker to maintain a market in them. Even those municipal bond issues listed on the Johannesburg Stock Exchange rarely trade.

The first requirement for greater liquidity, accordingly, is size of issue. This is a further potential advantage of an intermediary institution, like INCA. A private-sector intermediary can pool many local loans and finance them through a single large bond issue. The intermediary has a much better chance of achieving the size threshold of tradeability than does an individual issuer. This is the principle behind municipal bond banks and specialized municipal banks of the kind found throughout Western Europe and North America. Financial experts interviewed by the team placed the minimum threshold for practical liquidity in South Africa at anywhere between R500 million and R5 billion of aggregate bond value by an issuer.

A second requirement for liquidity is listing on the stock exchange. Although not sufficient to generate a true secondary market, listing on the stock exchange, according to our respondents, is a necessary condition for tradeability.

Finally, genuine liquidity requires an active market-maker in the bonds. In the South African context, the volume of trading in most bonds is insufficient to cause market-makers to set up shop

at their own cost, except in the case of government issuers or the very largest of the parastatal entities, such as Eskom. For other bond issuers, the issuing institution either serves as its own market-maker to ensure liquidity and hence demand for its initial bond issues, or the issuing institution hires a financial firm to make a market in its bonds. Rand Water is an example of a large utility that serves as its own market-maker to create liquidity. It offers to buy back its bonds from current holders, and then re-sells them on the secondary market.

INCA is an example of a company that has decided to create liquidity for its bonds by paying a financial institution (FNB) to make a market. It has taken this route in the hope of establishing swift market acceptability for its bonds, even before they reach the normal threshold size necessary for liquidity.

2.5 Conclusions for a USAID Capital Program

From this review of obstacles and opportunities for private-sector financing of municipal credit, it should be apparent that there are three potential roles for a USAID capital program to play:

- # USAID could try to strengthen credit flows to Tier 2 local authorities by providing credit to DBSA for on-lending to municipalities at modestly subsidized rates.
- # USAID could try to strengthen the inflow of privatization capital to the municipal infrastructure sector by supporting the efforts of DBSA or private-sector entities to participate in privatizations of water and wastewater systems or other basic municipal infrastructure services.
- # USAID could try to strengthen the purely private-sector system for lending to Tier 1 local authorities by supporting a private-sector intermediary that specializes in municipal credits.

Each of these options is potentially valuable in helping to develop South Africa's municipal infrastructure financing system. Each is consistent with the government's overall capital financing strategy. However, as implied by the Scope of Work for this project, USAID's comparative advantage probably lies in helping to develop South Africa's *private-sector* financing capacity. This means working with private-sector institutions that potentially can finance significant portions of Tier 1 local authorities' investment needs in the short run, while setting in motion a system that can graduate a greater number of Tier 2 local authorities to the private credit market over the intermediate term.

Chapter 3 describes the specific capital financing tool that USAID has at its disposal, the HG program, and evaluates the options for HG program design against the characteristics of South Africa's municipal credit market as discussed above. A HG program should address as many of the obstacles to market growth as possible, while remaining simple in its implementation.

3. Opportunities for a HG Program

3.1 Description of the Housing Guaranty Mechanism

The principal capital program that USAID can use to support municipal infrastructure financing is the HG program. It provides a US Government full faith and credit guarantee to US investors who in turn make US dollar loans to governmental or private-sector (non-sovereign) institutions in countries where USAID is carrying out programs that support housing or municipal infrastructure development. A competitive bidding process is used to ensure the lowest available interest cost. The US dollar loan is untied. The local currency equivalent of the US dollars can be used in a variety of ways to expand the provision of housing or municipal infrastructure.

The borrower, either sovereign or non-sovereign, provides the US Government with a counter-guarantee for the loan. The borrower receives the most favorable interest rates available in the US capital market for a US Government guaranteed loan of the same maturity. Interest rates compare favorably to US Government Treasury interest rates of a similar term, with recent spreads ranging between 50 and 65 basis points over the prevailing comparable Treasury rates.

Borrowers must have a need for US dollars, or be able to affordably protect the value of the dollars during the loan term by means of a hedge or other currency risk insurance. While the HG program does not require specific tracking of the dollar proceeds provided from the loan, it does require the identification of local currency “eligible expenditures” consistent with the loan purpose at least equal to the amount of the HG. These must be auditable expenditures on capital investments related to the program objectives. Beneficiaries must be residents whose incomes fall below the median income of the host country.

The amount of loan funds that can be guaranteed under the HG program in any given year is a function of two factors: (1) the amount of credit reserve allocated to the Agency by the US Government in that year and (2) the credit rating of the borrowers, both sovereign and non-sovereign, under the HG program. The higher the credit rating of a HG borrower (as determined by a rating model developed by the US Government), the more private capital the borrower can raise in the US capital market.

Recently, USAID has sought to further increase the leverage from the annual HG credit reserve, by employing a wider variety of loan terms and working with more private-sector borrowers. Even though the country’s sovereign credit rating is a component of a private borrower’s US Government rating, the financial condition of the private entity may be more sound than that of the country, allowing a larger amount of funds to be raised from a given amount of credit reserve. The South Africa program has been in the forefront in applying these program innovations in its housing activities with HG loans to two South African commercial banks.

3.2 General Options

3.2.1 Provision of Onlending Capital

The most common approach employed with HG funds is the provision of loan funds for financing infrastructure (or housing) investments. Lending by central government agencies or development banks to individuals, parastatal housing authorities or local governments has been supported around the world by the HG program. Capital funds from the HG normally are augmented by funds from central government or other donor sources.

The onlending approach to development assumes that developing good credit practices on the part of both the borrower and lender will either become a self-sustaining activity, or will lead to development of commercial incentives that will allow the lending activity to move into the private sphere where greater resources will be available.

Onlending has also taken place through banks or other private-sector institutions that act as agents of government. Many low-income mortgage programs have been designed this way using HG funds. While the hope is that the institutions involved will continue similar activities in the future, commercial incentives in such arrangements are limited. Yet a number of examples exist today where credit activities carried out originally with onlending funds by USAID have contributed to the development of viable financial institutions, including the Housing Development Finance Corporation in India.

3.2.2 Sovereign Policy-Based HGs

Policy-based HGs developed later when USAID's focus shifted in many countries to assisting government counterparts to develop the policy frameworks and mechanisms that would better support the system of shelter provision to low-income groups. The HG resources, especially when loaned to countries with funding shortages, ensure that the country has financial resources for housing and urban development activities with which to work while designing and implementing the policy agenda associated with the HG program. These activities may or may not entail onlending. Eligible expenditures and repayment are required, but may come from an agency within government other than the Ministry directly involved in carrying out the policy program.

3.2.3 Financial Leveraging

As the need for private capital for housing and urban infrastructure has expanded in the last decade, USAID has increasingly sought to use its HG funds in ways that leverage additional private capital to match or multiply the amount of HG funds supplied. USAID's experience is that HG funds can provide an incentive to an institution to initiate and commit its own funds to financing activities it might not otherwise carry out, such as lending to municipalities (as in USAID's program with the

Central American Bank for Economic Integration) or making mortgages to lower income borrowers (with Nedcor and First National Bank in South Africa or commercial banks in Panama). The hope is also that the funds help to develop a market that the financial institution will continue to service on a profitable basis after the HG funding is repaid.

The most effective use of financial leveraging is to provide capital to a financial intermediary that uses HG resources as the basis for raising new private funds. Such a use of HG funds can lower risk to private investors, but may entail greater risk of loss by the US government. This type of risk capital is precisely what is needed in many emerging municipal and housing finance markets. However, USAID's need to minimize the risk associated with each transaction has acted as a disincentive to the use of HG funds as true risk capital.

3.3 Options for Use of HG for Credit Enhancement in South Africa

A number of options were considered for the use of HG funds to stimulate private municipal credit financing in South Africa. The range of credit enhancement options expanded during the course of the assessment, as the variety of obstacles to private credit, reviewed in Chapter 2, became apparent. This section discusses the various options that were considered, and relates them to the larger municipal policy framework that emerged during the team's investigations.

3.3.1 Options Not Considered Appropriate

Neither a sovereign policy-based HG nor a loan for central government onlending was considered to be an appropriate use of funds in South Africa at this time. Both of these arrangements would require a government guarantee, while the central government has made clear in the MIIF, and elsewhere, that it intends to reduce to an absolute minimum its use of central government guarantees to facilitate municipal credit.

Further, onlending clearly does not help to create the incentives needed for private-sector participation in the South African municipal debt market. The potential for a HG loan to DBSA is discussed below.

3.3.2 Creation of Guarantee Fund

Proposals are frequently made to use HG resources to create guarantee funds to serve as a credit enhancement for municipal lending. A guarantee fund acts as a type of insurance for the lender, who would be given the right to draw on the fund, with certain restrictions, in the event a borrower fails to make loan payments. A credit analysis function would be needed to manage the risks of the fund, with the costs presumably charged against the fund's income. If the HG funds were to be invested at market rates, and fees charged to borrowers for participation in the fund, the return might

be sufficient to cover the costs of hedging the foreign exchange, making the guarantee fund fully self-sufficient.

There are both administrative and economic reasons why this approach has been rejected in the South African context. The administrative issues have to do with difficulties that may arise in identifying an eligible borrower and related matters.

The economic arguments against this use of HG funds are more crucial. Setting aside debt-service reserves (ideally as cash or a very liquid instrument) acts as a form of insurance and gives lenders greater confidence that payments in any period will not only be made but made on time. While there are costs to the borrower associated with holding these cash reserves, failure to deliver on these obligations has even greater costs, including the loss of the reserve balances and higher costs of borrowing, including higher reserve requirements, in the future.

A guarantee fund provides similar assurances to lenders, and the result may lower borrowing costs or increase the willingness of financial institutions to lend to previously unqualified borrowers. The costs of maintaining the fund can be shifted to borrowers by charging fees for use of the fund, ideally higher fees for greater risk borrowers, but it is very difficult to “charge” the borrower for the losses to the fund that result from borrower default. Especially where the agent for the fund may be a public sector institution, the record of collections from municipalities for losses experienced by these funds is very poor, for political reasons and because the default generally reflects a lack of financial resources at the municipal level.

The potential benefit of this approach in the South African municipal finance context appears to be limited by a number of factors. First, a successful fund requires the participation of a range of borrowers, some with very low probability of defaulting, in order that it not be immediately depleted by default payments. It is not obvious that in South Africa at this time there is a large enough group of borrowers with good credit ratings or a large enough number of creditworthy projects to participate in the pool.

Secondly, because interest rates were observed to be somewhat insensitive to risk in South Africa, it is not evident that the interest rates received by borrowers participating in the fund would be lowered enough to compensate for the costs of participating in the fund.

And lastly, even if the group of users interested in using the fund is large and diverse enough to create a good pool, the HG resources may not be sufficient to “seed” the guarantee fund with funds adequate to guarantee this large a pool of loans. In fact, it is an open question whether the HG resources can be invested safely at rates of return in excess of those needed to repay the HG loan itself.

For these reasons, the creation of a guarantee fund is not recommended as a use of the HG resources.

3.3.3 Partial Financing of Credit Insurance Mechanism

A number of financial institutions in South Africa have considered the creation of a private bond insurance program. It has been proposed that a bond insurance mechanism could be capitalized with reserves as low as 10 percent of the insured portfolio.

A bond insurance program would give municipalities access to the bond market as an alternative to bank loans, reduce the costs of bond issues, tide bond issuers over liquidity squeezes, help to facilitate a more active secondary market in municipal bonds thereby reducing the cost of borrowing, and encourage the retail (small purchase) market for municipal bonds. It has been proposed that a range of municipal issuers as well as financial institutions could make use of this product, depending on their need for risk management.

At least one organization felt strongly that a local institution could do a better job than a foreign bond insurer because they would be better able to assess risks in the market. Among the concerns that arise in this context, as in the case of a guarantee fund, are the lack of incentives for good quality bond issuers to buy the insurance, making it difficult to develop a well-diversified pool, and the need for grant funds or risk capital that ideally would not expose the institution to currency risk, as the HG funds would.

The general conclusion of this assessment is that there are more fundamental developmental issues standing in the way of an active municipal finance market that will need to be addressed before bond insurance is a viable product. A bond insurance mechanism, even if developed by a private entity, has some of the same inherent risks as the guarantee fund discussed above, especially questions about credit quality, its value to borrowers at this time in the development of the market, and the small size of the pool. Many of the logical insurers of municipal bonds in the South African market are already large primary purchasers of such bonds. They remarked that they would in effect be insuring themselves against credit risk, or diverting credit assessment capacity to an insurance pool when they could earn higher returns as an active buyer/seller in the municipal market.

There also does not seem to be any institution that has yet clearly established the feasibility of this approach. USAID could conceivably run a competitive process to solicit proposals for the development of a municipal bond insurance (or more general municipal credit insurance) instrument. However, this activity seems premature, and it is therefore not recommended as a use of HG funds.

3.3.4 Partial Financing of Market-making Mechanism

Discussions with existing and potential holders of municipal debt revealed significant concern with the lack of tradeability of municipal debt in the current market, and interest in arrangements that would increase the liquidity of credit instruments. As discussed elsewhere in this paper, old municipal bonds were in the past not actively traded due mostly to the “buy and hold” investment strategies of those purchasing them. Currently, they are not being traded both for that reason, and because of the

many uncertainties that surround them, in particular uncertainties regarding their actual value over the long term and their legal standing on the balance sheets of the newly formulated local authorities.

Investors' experience with the old debt, and their inability to trade it, affects their willingness to invest in new debt. For borrowers, the lack of investor liquidity limits their opportunities to borrow from the private market at the present time and increases the costs of loans, as interest rates are set higher to compensate for the non-tradeability.

For these reasons, the idea of using HG resources to support a market-making mechanism in old municipal debt was considered. The concept of a fund that would be capitalized partially with HG funds and would purchase old municipal debt, undoubtedly at a discount, was proposed to the team by a number of private institutions. The fund would be structured to include market-making activities.

Although there is extensive interest in a market mechanism for this purpose, no mechanism has yet been designed or resources committed to provide this form of enhancement. Again, it might be possible to run a competitive process to solicit proposals for the development of a market-making mechanism.

The team's conclusion is that a mechanism for improving municipal bond liquidity is needed in this market. Interest is widespread, and the effect on new financing of resolving the concern about old debt could be very positive. As a use of HG funds, however, this activity is not recommended. It is seen as more of a long-term market-development need that if addressed alone will not have as great an impact in providing new investment over the medium term as other uses of HG funds.

3.3.5 Investment in Public Intermediary

Investment of the HG funds in a public intermediary, specifically DBSA, was one of the options presented to the team prior to arrival in South Africa. With its new focus on infrastructure finance and its expertise in working at the municipal level, DBSA is an obvious potential borrower under the HG program. DBSA's way of doing business incorporates a number of activities that serve as credit enhancements for its own loans. These include its detailed project assessments, its capacity-building activities with borrowers, its hands-on involvement in the structuring of projects and oversight during the repayment period and the very low debt to equity ratio of its own capital structure. The new focus on supporting infrastructure privatization holds the potential for making these credit-enhancement skills available to outside parties.

A HG loan could provide a source of financing for new ventures by DBSA in public/private co-investment. This would be a very logical use of HG funds, and an effective one if not treated as "onlending capital," but instead capital that would attract new private resources to invest in municipal infrastructure in the future.

DBSA is considered the second-best alternative for the use of HG funds. It is not the primary recommendation of the team, for two reasons. The first has to do with DBSA's funding options and financial structure. DBSA appears to be in negotiation with several institutional lenders, including multilaterals, which will likely provide them with more than adequate resources for onlending. While agreements for some of these funds are not in place, they make it difficult to argue that the HG funds will fill a critical gap in the organization's funding. Similarly, DBSA appears to have enormous capacity to raise funds in the private market, given its current capital structure (although improvements in profitability may be called for first). Therefore, it is difficult to make a case for USAID contributing to its concessionary funding base.

Secondly, DBSA already has made a commitment to working with the private sector, and there is no evidence that DBSA will be any more or less motivated in its effort to work with the private sector if it accesses HG funds. The more likely determinant is the degree to which the organization can change and respond to the demands of outside parties. For these reasons, a loan to DBSA is not the first choice for use of HG funds.

3.3.6 Investment in a Private Intermediary

The last, and recommended, option is for the HG funds to be used to make a loan to a private intermediary. Financial intermediaries play a number of roles in a financial market, the most essential of which is the raising of capital on behalf of a borrower or issuer of bonds. Depending on the efficiency of the market and the characteristics of the borrower, they may do only that, or they may provide additional functions or services that facilitate financing.

Financial intermediaries in the South African municipal finance market will need to do more than simply raise capital; they will need to take steps to overcome some of the sectoral and market risks faced by investors. And they will have to do this while providing a market rate of return to investors.

At present, only two private intermediaries for infrastructure finance are known to be operating in South Africa. Those are the South African Infrastructure Fund (SAIF) and the INCA.

SAIF makes equity investments in infrastructure projects defined to include the environment (water, waste, sanitation, and sewerage), energy, telecommunications, ports and harbors, pipelines, toll roads, and transport sectors. Investors make equity contributions and may sit on the fund's Governing Board or Investment Committee. Founding members include a number of major domestic pension funds, life insurance firms, and Standard Bank of South Africa, which sponsored the fund.

The fund term is 15 years, although it expects to have fully committed its initial capital (in excess of R693 million so far) within five years. For specific projects, the fund may assist in raising concessionary finance from multi- and bi-lateral agencies through co-financing agreements with such

agencies and/or technical assistance grants or guarantees from government. A subsidiary of Standard Bank, established for this purpose, provides the fund management.

Eligible municipal projects for the fund would most likely be infrastructure privatization projects; the fund position in these projects will be as equity or quasi-equity holder. To date the fund has made no funding commitments but is actively investigating possible municipal infrastructure projects.

INCA is a debt fund for infrastructure loans, whose target clientele include local authorities, parastatal bodies and public utilities, district councils, provinces, private firms involved in local infrastructure development and financial institutions of various kinds. Equity investors who have to date contributed a total of R50 million include First National Bank, Southern Life Association Limited, Msele Financial Holdings Limited, South African Mutual Life Assurance Society, the Commonwealth Development Corporation (a British development finance agency), and DEG (a German development agency).

The company will raise debt through the South African capital markets by issuing two classes of bonds: senior bonds and junior bonds, each with various terms up to 15 years. The first sale of senior bonds, in the amount of R500 million (about \$120 million) took place in February 1997. Total senior debt is authorized up to R1.2 billion and an additional R200 million of junior debt is expected to be raised. The organization has received an AA- credit rating from IBCA, an international credit-rating agency.

INCA expects to be able to quickly lend the senior debt funds raised in the first tranche. Loans totaling R200 million were approved almost immediately after the initial bond sale.

For investors, INCA is well-structured to lessen risks in the existing municipal debt market, including (1) credit risk resulting from the lack of an established approach to risk analysis, which INCA has addressed by developing its own credit model that it will use to evaluate projects and allocate risk within its portfolio; (2) the lack of market-based credit enhancements, which INCA provides through its capital structure and its risk-management techniques; and (3) liquidity risk of municipal debt, which INCA will overcome through the use of a market-making agreement with FNB. INCA hopes later to create a program to purchase, enhance, and pool outstanding municipal debt that is not now being traded, in order to also address liquidity problems with the outstanding debt.

For borrowers, INCA will help overcome the high transaction costs associated with raising funds, especially bonds, by raising a single pool from which loans will be made to several borrowers. It will lower the interest cost of capital to borrowers due to the credit enhancements built into the structure.

It is the recommendation of the team that HG funds be used to make an investment in INCA, taking into account both the restrictions of the HG program itself but, more importantly,

acknowledging the unique innovation that INCA represents in the current municipal credit market. The organization is new and still has a steep learning curve ahead of it as it accumulates and manages its portfolio of municipal debt. The presence of USAID in the capital structure, along with the technical assistance that could be provided on specific institutional issues from the US financial sector, should contribute to investor confidence and help ensure that this approach to municipal financing is successful. The potential impact of INCA's success on the overall development of the municipal market could be enormous.

INCA is not only an innovation in the South African municipal credit market. Worldwide, it is the first 100 percent privately financed municipal credit intermediary in the developing world. Its value as an international "pilot" project for private-sector debt financing of municipal investment is enormous.

Table 4 on the next page summarizes the investment options that were considered for the HG funds and identifies the benefits and drawbacks of each approach.

3.4 Recommended HG Design

The recommended use of the HG loan is an investment in the INCA, which is designed to address the objectives and issues discussed in this report. Following is a description of INCA's capital structure and the proposed HG loan and a discussion of how the HG funds will assist INCA's development.

3.4.1 Background on INCA and its Capital Structure

INCA is a debt fund for infrastructure, whose target clientele include local authorities, parastatal bodies and public utilities, district councils, provinces, private firms involved in the infrastructure development and financial institutions of various kinds. Equity investors who have to date contributed a total of R50 million include FNB, Southern Life Association Limited, Msele Financial Holdings Limited, South African Mutual Life Assurance Society, the Commonwealth Development Corporation (a British development finance agency), and DEG (a German development agency).

Table 4
HG Investment Options

Option for Use	Need Addressed	Outcome	Borrower	Pros	Cons
1. Creation of guarantee fund.	Need to decrease risk to lenders of municipal lending.	Reduce risks of public and/or private-sector lenders.	Trustee of fund— public or private institution.	Simple mechanism; easily expanded by other contributors.	Does not encourage development of project risk analysis skills; requires large pool; level of HG funds available may not be sufficient.
2. Partial financing of bond or other credit insurance mechanism.	Need to improve credit quality of investment grade bonds and lower cost of borrowing.	Development of commercial credit enhancement.	Financial institution or new entity.	Addresses perceived need of private lenders.	May be premature given other weaknesses in municipal credit market; no readily available mechanism to support.
3. Partial financing of market-making mechanism.	Need to increase tradeability of municipal debt.	Increased bond liquidity for investors; lower borrower costs.	Financial institution.	Targets a specific market failure resulting from small size of market; very often identified by investors.	May be an ineffective intervention at this time; no readily available mechanism to support.
4. Investment in public intermediary.	Need for funds for co-financing activities; leverage of private funds.	Expansion of public/private cofinancing.	DBSA	Could encourage and help define role of public sector lender in leveraging private capital.	Level of resources depends on credit rating of institution; resources may be marginal relative to other sources.
5. Investment in private intermediary.	Need for risk capital to leverage additional equity or debt for municipal infrastructure.	Expansion of private-sector lending; encourage private risk-taking.	INCA or other private institution.	May be able to address more than one market shortcoming depending on intermediary chosen.	Level of resources dependent on credit rating of institution; HG may not be suitable instrument for providing true risk capital.

The company will raise debt through the South African capital markets by issuing two classes of bonds: senior bonds and junior bonds, each with terms of 7, 10 and 15 years. The first sale of senior bonds, in the amount of R500 million (+\$120 million) took place in February 1997. Total senior debt is authorized up to R1.2 billion and an additional R200 million of junior debt is expected to be raised. The organization has received an AA- credit rating from IBCA, an international credit-rating agency.

Junior bonds are debt instruments, but serve a purpose similar to equity in INCA's capital structure, providing additional security to the senior bondholders, thereby lowering the cost of the senior debt to INCA, and as a result to the municipal borrowers. As a result, the recent borrowing of senior debt will be loaned out at an average rate of 16 percent, which is extremely competitive in the South African market. This rate is only 80 basis points over the RSA's treasury bonds of like term, and only 1 percentage point over the concessional interest rates currently available from the Development Bank of Southern Africa.

The equity and junior bonds are not loaned out to borrowers, but are held in reserve to provide security to the senior bondholders in the event there is a problem with a loan made to a municipality. The existence of this reserve allows considerable gearing, or financial leverage, in the raising of senior debt. Based on the capital adequacy commitment made to senior bondholders of 4.8 percent, each rand of reserve allows 21 rands of senior debt to be raised, allowing 21 times leverage ($1/0.048 \approx 21$). Conversely, for each 100 rand it wants to raise, it must add 4.8 percent (or 1/21) of this amount of rands to the reserve fund, or 4.8 rands. The funds provided by the HG will have the same "21 times" leveraging effect, so if \$5 million are added to the reserve fund as junior debt, INCA will be able to raise \$5 million x 21 or \$105 million of senior debt (or approximately R472.5 million).

The proportions of equity, junior bonds, and bonds is based on the risk characteristics of the infrastructure loan portfolio. Each loan INCA makes will be classified into one of five risk categories, developed with the assistance of IBCA. Each risk category has its own capital requirement, with the higher risk category loans requiring a larger capital reserve than the lower categories. The capital structure reflects an assumed mix of loans from the various risk categories.

INCA's structure represents a significant institutional innovation in the South African capital market, as well as internationally, since it is the first fully private infrastructure financing entity. The structure addresses a number of the market barriers that keep the financial sector from providing debt for municipal infrastructure. While many of these barriers are well-recognized, and a number of private-sector mechanisms have been proposed to overcome them, INCA is the only intermediary that is providing the debt financing most sought by municipal borrowers.

The recommended HG loan would be made on terms identical to the junior bonds and will allow INCA to expand the number of loans made "downmarket" to borrowers in the higher-risk categories. An investment of USAID funds now will allow a larger amount of municipal debt to be loaned out more quickly. USAID funds will also provide INCA with cost savings to help finance its start-up costs, due to the lower cost of HG funds relative to private funds. And, it is believed by

INCA, USAID's presence in the capital structure will provide confidence to future investors, potentially lowering its future cost of funds.

For USAID, this investment is a model for the use of HG funds as a leveraging investment in a financial institution. Much more than a simple "matching funds" arrangement, USAID's investment—although modest in size—will allow more than 20 times the HG amount in new financial resources to be raised in the private market. The risks to which USAID will be exposed in this transaction appear to be reasonable relative to the developmental benefits that could result, both in terms of actual financing delivered, as well as the impact on financial market development.

While this loan may be somewhat unique when compared to other HG loans made in the past, the results are expected to be considerable for the South African municipal finance market. It is recommended that this fact, and the assumed small size of the HG loan, be kept in mind when deciding on the advisability of this approach.

Appendix A

Municipal Loan Structure and the Efficiency of Local Investment: International Experience

Market-based municipal lending, in addition to tapping new sources of financing, should help increase the *efficiency* or *productivity* of municipal investment. The use of market-determined interest rates in lending, for example, has been found generally to be positively correlated with average investment returns. From the borrower's perspective, low-return investments that nonetheless are profitable when financed with subsidized loans become unprofitable at the market rate of interest, and are squeezed out when the investor must pay the full cost of capital. Financial intermediation by a bank or other lender also adds the lender's professional appraisal of a project to the investor's own assessment, potentially providing a double check on investment returns.

The *structure* of municipal credit arrangements goes far toward determining how much of this potential for boosting municipal investment efficiency is realized. Investment productivity is supported most effectively when participants on both sides of the credit market have a clear stake in a project's success. This kind of incentive is clearest in project financing, where the lender's repayment depends on the project's ability to generate adequate revenue.

General obligation municipal loans create less incentive for project efficiency. Returns to the individual project may be largely irrelevant to the lender, whose debt is secured by the municipality's overall budget and assets. General obligation lending instead creates incentives for general financial discipline. In a well-functioning private credit market, municipalities whose budgets are out of control will be cut off from further credit or charged steep risk premiums. Local governments that want to use credit have a strong incentive to maintain budgetary discipline. A number of empirical studies have confirmed that, as long as municipalities in financial trouble cannot go to the public sector and get cheaper loans or grants because of their financial distress, this system is effective in restraining local budgetary behavior.¹¹

Municipal loans backed by unconditional central government guarantees can create perverse efficiency incentives. As pointed out in the text, central guarantees can lead lenders to skip project review altogether, and even to ignore local financial condition. The lender's incentive is to look straight through the local borrower and local loan purpose to the strength of the central guarantee. In fact, guarantees of this kind promote profligate lending and inefficient or corrupt local spending.

Private-sector lenders often acknowledge that, when municipal loans are fully protected by government guarantees or by intercept rights to local government transfers, they spend no time at all

¹¹ For a review of this literature, see Goldstein and Woglom, "Market-Based Fiscal Discipline in Monetary Unions: Evidence from the US Municipal Bond Market," (International Monetary Fund, 1991).

on municipal project review and do not attempt to master the complexities of local government budgeting.¹²

An extreme illustration of the perverse nature of central government guarantees is provided by Turkey's experience in 1996. During 1996, municipalities in Turkey began disowning debt on a large scale. Both Istanbul, the largest city, and Ankara, the capital, informed the national Treasury that they would not be repaying foreign debts. As of June 1996, approximately \$400 million in debt payments due to Japanese and German lenders had been abandoned by Turkish local authorities.

Partly at issue was a political quarrel. The Islamist Welfare Party, Refah, now in control of many municipalities including Istanbul and Ankara, maintained that the municipal debts had been contracted by their predecessors in power and should be paid by them. Conflict with the central government over grants policy during the first half of 1996, before Refah came to national power, further exacerbated the fiscal situation. In the words of one municipal spokesman, "They don't pay us (grants); we don't pay them (banks and bondholders)."

Despite this turmoil, the credit market remained largely untouched by events. Some municipal debts were explicitly guaranteed by the national government. All other debts contained cross-default clauses, so that default on any one credit triggered default on the others, including those guaranteed by the Treasury. Under these conditions and to preserve national access to credit markets, the central government assumed responsibility for all payments not made by municipal borrowers. In total, between \$8 billion and \$10 billion in municipal foreign currency debt is outstanding.

In the midst of the crisis and following Istanbul's and Ankara's disavowal of repayment obligations, a new DM200 million loan was extended to the municipality of Izmir through an international syndicate of commercial banks, with a central government guarantee. Lenders in effect looked straight through the local government general obligation pledge to the sovereign guarantee. One international banker in the syndicate was quoted as saying, "As long as I am paid, I don't care where the money comes from."¹³

Mexico's rush to build a national highway system through private construction of toll roads provides a different kind of illustration of the risks and inefficiencies created by central government guarantees. The toll roads were financed primarily by project lending. State banks, acting on political direction, provided much of the financing and supplied guarantees both to private lenders and to

¹² See, for example, Peterson, "Colombia Municipal Development Financing: Current Performance and Future Role of FINDETER," (Inter-American Development Bank, September 1996). The commercial banks interviewed as part of this study acknowledged that for standard municipal loans they did not examine the economic structure of the underlying investment projects or carry out more than the most casual review of local financial condition. Instead, they focused on the adequacy of the municipality's pledge of intergovernmental tax-sharing to cover debt service. If the pledge was legally air-tight, and local tax-sharing receipts were sufficient to cover debt-service obligations with ample margin, a bank would approve the loan.

¹³ Euromoney, *Emerging Markets Report* (July 1996).

contractors. One consequence was a vastly over-designed and expensive toll road system, which cannot generate revenue to pay back more than a fraction of construction cost. A second consequence was a hemorrhaging of the state banks that provided guarantees. When the economic earnings of the toll roads proved inadequate to service private lenders' debt, state guarantee institutions ended up with much of the losses.

Designers of credit systems need to recognize that transferring credit risk to central government eliminates most of the incentives private lenders otherwise have for monitoring local investment projects and investigating local finances.

Appendix B

International Experience with Co-Financing and Graduating Local Government Borrowers to Private-Sector Credit

International experience is not very encouraging as regards the ability of parastatal lenders and private-sector lenders to function side by side and complement one another in providing credit to local authorities. More often than not, Development Banks for the local sector, or Municipal Development Funds, have suppressed development of private-sector lending, by undercutting the market's interest rates on municipal loans or by tolerating high delinquency rates among municipal borrowers.

Nevertheless, examples can be found of successful complementarity between parastatal and private lenders to municipalities. This Appendix briefly examines the experience of three such countries: Colombia, the Czech Republic, and Poland. As emphasized in Chapter 2 of the main text, the real test of complementarity is not that the two forms of lending can survive side by side, but that the entire credit system works in such a way as to steadily "graduate" more and more local authorities from reliance on parastatal credit to use of the private credit market. The three countries whose experience is summarized were selected because each has used a different approach to defining the boundaries between parastatal and private credit, as well as different systems for "graduating" local borrowers to the private market.

Colombia

Basic description. Colombia has one of the best known Municipal Development Banks, FINDETER. From its inception, it has functioned financially solely as a co-financing institution in partnership with commercial banks.

FINDETER is a second-tier financing facility, but also a pro-active development bank. Municipal authorities bring financing proposals to FINDETER. FINDETER then reviews the projects from a technical, economic, and developmental standpoint. For projects it approves, FINDETER agrees to refinance up to 85 percent of a commercial bank's loan to the municipality to finance the project. The commercial bank performs its own financial analysis and assumes all credit risk, including risk on the portion of the loan financed by FINDETER. [That is, the bank remains responsible for servicing its debt to FINDETER, regardless of its own repayment experience.]

FINDETER-supported loans are made at near market rates of interest. They are variable rate loans which give the banks a 3 percentage point spread over the standard index of banks' cost of funds, adjusted monthly. The banks participating in this system candidly acknowledge that they rely on FINDETER to perform all of the project appraisal responsibilities, including general financial

analysis of the municipality. The banks' credit position is protected by special intercept arrangements, giving the banks first claim on intergovernmental revenue-sharing payments as long as municipal loan payments are due.

The transition to private credit. The banks participating in the FINDETER program have enjoyed a good repayment record. Less than 2 percent of outstanding loans are classified as non-performing. The good credit experience of the banks has led them to commit their own resources to the municipal sector in the form of commercial loans without parastatal participation.

Municipal demand for direct bank loans has grown rapidly because, although the lending periods of bank loans typically are shorter than FINDETER's long-term loans, the approval process is far faster and the strings attached to bank credits are fewer. [A recent internal study conducted by FINDETER found that the average time elapsed between a municipality's request for funds from FINDETER and final loan approval was more than nine months.] Banks began lending to the largest and most financially secure municipalities using the same intercept provisions as in the FINDETER loans. Now, intermediate-sized cities and regional departments borrow primarily through commercial banks. Small cities and towns continue to rely heavily on FINDETER co-financing.

Bond issues are the most recent development in the municipal credit picture. The largest cities now finance their credit requirements primarily through bonds. Bonds are typically issued in serial form, with different maturities, ranging up to eight years. By the end of 1995, Bogota, for example, had issued its eighth series of municipal bonds. Bonds are preferred because they enable the largest cities with sound finances to raise capital less expensively than through commercial bank borrowing, and because they give city authorities more flexibility in managing the resources received.

Table B.1 summarizes the very rapid overall growth in local and departmental credit between 1991 and 1994. [The exchange rate is approximately 50 pesos = US\$1.00.] FINDETER's shrinking share of the credit market is of concern to the institution. However, from an overall developmental perspective, this evolution seems to reflect a desirable shift to greater reliance on private-sector credit.¹⁴

In summary, local authorities have "graduated" to the private credit market, in the Colombia model, because: (1) the parastatal introduced commercial banks to the municipal market through co-financing; (2) FINDETER lends at essentially the same interest rates as the private market; and (3) local authorities then can weigh for themselves the trade-offs between FINDETER's developmental assistance and longer-term loans, on the one hand, and the private sector's swifter action and hands-off approach to project technical appraisal, on the other.

¹⁴ FINDETER itself is now under pressure from the government and international multi-lateral agencies to begin raising its incremental funds from bonds issued in the domestic market, just as DBSA is.

Table B.1
Municipal and Departmental Credits
(Billions of Pesos)

Source of Credit	1991	1992	1993	1994
FINDETER Co-Financing	115	142	280	278
Commercial Banks Own Resources	193	231	459	924
Municipal Bonds	36	74	166	247

Czech Republic

Basic description. Municipal borrowing to finance local infrastructure projects is relatively new in the Czech Republic. Until the collapse of Communism, almost all local capital investment was financed either by state subsidies or by direct state construction of facilities.

After Communism, the Czech Parliament debated two rival models of municipal credit supply. Legislation was introduced to formally establish the former State Savings Bank as the sole supplier of municipal credits. In the end, however, the municipal credit market was fully de-regulated and opened to competition.

Besides commercial market credits, the Czech Republic, like most Eastern European states, created an Environmental Fund to finance projects urgently needed in addressing pollution hazards. The majority of the Fund's resources have been directed to municipal investment in projects aimed at reducing water and air pollution. Originally, the Environmental Fund made grants to finance these projects. Then, it introduced a revolving loan fund at zero interest. Now, it is again revising its plan of operations so as to charge interest on its loans, but still at highly subsidized rates.

The transition to private credit. The side-by-side existence of full private market lending and zero-interest parastatal lending has been a challenge to development of the Czech municipal credit market.

The lines of demarcation have been drawn according to two principles. First, Environmental Fund loans are available only for fairly well-defined types of projects. Still, the range of eligible projects includes most of the current major municipal investment activities, such as investment in wastewater collection systems and treatment plants, replacement of highly polluting coal-fired district heating systems, and installation of metering for water consumption and district heating.

Second, the Environmental Fund takes into account municipal ability to pay in awarding its subsidized loans. Municipalities able to finance their investments through the commercial market are supposed to be excluded from loan eligibility. Although there have been some political decisions which appear to override this principle, in general Environmental Fund loans have been targeted effectively on smaller and poorer communities. This targeting has tightened over time as the Government has made clear that the Environmental Fund must operate in the future within the capital endowment it already has received from Government and international donors.

The result of this process has been parallel, rapid growth in both private and parastatal lending to municipalities. Larger and better-off local authorities have been pushed into the private credit market, by the tighter targeting of Environmental Fund loans.

As in Colombia, a three-way segmentation of the local credit market has emerged. Small municipalities borrow principally from the Environmental Fund. Mid-sized cities borrow largely from commercial banks. More than 1,300 commercial bank loans were made between 1992 and 1995. Larger cities rely principally on municipal bonds for credit. All Czech cities over 100,000 population have now issued municipal bonds.

Table B.2
Municipal Credit Market Growth in the Czech Republic

Type of Debt	Volume of Debt Outstanding (millions of Czech crowns)		
	1993	1994	1995
Commercial Bank Credits	1,983	4,222	7,330
Domestic Bonds	28	608	1,231
Foreign Currency Bonds	0	7,294	7,294
Zero-Interest Loans (Environmental Fund)	800	2,900	6,500

Note: The approximate exchange rate throughout this period has been US \$1.00 = 26 Czech crowns

Poland

Poland has a different and instructive history of municipal credit market development.

Soon after the fall of Communism, it, too, created a system of special parastatal lending to support municipal environmental investments. In Poland's case, this system consisted of a series of

regional Environmental Funds which made mostly grant awards, as well as a large national Environmental Bank, which made highly subsidized loans to local authorities.

For several years, the Environmental Bank in principle could lend for essentially every type of municipal investment project that could be imagined. Investments in street paving were eligible for subsidized environmental loans because they would reduce dust pollution. Investments in new transit vehicles were eligible because they both reduced fuel consumption and reduced pollutant emissions. Extensions of potable water systems were eligible, as were all kinds of investments in sanitation and wastewater removal or treatment. Local authorities of all sizes and financial condition could receive loans from the Environmental Bank.

The effects of this very broad definition of eligibility were twofold. Municipal applications for Environmental Bank loans vastly exceeded the Bank's (substantial) resources, resulting in massive queues, long project delays, and uncertainty about ultimate financing. At the same time, the commercial bank loan and municipal bond markets were completely suppressed. As long as there was a prospect of receiving deeply subsidized loan funds, municipalities preferred to take their chances with the Environmental Bank rather than go to the private market for credit. USAID's efforts to develop a municipal bond market were stymied.

This situation changed suddenly when the Environmental Funds and Environmental Bank announced clearer and more restrictive project eligibility guidelines. In particular, it was announced that investments in road construction, street surfacing, and purchases of new rolling stock would not be eligible for environmental grants or subsidized loans.

With this determination, a private credit market materialized almost overnight, helped along by the sharp decline in Poland's rate of inflation, which led to lower commercial interest rates. Bank loans to municipalities grew rapidly. A small but healthy municipal bond market emerged. All municipal bonds announced as part of the first round of bond issues in 1996 were used to finance road investments and investments in rolling stock, the two categories excluded from Environmental Bank eligibility.

The transition to private credit. Poland's experience illustrates a very simple but fundamental lesson in municipal credit market design. The lending activities of a subsidized parastatal intermediary should be as tightly and clearly targeted as possible. As soon as it becomes clear what kinds of investments the parastatal will ***not*** finance, a private credit market is likely to become active around the excluded investment categories. "Graduation" to the private credit market then can be engineered by gradually cutting back on the range of projects, or the range of municipalities, eligible for subsidized loans. The worst enemy of private credit market development is ambiguity in the financing mandate of a subsidized parastatal authority.

Appendix C

Bundling Technical Assistance and Credit

The functions of municipal development banks typically extend beyond credit supply to increasing the efficiency of local investment, promoting the development of service pricing and cost recovery in local investment projects, upgrading municipal financial management capacity, and ensuring that critical investment projects get built. Development banks for the most part have addressed this range of goals by trying to bring capacity to perform all of these functions under their own roofs.

The rationale for bundling together these different options is straightforward. In principle, it allows the Development Bank to coordinate all of the activities critical to the success of a local investment project. Without coordination, local authorities may never make use of loan funds because they are hoping to become eligible for a capital grant instead, or a project may get financed but never be completed because of inadequate local implementation capacity or poor technical design. As the pre-eminent institution dealing with local government investment, a sectoral Development Bank can assemble the critical mass of technical expertise necessary both to improve local investment practices and serve as a comprehensive counterpart for international technical assistance.

Nonetheless, there are dangers in internalizing all of the functions associated with local government investment financing in a single institution. One danger is bureaucratic delay. In performing the various roles assigned to it, a Municipal Development Fund (MDF) or Development Bank may become a cumbersome bottleneck that slows down the investment process. In the early 1990s, for example, the average elapsed time between initial project identification and municipal loan approval at Ecuador's municipal development fund was more than 32 months. FINDETER in Colombia has been able to reduce the period between initial loan application and loan approval to a little more than eight months, but municipalities nonetheless have been shifting loan demand to commercial banks, citing the delay in FINDETER project review as the principal shortcoming of its lending process.

A second danger is that a development bank empowered to perform the full range of functions described above will act as a monopolist, squeezing out competition and retarding development both of a private credit market and of local governments' capacity to plan and execute projects on their own. If a municipal development bank, for example, has the ability to blend subsidy funds with its loans, it will tend to underprice pure commercial lenders, forcing them out of the market. If municipal authorities must utilize development bank loans in order to gain access to technical assistance, other institutions will find it difficult to compete for loan business. A strong development bank can likewise stand in the way of decentralization. If it must approve project design and project service pricing arrangements, for example, in order for a project to obtain financing, it will be tempting for local authorities simply to look to the development bank for technical guidance in the first place. Many municipal development banks maintain a roster of approved technical consultants, who view their true client as the bank, not local governments.

Unbundling options. The various development functions that a multi-purpose development bank performs are critical to improving the quality and cost-efficiency of local investment. Whether these functions should be centralized in a single institution, however, is a different question. An alternative path is to unbundle the functions as much as possible, so that some of them can be assumed by the private sector, once it becomes equipped to do so, and others can be performed by municipalities themselves. This strategy introduces competition into local investment design and financing, while keeping the development bank in a pivotal coordinating role.

One function that can be unbundled is credit analysis. In a number of countries with active capital markets, including India, Thailand, Chile, Colombia, and Eastern European nations, as well as South Africa, independent credit rating firms are now functioning. These firms can be utilized by development banks to separate credit rating from the rest of the bank's appraisal process.

Another opportunity for unbundling involves the linkage between subsidies and credit. Tying capital subsidies exclusively to development bank loans is one of the surest ways to deter expansion of the private credit market. Unbundling the subsidy function need not reduce the magnitude of subsidies. Rather, the subsidy decision can be made by a different government agency or agencies, based on the characteristics of the project or the characteristics of the municipality. In an unbundled system, interest-rate subsidies and matching grants are awarded according to transparent criteria, independently of the source of loan financing.

One of the tightest controls that municipal development banks typically exert involves project preparation. The development bank typically must approve the project design, in its technical, financial, and "political" aspects, in order for a project to receive credit financing from the bank. The bank is likely to maintain a list of qualified technical consultants; local authorities must hire their consultants from this list. International support for municipal development banks often involves setting aside small grants or subsidized loans for project development and pre-feasibility studies. Municipalities that draw on this assistance normally must agree to borrow from the development bank if financing goes forward. All of these mechanisms are intended to stimulate the flow of eligible projects. However, they also have the effect of squeezing out commercial lending and 'non-approved commercial technical assistance, which do not have access to the same sources of subsidized project development financing.

In the case of small municipalities, the argument can be advanced that supervision by a development bank or other entity is necessary to ensure that local projects are efficiently designed. Even in this case, however, a strategy for gradual unbundling may be appropriate. Small-scale projects can be a proving ground for decentralized project preparation by local governments. The technical benefits gained by having development bank staff review and approve small-scale individual projects, like neighborhood water distribution projects or road surfacing, are likely to be outweighed by the time savings and experience gained from allowing local authorities to move ahead on their own.

For municipalities of any size, separating project preparation from credit financing furthers the conditions for competitive markets. Municipalities that have prepared their own project specifications can “shop around” for the best financing terms. If the project design must be prepared, or reviewed and approved, by a professional team associated with the development bank, it becomes difficult to seek financing from any other source. The bundling of credit and technical assistance for project preparation deters the competitive development of both markets.

Appendix D

South Africa's Capacity for Collections and Cost Recovery

The poor record of many local authorities in South Africa to collect fees (or rates) for services provided to citizens is a critical weakness in the financial system that will impede private financing of municipal infrastructure. Municipal officials, and newspaper writers on daily basis, discuss the political and financial predicament that the unwillingness to pay for services represents in many areas of South Africa life, from municipal services to education. The practice of rent strikes and other refusals to pay has spread from being a political tactic used in the black townships during the apartheid era, to being a cultural practice used by ratepayers at all income levels as South Africa attempts to adjust to its new reality of reallocated resources across social classes and institutional transformation at the municipal level. Politicians frequently deplore the “culture of entitlement” that has overtaken South Africa. On average, South African municipalities report less than a 70% rate payment record, although many still budget for 100% payment, according to the Department of Constitutional Development.

Until this situation is addressed, lack of cost recovery may stand in the way of development of a private market for municipal infrastructure financing. Not only do low collections have a financial impact that may make a project and related private financing infeasible, but non-payment also implies political discontent that may make financial institutions reluctant to lend.

In an interview conducted with ABSA Bank during the assessment, one of those interviewed suggested that citizens fall in four classes, each of which will require a different collections strategy. These four classes are: the non-paying unemployed, the non-paying intermittently employed, the non-paying employed, and those who are paying. These classes gradually shift from inability to pay to relative degrees of willingness to pay.

It was also observed, and confirmed in discussion with the Treasurer of Nelspruit, that logistical factors such as distance from a pay point figure significantly in collections. Nelspruit has plotted non-payers on a map, and has found a high correlation between distance to the nearest pay point and non-payment. For that reason, Nelspruit is organizing an effort to locate pay points closer to neighborhoods with payment problems and keep them open on Sundays.

ABSA sees the need for municipal authorities to increase rate collections as an opportunity to develop new financial services. It has designed two efforts to assist municipalities: SmartPay, a mobile paying system for rural areas, and PayNet, a grocery store-based collections system. Nelspruit is also organizing a program to provide to paid-up ratepayers the chance to compete to win prizes of cash or coupons for goods and services, in an effort to increase payment rates. The use of metering for certain services such as water and electricity is often pointed to as the ultimate solution, but these systems take time to plan and install and the costs of meter installation may not be affordable or

acceptable in all communities, especially when the emphasis is on service expansions that improve citizens' quality of life. In certain locations in South Africa, the use of prepayment cards for electricity has succeeded in reducing nonpayment and thefts of service. The central government has tried moral influence and launched the Masakhane campaign to cajole citizens into paying what they owe. The results of the campaign reportedly have been modest.

Obviously, many factors are influencing the willingness of citizens to pay for public services, including politics, household economies, logistics and unwillingness to pay for substandard service, among others. At the same time, there seems to be little consciousness of demand management techniques that could effectively lower the rates that users must pay. The good news is that there appears to be a growing body of experience and of proposals for overcoming the problem—some from the private sector, others from the public sector. Sharing successful local experiences should accelerate the learning curve of all municipalities, as should learning from international experience with regard to cost recovery and demand management. At the same time, there is need to improve information systems that will make it easier for municipalities to monitor and manage rate payments of both citizens and commercial users, as well as to more accurately calculate the costs of providing services to different classes of users.

Finally, rates collection in South Africa has been complicated by recent legal rulings. In March 1997 the Pretoria High Court upheld an earlier ruling that the interim practice of charging flat-rate fees or taxes, rather than rates scaled to service usage, is illegal. The court rescinded Pretoria's right to sue for payments arrears based on the interim practice of flat-rate charges. The court further held that differential tax and fee schedules for former black and former white townships, now part of an amalgamated whole, was discriminatory, and suspended the Pretoria Council's right to enforce such charges.

Similarly, courts have ruled that the property tax assessment base in Cape Town, which dates from a 1958 property valuation, cannot continue to serve as the basis of property taxation, both because the valuation fails to take account of subsequent differences in property appreciation, and because different base-year valuations are used in the areas newly amalgamated into the city. The courts have given Cape Town until the year 1999 to establish a uniform property valuation throughout the new tax region. Partly to simplify the massive revaluation and cadastre effort that is required, the City has opted to convert to a land value tax that will avoid the administrative difficulties of valuing built property and its depreciation. Meanwhile, the municipality anticipates numerous legal challenges to its tax billings.

The legal situation makes it imperative for local authorities to move as swiftly as possible to tax and fee systems that meet court standards of uniformity and equity. Otherwise, any attempt to improve collections threatens to become bogged down in legal challenges as well as rates strikes.

Appendix E

Persons Interviewed

John Coetzee	General Manager	ABSA Bank
Andre Kruger	Senior Manager Credit/ Public Sector Banking	ABSA Bank
Robert Van Der Walt (2 others)	Treasury Consultant	ABSA Bank ABSA Bank
Ian Bain	Assist. General Manager/ Finance	Alliance Insurance
Philip Van Ryneveld	Executive Director/ Corporate Finance	City of Cape Town
Nantes Kruger	Treasurer	City of Nelspruit
Matthew Durdy		Commonwealth Development Corporation
Leon Campher		Coronation Asset Management
David Ferreira	Manager/Private Sector Investments	Development Bank of Southern Africa
Mandla Gantsho	Executive Manager	Development Bank of Southern Africa
Burgert Gildenhuys	Senior Specialist/ Specialist Unit	Development Bank of Southern Africa
Chris Heymans	Manager—Policy	Development Bank of Southern Africa
Barry Jackson	Principal Policy Analyst	Development Bank of Southern Africa
Dave King	Executive Chairman	Duff and Phelps Credit Rating Co.
Mr. Rautenbach		Eskom Pension Fund
Johan Latsky	Attorney	Hofmeyer Law Associates
Mike Berry	Managing Director	IBCA Credit Rating Agency
Johan Kruger	Managing Director	Infrastructure Finance Corporation Ltd. (INCA)
Attie Van Zyl	Executive Director	Infrastructure Finance Corporation Ltd. (INCA)
Solomon Asamoah	Investment Office/Capital Markets—Sub-Saharan Africa Department	International Finance Corporation
Patrick Connolly	Senior Investment Office/ Capital Markets—Sub-Saharan Africa Department	International Finance Corporation
Vincent Rague	Chief of Mission/South Africa	International Finance Corporation
Andre Pillay	Investment Officer: Capital and Money Market	Iscor Pension Fund
Nick Vlok	Manager/Capital and Money Market Investments	Iscor Pension Fund
Tom Plaistowe		Old Mutual Insurance Company

Chris Kapp	Project Director City Treasurer	Project Liquidity Port Elizabeth
Marlene Hesketh	Senior Manager	Rand Merchant Bank Ltd.
Mike Burns Thomson	Senior Accountant	Rand Water
Andrew Canter	Manager/Fix Interest	RMB Asset Management Ltd.
Moektsi Masolo		RSA/Department of Constitutional Development
Dr. Crispian Olver	Chief Director: Municipal Infrastructure and Finance	RSA/Department of Constitutional Development
Roland White	Consultant	RSA/Department of Finance
Mike Muller	Deputy Director General/ Regions	RSA/Department of Water and Forestry
Nick Christodoulou	General Manager	Sanlam
Philip M. Chen	Managing Director	South Africa Infrastructure Fund
Emiel Vanden Houe	Senior Manager/ Project Analysis	South Africa Infrastructure Fund
Michael Leeman	Futuregrowth Co-ordinator, Employee Benefits	Southern Life/Future Growth
Colin Coleman	Director/Public Finance Division	Standard Corporate and Merchant Bank
Morgan Pillay	Manager/Public Finance Division	Standard Corporate and Merchant Bank
Frikkie van Zyl	Manager/Public Finance Division	Standard Corporate and Merchant Bank
Chi-Chi Mung' Omba	Principal	Theta Securities
Daan Wandrag	Executive Director	Theta Securities
Louis Cronje	Senior Manager— Development Finance	UAL Merchant Bank Ltd.
Nigel E. Palmer	General Manager— Development Finance	UAL Merchant Bank Ltd.
Carlene Dei		USAID Pretoria
Joel Kolker		USAID/Pretoria
Paul Weisenfeld	Attorney	USAID/Pretoria
Aaron Williams	Mission Director	USAID/Pretoria
Claudia W. Sadoff	Economist/Eastern and Southern Africa	World Bank
James F. Hicks	Principal Urban Finance Specialist/Southern Africa Department	World Bank
Junaid Ahmad	Deputy Chief of Mission	World Bank/South Africa