Municipal Bonds in Three Countries: India, South Africa and the United States

Matt Glasser

Director for Municipal Law and Finance at the Centre for Urban Law and Finance in Africa (CULFA) and Extraordinary Research Fellow of the Chair for Law, Justice and Sustainability of North-West University in Potchefstroom, South Africa, matthewdglasser@gmail.com

Follow this and additional works at: https://readingroom.law.gsu.edu/jculp

Part of the Comparative and Foreign Law Commons, Environmental Law Commons, Land Use Law Commons, and the Urban Studies Commons

Recommended Citation
Available at: https://readingroom.law.gsu.edu/jculp/vol4/iss1/15

This Article is brought to you for free and open access by Reading Room. It has been accepted for inclusion in Journal of Comparative Urban Law and Policy by an authorized editor of Reading Room. For more information, please contact gfowke@gsu.edu.
MUNICIPAL BONDS IN THREE COUNTRIES: INDIA, SOUTH AFRICA AND THE UNITED STATES

Matt Glasser*

BACKGROUND

When Alexander Hamilton was asked to take on the financial challenges of a young United States, he recognized the need for capital to invest in the country’s future. A recent book introduces Hamilton’s impact this way:

During his relatively short life …, Hamilton…went on as the nation’s first Secretary of the Treasury from 1789 to 1795 to engineer the U.S. financial revolution. He did so to promote economic growth and national power. He was ahead of his time. Indeed, since we have only of late come to appreciate what he knew long ago about finance’s or credit’s connection to growth and power, he remained ahead of his time right down to the present.¹

New York’s capital markets, which Hamilton helped establish, can take credit for financing the bulk of local infrastructure in the U.S. over the past one hundred years. In 1812, New York City issued the first general obligation (GO) municipal bond to finance the building of a canal.² Outstanding debt of U.S. local governments had reached $200 million by 1860, and $516 million by 1870.³ Today, the U.S. municipal bond market stands at about $3.8 trillion dollars.⁴

---

¹ R. Sylla and D. Cowen, Alexander Hamilton on Finance, Credit and Debt, Columbia University Press (2018), page 1

* Director for Municipal Law and Finance at the Centre for Urban Law and Finance in Africa (CULFA) and Extraordinary Research Fellow of the Chair for Law, Justice and Sustainability of North-West University in Potchesfstroom, South Africa.
Largely because of the enduring success of the U.S. municipal bond model, attempts have been made over the past two decades to establish municipal bond markets in developing countries. This article traces developments in South Africa and India. Comparing the situation in these two countries with one another, and with the long-established municipal bond market in the United States, we explore how context affects outcomes. In development circles, it is widely accepted that municipal bonds and other credit arrangements can help finance essential local infrastructure.

I hope to demonstrate that the political, institutional and regulatory environment that empowers or constrains the use of municipal bonds and other borrowing tools is complex, and that municipal bonds are not magic. For municipal bonds per se to be a sustainable infrastructure financing mechanism, local government must be creditworthy and there must be a helpful institutional, legal and regulatory framework. Citizens must want and expect their local government to provide services and infrastructure, and they must expect to pay for it. Local government must have adequate powers and financial instruments to deliver on their citizens’ expectations.

**NATIONAL DIFFERENCES**

**Significant contrasts.** These three countries differ in size, wealth, and governmental structure. India has by far the largest population, with over 1.3 billion people. This is four times the population of the United States, and more than 20 times the population of South Africa. The United States is a high-income country, with a per capita GDP of US $62,641; South Africa is a middle-income country, with a per capita GDP of US $6,374; and India is a lower middle-income country, with a per capita GDP of $2,016. India and the U.S. are federal countries, in which the powers of local government units depend entirely on state laws. By contrast, South Africa is a unitary country, with significant decentralization in the local sphere. These differences have consequences for the state of the municipal bond market in each country, and for the market’s future development.

**Indian urban local bodies (ULBs) have limited powers and functions.** In 1992, the 74th Amendment to the Indian Constitution recognized, and attempted to empower, urban local government, noting that “in many States local bodies have

---

5 Local governments which are not creditworthy can borrow with a government guarantee, but such borrowing should be thought of as state or national borrowing, since that is where the risk actually lies.

become weak and ineffective...[and] are not able to perform effectively as vibrant democratic units of self-government.” However, the 74th Amendment left it to each state to enact enabling legislation and to provide ULB finances. Within India’s federal structure, it is up to the states to determine the powers, functions, and revenues of ULBs. Most Indian states have failed to devolve significant authority and revenues to these bodies. The lack of a stable and reliable financial base has naturally constrained borrowing by ULBs, despite episodic enthusiasm for municipal bonds. India is comprised of 29 States and seven Union Territories. The States have considerable autonomy, while the Union Territories are governed centrally. Many Indian states are larger than countries in other parts of the world, so the concept of meaningful decentralization of functions and finances has merit, but it remains far from realization. Most infrastructure is installed through state-controlled channels, and most subnational borrowing is state-level borrowing.

**South African municipalities have considerable responsibility and autonomy.** South Africa is small, compared to India and the U.S. Its 257 municipalities have extensive, constitutionally specified powers and functions, are responsible for local land use regulation, and are largely responsible for planning, constructing, operating, and maintaining local infrastructure. Municipal powers do not depend on provincial legislation or fiscal transfers. South Africa’s largest cities have strong economies and own-source revenue bases. Poorer, rural municipalities rely more on transfers from national government. Municipalities’ legally authorized revenue instruments (primarily property taxes and tariffs on water and electricity), together with equalizing transfers from national government, are broadly adequate to the functional responsibilities of municipalities, and in principle provide a solid foundation to borrow for infrastructure investment. However, there are now significant financial problems in many municipalities. These are mostly attributable to poor financial management, rather than the underlying fiscal framework.

**U.S. local government is meaningfully decentralized.** Like India, the U.S. is a federal country, and state legislation determines the powers, functions, and finances of local government units. Despite this nominal similarity, U.S. municipalities are generally autonomous to an extent that is distinctly unlike India, and without many

---

7 Statement of Objects and Reasons appended to the Constitution Seventy-fourth Amendment Act, 1992

8 Delhi is something of an exception. In Government of National Capital Territory of Delhi vs. Union of India, CA No. 2357 of 2017, the Supreme Court ruled that the National Capital Territory’s government has substantial legislative and executive powers, and is not subject to the control of the center in most matters.
parallels in the world. There are over 90,000 local governments in the U.S.,\(^9\) including a proliferation of cities, counties, school districts, water districts, fire districts, and other special districts and institutions, most of which have locally elected councils or boards, significant locally determined revenues and expenditures, and the ability to borrow for capital investment. Debt securities issued by any of these local entities are thought of as “municipal bonds,” even when the issuer is not a municipality \textit{per se}. Most infrastructure and service delivery in the U.S. is organized and financed at the local level.

\textbf{MUNICIPAL BOND ISSUERS}

\textit{Each country’s laws and regulations impact on municipal borrowers and bond issuers.} Analytically, it is useful to start with the functions that local government in each country is legally authorised or mandated to perform, the infrastructure investments for which it is responsible, its authority to borrow, the revenues legally available to repay its debt, and its authority to pledge revenues and assets to secure debt. Laws and regulations relating to financial management, accounting, and reporting help support transparency and an informed, efficient marketplace. In addition to these issues, which directly affect municipal borrowers and bond issuers, we should consider legislation related to capital markets, taxation, and remedies available to creditors. This article attempts to survey and identify these issues for comparative purposes, but is not intended as an in-depth treatise on municipal bonds in any of the three countries.

\textit{Local governments differ in their functions, and thus their need for debt finance.} The functions that a local government unit performs, and the infrastructure it is consequently expected to finance, fundamentally influence its need to borrow for investment. There are 29 states in India, and 50 in the United States. These states in both countries are diverse, with a wide variety of economies, politics, and histories. Local government powers and functions vary from state to state in these two countries, and sometimes within a state. Although India and the U.S. are both federal countries, the powers and functions of U.S. cities are generally far greater than those of Indian cities, and typically include responsibility for building, operating, and maintaining most public infrastructure in urban areas. In both India and the U.S., it is not unusual to see parallel authorities, districts, and entities that are charged with building some types of urban infrastructure, and these entities do borrow to finance such investments. In India, these are usually controlled by the

state, whereas in the U.S., these are usually separate and autonomous entities.\(^{10}\) By contrast with India and the U.S., South Africa has one set of national laws that apply to all municipalities, and municipalities largely have the same functions throughout the country, with the qualification that outside of the eight large metropolitan municipalities, local government functions are divided between two levels: relatively compact local municipalities and larger district municipalities (each of which includes several local municipalities). Unlike the other two countries, South Africa does not have parallel authorities responsible for infrastructure investment, though some functions can be organized as municipally owned enterprises.

**Local governments differ in their ability to service debt.** Financial sustainability, including debt carrying capacity, depends on the revenues available to meet local government’s responsibilities. Three kinds of revenue can play a role: local taxes, local fees and charges, and intergovernmental transfers or revenue-sharing. If these three legs are adequate and stable, the financial sustainability of local government further depends on revenue management and expenditure control. Municipal bonds are generally neither possible nor desirable in the absence of stable and predictable local budgets, annual operating surpluses, and clear prioritization of infrastructure needs.

**Own-source revenue instruments are especially important.** Although borrowing against future intergovernmental transfers and revenue sharing is possible, own-source revenues collected by local government from residents and businesses seem to be the real key to servicing debt obligations sustainably. The authorized own source revenue instruments (taxes, fees, and charges) vary from state to state in the federal structures of India and the U.S., whereas own source revenue instruments are the same for all South African municipalities.

**In all three countries, property taxes are a main driver** of local government debt-carrying capacity. Property taxes are an unconditional revenue source, which can be used for any legitimate local government purpose. They are therefore especially important in considering local government’s ability to sustain itself and successfully issue municipal bonds. Property taxes account for 72 percent of

---

\(^{10}\) In the US, such entities’ functions usually extend beyond the boundaries of a single municipality, and may include several municipalities, as well as unincorporated areas. Examples include transport and water authorities, and school and fire protection districts. Examples in India include development authorities that are often focused on a single city, and water or transport authorities that may serve several ULBs as well as rural areas.
local government tax collections in the U.S.,\textsuperscript{11} 60 percent in India,\textsuperscript{12} and virtually all local taxes in South Africa.\textsuperscript{13} In the U.S., local government in most states is authorized to impose sales and use taxes, and in some states municipalities are authorized to impose local income taxes.\textsuperscript{14} In India, some ULBs impose utility taxes, property transfer taxes, and development charges, but these generate little revenue \textit{per capita} compared to South Africa and the U.S. Prior to the 2017 adoption of the Goods and Services Tax, Indian ULBs imposed a range of luxury taxes, octroi and other entry taxes, advertising taxes, and various surcharges and cesses, but national Goods and Services Tax (GST) legislation\textsuperscript{15} has recently abolished these taxes, with dramatic impact on the budgets of some ULBs.\textsuperscript{16}

**User charges can support bonds to finance infrastructure.**\textsuperscript{17} In general, user charges for services such as water and sanitation services and electricity are more than enough to cover operating costs in the U.S., but they rarely cover even operating costs in India or South Africa. The corollary is that in the U.S., municipalities and other local service entities rely on user charge revenues to support municipal bonds issued to finance utility infrastructure, and can finance investments using revenue bonds, with debt service paid entirely from user charges\

\textsuperscript{11} 2016 data from US Census Bureau, retrieved 2 January 2020 at https://www2.census.gov/programs-surveys/gov-finances/tables/2016/summary-tables/16slsstab1a.xlsx\


\textsuperscript{13} While property tax is the only municipal tax in South Africa, it makes up less than 25\% of municipalities’ own-source revenues, which include charges for water, electricity and other services. See StatsSA, “Quarterly financial statistics of municipalities,” June 2019, retrieved 2 January 2020 at http://www.statssa.gov.za/?page_id=1854&PPN=P9110&SCH=7625\

\textsuperscript{14} A helpful chart showing which states allow which local taxes is contained in Figure 2 of Reschovskyy, Andrew. "The Tax Autonomy of Local Governments in the United States." (2019).\


\textsuperscript{16} A case study describing the impact of this legislation in Mumbai provides some useful insights: Mankikar, S, “The Impact of GST on Municipal Finances in India: A Case Study of Mumbai,” Observer Research Foundation Issue Brief, September 2018, Issue No. 257\

\textsuperscript{17} See Ebel, R.D. & Wang, Y. 2018, User Charges to Fund State and Local Infrastructure Services, Federal Reserve Bank of St Louis, St. Louis.
and connection charges. In South Africa and India, such revenue surpluses are rare, and this is a major barrier to a sustainable market for municipal bonds.

**Formula based, unconditional fiscal transfers can also support bonds.** In places where the economic base for local taxes, fees and charges is insufficient for the minimum functions local government must perform, local bodies must rely on intergovernmental transfers. For infrastructure funding, such transfers often take the form of conditional grants, with transfers dedicated to support specific projects or programmes.\(^\text{18}\) The strengths and weaknesses of such conditional transfers are beyond the scope of this article. However, if transfers are predictable, formula-based and unconditional, and there is a reasonable expectation that they will continue for the indefinite future, local government can leverage intergovernmental transfer flows by pledging them to service debt, as with any other future revenues.

**Indian ULBs depend on transfers from national and state governments.** India’s intergovernmental fiscal architecture relies on Central and State Finance Commissions to meet every five years and make recommendations for transfers to local government units. The Central Finance Commission recommendations are usually accepted by the Union government. For the period 2015-2020, Central Finance Commission allocation to ULBs amounted to just over $7 per capita, per year.\(^\text{19}\) While states have had a generally poor record of compliance with the five-year requirement for State Finance Commissions,\(^\text{20}\) the eventual amounts recommended by State Finance Commissions – an average of $16 per capita per year over the last four years – are more than the transfers allocated by the Central Finance Commission.\(^\text{21}\) Both Central and State Finance Commission allocations to local government units have been rising over time. These transfers are substantial, and if the Finance Commissions were to structure these transfers in a more permanent, predictable, and unconditional way, ULBs could usefully leverage them

---

\(^\text{18}\) India’s urban schemes are an example: there have been a series of central government schemes to support investment in cities. JNURM, in 2005, was in principle aimed at promoting financially sustainable and accountable ULBs and parastatals. A core idea was to offer funds for capital investment in exchange for specified reforms. This approach was largely continued with the 2015 AMRUT and Smart Cities Schemes. Although there are some incentives for municipal bonds provided in the AMRUT schemes, the conditionality of these funds renders them unsuitable to support long term borrowing.

\(^\text{19}\) Author’s calculation based on a total grant of Rs 87,143.80 crore, then equivalent to about $14 billion, spread over five years.

\(^\text{20}\) Manish Gupta and Pinaki Chakraborty, State Finance Commissions: How effective have they been in empowering local governments? NIPFP Work Paper No. 263, April 30, 2019

\(^\text{21}\) *Ibid*, Table 3, author’s currency conversion
through municipal bond issues or other borrowing, to accelerate urban infrastructure investment.

**South African local government receives transfers of two kinds.** First, South Africa municipalities benefit from a constitutionally mandated “equitable share” of national revenues. The equitable share formula is complex, but mostly driven by population and poverty. Poorer, more rural municipalities, which have less own-source revenue potential, receive more equitable share funding *per capita* than more urban municipalities. The equitable share transfers are unconditional and can be used for any legitimate local government purpose. Second, municipalities receive conditional grants of many kinds, which have proliferated and grown substantially over the last fifteen years, and are dedicated to specific uses. South Africa has permitted municipalities to pledge equitable share transfers to secure borrowing since 2003, and government has recently announced that it will remove language requiring the approval of the National Treasury for a pledge of conditional transfers. The previous restriction on pledging of conditional transfers is being removed specifically so that municipalities can leverage these revenue flows, subject to the conditions of the grants. Until recently, there had been limited pledging of conditional transfers, but only for the three years of government’s Medium-Term Expenditure Framework.

**In the U.S., state transfers to municipalities are significant, but not predictable.** While states’ transfers to local governments have gone up and down over the last decade, over the longer term there has been an increasing trend. 36% of local government revenues come from intergovernmental transfers, the overwhelming majority of which are transfers from the states to local government. Unpredictable transfers are not suitable for long term leveraging, though some municipalities have borrowed against expected near-term transfers.

22 Municipal Finance Management Act, No 56 of 2003, Section 48(2)(e)
24 In 2016, 36 percent of US local government’s general revenue came from intergovernmental transfers; 88 percent of transfers came from state governments (including indirect federal funds) and 12 percent came directly from the federal government. Urban Institute, State and Local Tax Initiative, retrieved 1 January 2020 at https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/state-and-local-revenues#local
1. India

India has over 4,000 ULBs that might theoretically issue bonds, as well as a large number of state-created development authorities, water and sewerage boards, and other entities responsible for investment in urban infrastructure. The borrowing powers of ULBs and other entities depend entirely on state legislation. State laws typically include rules as to what entities may borrow, how much, for what purpose, for what term, and subject to what processes and approvals. A 2011 World Bank study undertook a detailed review of the laws in four states, and concluded that in these states, ULB borrowing requires the approval of the state government, usually on a case-by-case basis, and this can often take six months or more. The research showed that “in all cases where some sort of substantive, merit-based scrutiny of the proposed loan transaction is conducted, there are no clear criteria governing the assessment (or at least none which are clearly documented and understood by the applicant ULB or investors). The process through which the assessment is conducted is highly opaque, and there is no mandated timing.”\(^25\) After state approval, ULB councils must approve the borrowing through a resolution passed at a special meeting convened specifically for the purpose of approving the proposed borrowing.\(^26\) In 2017, the Janaagraha Centre for Citizenship and Democracy, in their Annual Survey of India's City-Systems (ASICS)\(^27\) found that only 4 out of 23 ULBs surveyed are authorized to borrow money without state or central government approval.

The power to issue bonds is meaningless without stable, predictable and adequate revenues that can be used for repayment. In 1993, the 74th Amendment to the Indian Constitution recognised ULBs as a third tier of government, and provided that a state legislature may devolve to ULBs the responsibility for specified matters, but it left actual devolution of these matters to the states.\(^28\) Moreover, ULBs' power to levy taxes and fees also requires specific state


\(^{27}\) Available at http://www.janaagraha.org/asics/ASICS-2017.html

\(^{28}\) Constitution (Seventy-Fourth Amendment) Act, 1992, section 243W
Local autonomy to formulate tax policy is severely limited, and there are many rebates and exemptions, including a Constitutional prohibition on taxing property of the Union Government. As a result, property tax collections in India, amounting to 0.14% of GDP, are significantly lower than in other developing countries, let alone OECD countries.

Most states have failed to provide ULBs with stable, predictable and adequate revenues. Such revenues could be provided either by authorizing ULBs to use robust own-source revenue instruments or by providing predictable, unconditional transfers or revenue sharing from state revenues. The finances of ULBs are generally anemic by global standards, and this is one bottleneck that has constrained the development of the municipal bond market. After the 74th Amendment was adopted, there were still various state and local taxes (e.g. VAT, luxury taxes, octroi and other entry taxes, advertising taxes, and various surcharges and cesses) that raised revenue for ULBs. Since then, many of these have been eliminated, and from 2017 ULB finances faced a new challenge when Goods and Services Tax (GST) legislation abolished these local taxes. A case study describing the impact of this legislation in Mumbai provides some useful insights.

State guarantees of municipal bonds in India are common, but not the rule. The 1998 bond issue by Ahmedabad Municipal Corporation was noteworthy because it was the first ULB to issue a bond without a state guarantee. In 1997 there had been a municipal bond issue by the Bangalore Municipal Corporation, but it was backed by a guarantee from the state of Karnataka. Subsequent guaranteed municipal bond issues include a 2000 private placement bond issued by the Indore Municipal Corporation in Madhya Pradesh, a 2003 issue by the Chennai Metropolitan Water Supply and Sewerage Board in Tamil Nadu, a 2005 issue by the Chennai Municipal Corporation, a 2005 issue by the Karnataka Water and Sanitation Pooled Fund, and a 2018 issue by the Andhra Pradesh Capital Region

29 Id., section 243X; see also P. K. Mohanty, “Give cities a share of GST to make them viable,” http://www.civilsocietyonline.com/cities/give-cities-a-share-of-gst-to-make-them-viable/

30 Om Prakash Mathur, Property Tax and Municipal Finance in India, 2020

31 Art. 285, Constitution of India

32 Om Prakash Mathur, supra, at pp. 10-11


34 Urbanisation in India: Challenges, Opportunities and the Way Forward, edited by Isher Judge Ahluwalia, Ravi Kanbur, P. K. Mohanty
Development Authority. The state guarantee seems to be more common for non-ULB “municipal bonds,” which is logical, since these bonds are, in any event, issued by state entities.

ULBs can pledge collateral to lenders, but this may be of dubious value. State laws generally authorize ULBs to pledge immovable property owned by the ULB and revenue from taxes, fees, and levies imposed by the ULB. However, it is not clear how investors would enforce such pledges. Only some states provide for attachment of ULB funds in the event of a default, and this can only be done through application to the state government (rather than e.g. through a court process). There are no state laws authorizing the attachment of ULB property in order to enforce lenders’ rights. It is not completely clear that the default provisions apply to bondholders (as opposed to lenders), but even assuming that they do, there are practical problems of enforcement: no individual bondholder is likely to have enough of a stake to warrant the time and expense required to initiate an attachment process. If one bondholder does so, it is not clear what the consequences would be for other bondholders. Some states have authorized ULBs to create special purpose escrow accounts that divert specific revenues for the benefit of creditors, and these arrangements appear to provide more security to bondholders, and to allow for less political interference in the enforcement of legal rights.

2. South Africa

South Africa has 257 municipalities, of which 53 are potential bond issuers. The term “municipality” can be misleading to those unfamiliar with the country, because it does not signify an urban area. South African municipalities are “wall-to-wall,” i.e. they cover the entire country, and include both urban and rural areas in varying proportions. There is a great deal of economic inequality between municipalities, and many municipalities in rural areas do not have a substantial own-source revenue base. Although there is no legal barrier to bond issuance by the poorest municipalities, the most optimistic count of potential municipal bond issuers would include the eight Category A metropolitan municipalities, the 19

35 This information was compiled by Mathangi Chandrasekhar, of the Janaagraha Centre for Citizenship and Democracy.
36 Ibid
37 Ibid
38 Ibid, page 108
39 Unlike India’s states, South Africa’s provinces have little authority over municipalities, and provincial infrastructure responsibilities are largely in the health and education sectors.
Category B1 municipalities (which house secondary cities), and the 26 Category B2 municipalities (which contain large towns). Of these 53 potential bond issuers, only four have actually issued municipal bonds since the democratic era that began in 1994.\footnote{A fifth metropolitan municipality, eThekwini, has indicated that it will soon issue its first municipal bond.}

**Municipal borrowing powers are governed by national legislation**,\footnote{Chapter 6 of the Municipal Finance Management Act, No 56 of 2003} and are not subject to any regulatory or approval processes at the provincial level. Key provisions of South African legislation include 1) authority for an elected council to bind the municipality (and future councils) to repay debt;\footnote{Section 230A, Constitution of the Republic of South Africa, 1996, as amended by the Sixth Amendment Act of 2001} 2) limitations as to the purpose of long-term borrowing – municipalities may incur long-term debt only for “capital expenditure on property, plant or equipment to be used for the purpose of achieving the objects of local government,” and in certain circumstances for refinancing existing long-term debt;\footnote{Section 46, Municipal Finance Management Act, No 56 of 2003 (MFMA)} 3) procedures to ensure the council has considered the implications of borrowing, informed the public in advance, provided an opportunity for comment,\footnote{Section 46 (3), MFMA} and disclosed all information that may be material to a prospective lender or investor;\footnote{Section 49, MFMA} and 4) limitations as to the currency which may be borrowed (municipal debts must be denominated in South African Rands and not indexed to any foreign currency).\footnote{Section 47(a), MFMA} Procedurally, a municipal bond issue in South Africa is authorized by resolution of the municipal council, signed by the mayor.\footnote{Section 46(2)(a), MFMA} The debt agreement itself must the signed by the accounting officer of the municipality.\footnote{Section 46(2)(b), MFMA}

**There are no state or national guarantees for municipal bonds in South Africa.** Bond buyers must base their investment decisions on their own judgments about the creditworthiness of South African municipalities, and understand that there are no provincial or national guarantees. Bond investors and other lenders are therefore not willing to extend credit to municipalities that are unlikely to be able to repay

\[\text{https://readingroom.law.gsu.edu/jculp/vol4/iss1/15}\]
their debt obligations. It is clear to all that credit extended to municipalities “will not be guaranteed by the central fiscus.”\textsuperscript{49} There are no binding restrictions on the amount of debt that a municipality can incur, though the South African National Treasury has issued guidelines suggesting that a municipality’s outstanding debt should not exceed 45\% of operating revenues, and that debt service should be between 6\% and 8\% of operating expenditure.\textsuperscript{50} This reliance on investors’ due diligence in the municipal sector has prevented the cycle of spiraling, unsustainable debt and bailouts that has affected many of South Africa’s SOEs, which did receive national government guarantees for their borrowings.

**Municipalities can provide bondholders with a wide range of security interests.** Municipalities are authorized to give liens, pledges, mortgages, cessions, and to otherwise hypothecate an asset or to give other forms of collateral; to deposit funds as security; to dedicate specific revenue streams to payment of debts; to retain various revenue streams at specified levels; and more.\textsuperscript{51} The key constraint is that if a municipal council agrees to any of these security arrangements, it must either determine that the asset or right being pledged is not necessary for providing a minimum level of basic municipal services; or if it is necessary, the council must indicate the manner in which the availability of the asset or right will be protected.\textsuperscript{52}

### 3. United States

**There are more than 90,000 local government units in the U.S.**\textsuperscript{53} Not all of these issue bonds, but most do. According to an industry advocacy group, there are nearly 50,000 municipal bond issuers in the United States. This includes states and general purpose local governments such as cities, towns and counties, as well as a wide variety of special districts and authorities, such as school districts, water and sanitation districts, and other special purpose entities.\textsuperscript{54} The overwhelming majority of these local government units are creditworthy, and the main reason that the remaining 40,000 have not issued municipal bonds is that they have relatively


\textsuperscript{50} Uniform Financial Ratios and Norms January 2014, National Treasury MFMA Circular No. 71

\textsuperscript{51} Subsection 2 of Section 48, MFMA

\textsuperscript{52} Subsection 2 of Section 48, MFMA

\textsuperscript{53} https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html

\textsuperscript{54} Municipal Bonds for America, https://munibondsforamerica.org/resources/
small operating budgets and investment needs, compared to the relatively high fixed costs of bond issuance.

**Some municipal borrowing requires voter approval.** Many states require voter approval for any general obligation (GO) borrowing. Some states allow lower levels of borrowing on council’s authorization alone, but require voter approval for higher levels of borrowing. As one example, Washington State allows municipal councils to authorize general obligation debt up to 1.5% of the assessed valuation of properties in the municipality, requires voter approval of additional debt up to a total of 5% of assessed valuation, and allows an additional 5% over that cap in the case of debt approved by voters and to be used specifically for water, lights, and sewers when those facilities are owned and controlled by the municipality.\(^{55}\) Issuance of a municipal bond, subject to voter approval if required, is authorized by resolution or ordinance of the municipal council or other governing body. The specific requirements depend on state legislation, and sometimes on the provisions of a home-rule charter. The resolution or ordinance specifies the purpose of the bond issue, the number, denomination, and term of the bonds to be issued, when payments of principal and interest will be made, and the security arrangements, pledges, and covenants that are undertaken for the benefit of bondholders.

**Voter approval may be required for GO bonds, but not for revenue bonds.** In the case of GO bonds, the full faith and credit of the municipality is obligated, i.e. the municipality is obligated to pay bondholders from whatever taxes are necessary, and whatever other funds it can access, including those would require increasing the rate of property tax. In the case of revenue bonds, bondholders can look only to specified revenue streams, e.g. water service charges, road and bridge tolls, etc. for repayment. In general, the authority of municipalities to issue GO bonds is more limited than for revenue bonds, since citizens are felt to need protection from the risk of increased property taxes.

“Iowa in 1857 and Illinois in 1870 had adopted constitutions which set limits on local government debt in terms of a percentage of assessed value. Widespread adoption of this and other types of constitutional restrictions on the borrowing powers of local governments came as an aftermath of the crisis of the 1870's. Within a very few years, some such provisions were placed in the constitutions of a majority of the States. Nearly as promptly also,

\(^{55}\) Wash. Const., Art. 8 §6
various devices and legal doctrines were developed to limit or circumvent effects of such provisions.**56**

**The use of proceeds may be restricted to purely public purposes.** Because American cities are “creatures of the state”57 we look to state laws to understand municipal borrowing powers, restrictions, and procedural requirements. Some rules are found in state constitutions, others in ordinary legislation, and still others in city charters.58 Some restrictions came into being in the 19th century, following several municipal financial crises connected with railroad investments and loans. Hoping to ensure that their citizens were well-connected to the developing national rail network, counties and municipalities incurred debt to support railroad construction, but many companies went bankrupt, and lines were abandoned. This left some local governments in a precarious financial position, and resulted in a wave of restrictions on municipal investment in support of private enterprise.59 A typical example provides that:

Neither the state, nor any county, city, town, township or school district shall lend or pledge the credit or faith thereof, directly or indirectly, in any manner to, or in aid of, any person, company or corporation, public or private, for any amount, or for any purpose whatever; or become responsible for any debt, contract or liability of any person, company or corporation, public or private, in or out of the state.60

**North Carolina is the only U.S. state requiring prior approval of municipal borrowing.** Municipalities in North Carolina are required to apply to the State’s Local Government Commission before they issue debt. The Commission “works with local governments to determine the necessity of a project, the size of the issue, and the most expedient form of financing, then guides all projects through a rigorous review to ensure the financing meets all statutory requirements. The Debt Management Section oversees the sale and issuance of all local government debt,

---

56 Advisory Commission on Intergovernmental Relations, State Constitutional and Statutory Restrictions on Local Government Debt (1961), page 21
58 See Advisory Commission on Intergovernmental Relations, State Constitutional and Statutory Restrictions on Local Government Debt (1961)
60 Colorado Constitution Art. 11, §1
then monitors repayment of debt and issues debt notices required under statute.”  

The Commission was originally established during the Great Depression to help local governments in North Carolina work out of their debt difficulties. Thereafter, it has remained in place to control and facilitate local debt operations.

**Municipal Bond Markets**

The municipal bond market is a segment within national financial markets. Financial markets in any country include debt instruments (bonds) and equities (company shares). When local government issues a municipal bond, it is offering a debt security that competes for investors’ capital with other debt securities. In each of these countries, the dominant bond issuer is the national government, and these sovereign bonds are seen by investors as the least risky investment. Corporate and municipal bonds are therefore typically priced in reference to, i.e. at a “spread” over, a benchmark sovereign bond.

**Creditworthiness is subjective.** The spread over sovereign debt that a municipal bond issuer must offer depends on buyers’ perceptions of the issuer’s creditworthiness relative to that of the national government. Creditworthiness has both qualitative and quantitative elements, and the judgment that ultimately matters is that of bond buyers. Municipal bond credit ratings are assigned by ratings agencies, whose business it is to evaluate credit risk, i.e. they undertake research and offer their opinions about the likelihood that a bond issuer will pay its credit obligations as and when due. These credit ratings can be helpful to bond buyers, especially in a market with many investment vehicles and many investors, such as the U.S. market. In all three countries, institutional fund managers are generally required to invest in instruments with a minimum credit rating. However, many institutional investors view a credit rating as only a starting point, and do at least some research and evaluation of their own. Note that rating agencies have no direct risk exposure if a municipality defaults, and global experience shows that rating agency judgements are often reactive rather than predictive.

---


62 If bond insurance or third-party guarantees are involved, then another relevant judgement is that of the insurer or other entity bearing the risk of municipal default.

Investors and rating agencies emphasize various factors in arriving at assessments of creditworthiness and the ratings they assign. There is no single, standard rating methodology. Ultimately, bond buyers want to be paid, and so they are interested in issuers that have been evaluated as managing their operations and finances well, that report their financial positions accurately, and that have stable operating surpluses, i.e. revenues that are consistently more than operational spending requirements. Although investors and rating agencies do use various financial ratios in forming judgements about creditworthiness, the probability of a default cannot be calculated with mathematical precision, as many factors come into play. In South Africa and the U.S., audited municipal financial statements are reliable and readily available. Municipal finance data in India is still much harder to come by, although some states have made progress in standardizing municipal accounting and financial reporting.

Local government borrowing in the form of loans is most common in India and South Africa. Municipal bonds are the focus of this article, but the dominance of direct lending in India and South Africa should be mentioned, and has several implications: first, it is financial institutions, rather than individuals, that are the primary investors in municipal debt in these countries. Second, loans are usually held to maturity by the institution that makes the loan. Third, loans are usually repaid in a series of payments over time, each of which includes interest on the unpaid principal balance, plus a portion of the principal, whereas bonds usually feature a semi-annual payment of interest, with the entire principal due at maturity. Finally, the predominance of loans, and the small stock of municipal bonds means that there is not a significant secondary market in either India or South Africa. Municipal bonds rarely trade, even though they are designed to be tradeable. Most municipal bonds end up being treated much like loans, in that they are initially bought by banks and other financial institutions, which mostly hold the bonds to maturity. There seem to be few individual holders of municipal bonds in India and South Africa.

Bonds are the dominant form of municipal borrowing in the U.S. Because municipal bonds are issued in relatively small denominations ($5,000 is typical in the United States), they are able to attract the savings of small investors. The

64 For one example of how issuers are rated, see Moody’s Investor Service, Rating Methodology, Regional and Local Governments, at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1072625, retrieved Dec. 8 2019.

65 In fact, either type of instrument can be structured with a variety of different payment schedules, but these traditional structures dominate the market.
primary market for municipal bonds is one of the largest financial markets in the U.S. Nearly half of all municipal bonds are held by individual investors, and another quarter of the stock is held by mutual funds, with the remainder mostly divided between financial institutions and insurance companies. This pattern of investors is possible because of the highly liquid nature of the U.S. bond market. In a liquid market, a bondholder that wants or needs to cash out a municipal bond can readily find a buyer, absent extraordinary circumstances. And this diversity of investors, many of which have long-term investment horizons, means that U.S. municipalities are not dependent on bank lending. This is becoming a more obvious advantage, since banks world-wide are increasingly being regulated to limit liquidity risk. Long-term municipal bonds are not a natural asset for commercial banks holding demand or short-term deposits.

In principle, long-term municipal bonds can be attractive to private and public financial institutions, insurance companies, pension funds, investment fund managers, sovereign wealth funds, and individual investors. An advantage of bonds, from the perspective of investors, is that investment is scalable. A household with some savings can buy a bond or two, a wealthy individual can accumulate a diverse portfolio of municipal bonds, and institutional investors can buy as many as they need. Long term municipal bonds are an especially good fit for U.S. investors, where banks hold relatively few municipal bonds. In South Africa and India, local government borrowers have not issued many long-term bonds, partly because of demand side limitations, and partly because there are relatively few institutional investors seeking long term municipal debt instruments. The longest bond maturities in both countries are 15 years, and 10 years or less is common. In the U.S., 30 year maturities are common, and low interest rates in recent years have led to several municipal bond issues with 50-year and even 100-year maturities.

1. India

In India, the total municipal bond market is only about US $200 million, out of an estimated $1.7 trillion national debt securities market. This extremely small municipal share is dwarfed by the market share of state debt securities, which is

---


67 SIFMA, Quarterly Breakdown of Municipal Outstanding by Bond Holder Type, retrieved December 15, 2019 at https://www.sifma.org/resources/research/us-municipal-securities-holders/

more than 2,000 times larger. The share of national government securities in the market is double the state figure. Indian ULBs’ bond debt comes to only about US $0.15 per capita, and state level securities add another US $309 per capita, which means that subnational borrowing accounts for about 15% of Indian per capita GDP. State debt securities are the significant subnational phenomenon in India, not municipal bonds. Since, ultimately, municipal and state debt rely primarily on overlapping underlying economic bases for repayment, there will be a limit as to how much the municipal bond market for any given state’s ULBs could be sustainably expanded without a concomitant reduction in the state’s own long-term debt.

Municipal bonds in India are listed on the national securities exchange. Accordingly, the Securities and Exchange Board of India (SEBI) has issued regulations that relate to the listing and trading of municipal bonds. A World Bank study has concluded that “SEBI rules regarding the listing of municipal bonds and public disclosure requirements are derived mainly from the corporate sector and are inappropriate in some respects for municipal instruments.” These regulations provide, inter alia, that issuers of listed municipal bonds must meet specified criteria including surplus income in one of the three previous years, and the absence of loan or bond defaults for at least the previous year. These are not very demanding requirements. Investors and lenders, especially those in the private sector, can be more demanding. Cautious investors are a good thing: encouraging investors’ due diligence helps prevent unsustainable municipal debt. Recently, SEBI has promulgated additional requirements for continuing disclosure of financial information, credit ratings, escrow accounts, interest accounts, sinking fund accounts, and other matters. The need to comply with SEBI regulations with respect to listed bonds, even though the requirements are not especially onerous, adds procedural complexity, and this tends to push ULBs towards loans from banks and state sponsored intermediaries, in preference to municipal bonds.

---

69 Dr. Viral V. Acharya, Deputy Governor, Reserve Bank of India - June 29, 2019, https://m.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1079
70 Note that in both South Africa and India, municipal bonds are listed on securities exchanges, and must meet the listing requirements of regulators. In the US, almost all municipal bonds are traded “over the counter.”
72 Securities and Exchange Board of India, Issue and Listing of Municipal Debt Securities Regulations, 2015 as amended, with effect from 27 September 2019
The banking sector has been the biggest buyer of municipal bonds. The Reserve Bank of India (RBI) is responsible for banking supervision. Of the three countries discussed in this article, India’s banking sector is probably the most challenged by non-performing assets.\(^{74}\) State and nationally owned banks predominate.\(^{75}\) As with most central banks, the RBI is increasingly pursuing a risk-based approach to banking supervision, consistent with Basel Principles, which support market discipline for commercial banks. An implication of these principles is that commercial banks, as deposit-taking institutions, will generally not be able to invest a significant portion of their assets in long-term instruments, such as municipal bonds. They may be able to handle 5 to 7-year tenors, but not 20 to 30-year maturities. Obviously, ULBs can afford less total debt if their bonds and other borrowings must be repaid more quickly.

Insurance companies and pension funds must treat municipal bonds differently to government bonds. Both life insurers and pension funds have actuarially calculated long term obligations, and could, in principle, match these with long-term investments that are reasonably safe municipal bonds that yield a predictable, long-term return. India’s Insurance Regulatory and Development Authority (IRDA) regulates the investment of insurance funds and classifies municipal bonds as “non-governmental securities” that need to be rated at least A+ to be eligible for inclusion in an insurance company’s investment portfolio.\(^{76}\) Similarly, the Pension Fund Regulatory Development Authority has classified municipal bonds as Asset Class C instruments (fixed income instruments other than Government Securities), rather than Asset Class G instruments (central and state government securities).\(^{77}\) Class C instruments require a minimum AA rating from at least two rating agencies.\(^{78}\) Thus, for these two important classes of potential municipal bond investors, municipal obligations are categorically disadvantaged.

---


\(^{75}\) An interesting example is the Housing and Urban Development Corporation Ltd. (HUDCO), owned by the Government of India, and incorporated in 1970 to directly provide finance for construction and urban development, and also to invest in bonds to be issued by State Housing and Urban Development Boards, Development Authorities, and others. The Indian financial sector has historically been the most centrally planned, and arguably the least efficient, of the three countries.

\(^{76}\) World Bank. 2011, at p. 39

\(^{77}\) Id.

\(^{78}\) PFRDA Circular re Investment Guidelines for NPS Schemes other than Govt. Sector (CG & SG), recovered 14 December 2019 at https://www.pfrda.org.in/writereaddata/links/xyz123305fe622-0679-4127-a47a-483063aa70e2.pdf
2. **South Africa**

**In South Africa, the municipal bond market is about US $1.3 billion,** out of a total debt securities market of approximately US $234 billion.  It is worth noting that the municipal bond market has steadily been losing ground to direct lending, with long-term loans to municipalities now at around US $3.62 billion.  South African municipal bond debt stands at about US $22 per capita, but note that this is complemented by about US $62 in loan debt.  Even the combined municipal loan and bond debt is only about 1.3% of South African per capita GDP.  This level of long-term subnational debt, in relation to *per capita* GDP, is less than one tenth of the Indian and levels.  From this perspective, there is significant room for sustainable expansion in the South African municipal bond and debt market.

**As in India, South African municipal bonds are listed on the securities exchange.**  Municipal bonds were listed on the Bond Exchange of South Africa (BESA) until 2009, when BESA was merged with the Johannesburg Stock Exchange (JSE).  Sovereign bonds, State-Owned Enterprise (SOE) bonds, corporate bonds, and municipal bonds are now all listed on the JSE.  All listed bonds must comply with JSE’s Debt Listings Requirements.  These requirements are generally the same for municipal bonds as for other bonds, with some exceptions that take into account the timing for municipal financial statements preparation and auditing.  The JSE has recently added new requirements for disclosure of influential persons and procurement practices.  While the Debt Listing Requirements require financial disclosure, there is no JSE requirement for municipal issuers to have surplus income, as there is in India.  Although municipal bonds are listed on the JSE, trading is done bilaterally – after the parties reach an agreement, deals are reported to the JSE for matching and settlement.

**In addition to JSE listing requirements, national legislation requires disclosure.**  There are two separate requirements, and failure to comply can have serious consequences for the individuals involved.  First, before any debt is

---

81 Long term provincial debt in South Africa is negligible.
82 Available at [https://www.jse.co.za/current-companies/issuer-regulation](https://www.jse.co.za/current-companies/issuer-regulation)
83 Amendments to the JSE Debt Listings Requirements Part 2 of 2018, 30 April 2019
incurred, the municipality must make public an information statement setting out the particulars of the proposed debt and any security to be provided, and must have invited the public and the provincial and national treasuries to comment.\footnote{MFMA Section 46} Second, “[a]ny person involved in the borrowing of money by a municipality must, when interacting with a prospective lender or when preparing documentation for consideration by a prospective investor (a) disclose all information in that person’s possession or within that person’s knowledge that may be material to the decision of that prospective lender or investor; and (b) take reasonable care to ensure the accuracy of any information disclosed.”\footnote{MFMA Section 49} These requirements are intended to prevent any misrepresentation, and if failure to comply is deliberate or grossly negligent, violation is a criminal offense.\footnote{MFMA Section 173}

**Pension funds and mutual funds are restricted as to municipal bond investments.** Under Regulation 28,\footnote{Pension Funds Act, 1956: Amendment of Regulation 28 of Regulations Made Under Section 36, per Government Gazette, 4 March 2011} pursuant to the Pension Funds Act, a pension fund may only invest in specified assets within defined issuer and aggregate limits. With regard to debt securities, the aggregate limit for (on-balance sheet) bank-issued, corporate and public entity debt combined is 75%, with a sub-limit of 50% for debt of listed companies and state-owned enterprises (SOEs), and a per entity limit of 10%. The term “public entity” here refers to entities subject to the Public Finance Management Act (PFMA). This includes national and provincial entities, but not municipalities, which are subject to the Municipal Finance Management Act (MFMA). Because there is no specific category for municipalities, municipal bonds come under the category “other debt instruments” and must be treated like unlisted corporate debt, with a portfolio limit of 5% per entity and 25% overall. This difference makes it difficult for municipal bonds to compete in a pension fund portfolio, even in an era when many SOEs are in serious financial difficulty. Similarly, under FSB Board Notice 90, pursuant to the Collective Investment Schemes Control Act,\footnote{https://www.fsca.co.za/Notices/Board%20Notice%2090%20of%202014.pdf, retrieved 25 Jan 2020} there is a separate category for municipalities, but aggregate limit is 20% for all municipal bonds, as compared to 100% for bonds issued by entities subject to the PFMA. This means that a mutual fund (“unit trust” in South African usage) could be invested 100% in SOE bonds but only 20% in municipal bonds. These regulatory restrictions are not based on risk or
performance, and unnecessarily limit the potential market for municipal bonds. In contrast to the categorical approach used for pensions and mutual funds, insurers base their asset allocation decisions on risk-based financial soundness\textsuperscript{90} under a new Solvency Assessment and Management framework. This approach avoids both errors of including risky investments, and of excluding sound investments.

3. United States

**In the U.S., state and local government debt accounts for just over US $3 trillion**, or 4% of the total domestic market for debt instruments and loans, which is about $75 trillion.\textsuperscript{91} This combined state and local debt comes to some $9,177 per capita, or 15% of US per capita GDP, which represents a long-term commitment to infrastructure investment at the subnational level that is comparable on an GDP-adjusted per capita basis to India, and more than 10 times the level in South Africa.

**Municipal bonds are not listed on an exchange, and issuers are not federally regulated.** U.S. municipal bonds are traded “over the counter” and thus are not subject to listing requirements. Brokers, dealers, and municipal financial advisors are regulated by the Securities and Exchange Commission (SEC) and Municipal Securities Rulemaking Board (MSRB). National authority to regulate municipal bond issuers is limited by principles of federalism (because local governments are creatures of the states, the federal government cannot in general regulate their actions). However, in 1975 the U.S. Congress used its authority under the commerce clause of the Constitution to require municipal securities dealers to register with the SEC.\textsuperscript{92} Registered dealers are regulated by the MSRB,\textsuperscript{93} a “self-regulatory organization” (SRO), which sets rules for dealers, subject to oversight by the SEC.\textsuperscript{94} These rules require that underwriters in the primary market prepare and file official statements, which are intended to prevent fraud and ensure transparency. They require dealers to disclose to their customers all material facts

\textsuperscript{90} Chapter 6, Insurance Act 18 of 2017, as implemented 1 July 2018

\textsuperscript{91} Board of Governors of the Federal Reserve System (US), All sectors; debt securities and loans; liability, Level [TCMDO], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/TCMDO, January 23, 2020.


\textsuperscript{93} 15B(b)(2)(A), ibid.

\textsuperscript{94} in a 2018 report, the MSRB outlined the history of its role, and the advantages of the SRO model. The report can be accessed at http://www.msrb.org/~msrb-Self-Regulation-and-the-Municipal-Securities-Market.ashx
which the dealer knows or which are reasonably accessible in the market.\textsuperscript{95} Starting in 1995, a requirement was added to for issuers to disclose updated information throughout the term a municipal bond is outstanding.\textsuperscript{96} In 2010, after the global financial crisis, Congress added a requirement that municipal financial advisors must also register with the SEC and be regulated by the MSRB. Financial advisors are under a fiduciary duty to act in the best interest of their municipal clients. Thus, bond dealers and financial advisors, rather than municipalities directly, are regulated.

**Federal tax exemption plays a significant role in the U.S. municipal bond market.** Interest on municipal bonds is generally excluded from federal taxation under the Internal Revenue Code. Originally, this exclusion was rooted in constitutional concerns, and an early Supreme Court case contained dicta to the effect that it would be unconstitutional to tax interest on state and local debt obligations.\textsuperscript{97} However, by 1982, many municipalities had used their ability to issue tax exempt debt to benefit private development, and public opinion had turned against such practices. As one author noted, “K-Mart financed nearly 100 stores between 1975 and 1980 with $220.5 million of tax-exempt small issues, while McDonald's used small issues to open thirty-two new restaurants in 1979 in Pennsylvania and Ohio alone.”\textsuperscript{98} In response to these perceived abuses, Congress passed laws limiting the tax exemption for interest on municipal securities. The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA)\textsuperscript{99} required issuers to register their bonds and eliminated tax exemption for “small issues” which had been used to finance a variety of small, private, businesses; the 1984 Deficit Reduction Act (DEFRA)\textsuperscript{100} imposed an annual state-wide cap on tax-exempt private activity issues; and the Tax Reform Act of 1986 restricted tax exemption for arbitrage.

\textsuperscript{95} MSRB Rule G-17 requires dealers and municipal advisors to “deal fairly with all persons;” in November 2019, the MSRB received SEC approval to amend and restate its Interpretive Notice regarding the fair dealing obligations that underwriters owe to issuers under Rule G-17. See http://www.msrb.org/Rules-and-Interpretations/MSRB-Rules/General/~/media/CED78C17C33843EC8447405456771663.ashx?

\textsuperscript{96} Exchange Act Rule 15c2-12

\textsuperscript{97} Pollock v. Farmers’ Loan & Trust Co. 157 U.S. 429 (1895); because the Court struck down the challenged Act on other grounds, this was \textit{dicta}, but its caution was respected for nearly a century.


\textsuperscript{99} Pub. L. No. 97-248, 96 Stat. 324

\textsuperscript{100} Pub. L. No. 98-369, §§ 611-648, 98 Stat. 494, 901-41
bonds.\textsuperscript{101} Debate continues, as it has for a century, over the tax exemption for municipal bond interest. Opponents argue that the tax exemption is an inefficient and perhaps ineffective way to subsidize state and local infrastructure investment.\textsuperscript{102} Proponents argue that “if the tax exemption is eliminated or reduced, states and localities will pay more to finance projects, leading to fewer projects and fewer jobs, or project costs will be transferred to local tax and rate payers.”\textsuperscript{103}

Pension funds, insurers, and mutual funds actively invest in municipal bonds. Instead of specifying categories and quantities of allowable investments, the U.S. uses a prudent person standard. Under Federal law, pension fiduciaries are required to invest “with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use….”\textsuperscript{104} This permits investment in municipal bonds, and such investments are common. U.S. insurers are mostly regulated at the state level, using risk-based capital models, which also allow balanced investments in municipal bonds. Property, casualty and life insurers all invest in municipal bonds.\textsuperscript{105} U.S. mutual funds invest extensively in municipal bonds, and some invest exclusively in municipal bonds, selected on the basis of market timing, geography, quality, or duration.\textsuperscript{106}

\textbf{Status and Prospects}

1. \textit{India}

\textbf{India’s weak ULBs are unlikely to develop substantial demand.} The lack of demand for long term credit is logical given that most ULBs have limited powers and functions, as well as limited and unpredictable revenues. ULBs have only such powers as are delegated to them by the law in each state, and it is up to each state to decide whether and how state revenues are shared with, and/or local revenue

\textsuperscript{101} Pub. L. 99-514, § 1301(a)
\textsuperscript{102} https://files.taxfoundation.org/legacy/docs/TaxFoundation_FF520.pdf
\textsuperscript{103} https://gfoa.org/help-gfoa-preserve-muni-bond-tax-exemption
\textsuperscript{104} 29 U.S. Code § 1104 (a) (1) (B)
\textsuperscript{106} For an evaluation of the performance of a variety of municipal bond mutual funds, see Gurwitz, J.A. and Smith, D.M., 2019. Municipal Bond Mutual Fund Performance and Active Share
instruments authorized to, ULBs in its jurisdiction. While there is state to state variation, no Indian state has given ULBs a large degree of autonomy, especially in comparison to municipalities in South Africa and the US. Residents of Indian cities seem to have little expectation or confidence that their local government will provide modern infrastructure or reliable services.

There have arguably been forty-one “municipal” bond issues since the Bangalore Municipal Corporation issued the first municipal bond, with a state guarantee, in 1997. This number counted as “municipal” bonds includes seven non-ULB issuers, such as the Tamil Nadu State Government, the Tamil Nadu Urban Development Fund, the Andhra Pradesh Capital Region Development Authority, and several water and sewerage boards. Besides issuing bonds, ULBs and other entities responsible for urban infrastructure also take loans from public and private sector financial institutions, including state level funds and intermediaries.

The size and tenor of municipal bond issues have been limited. In 1998, Ahmedabad, a city of 5.6 million people, was the first municipal corporation in India to issue municipal bonds without a government guarantee, in 1998, when it borrowed a billion rupees. As of 2019, Ahmedabad has issued its fifth municipal bond, in the amount of 2 billion rupees. The longest maturity for any municipal bond in India appears to be 15 years, though 10 years or less is most common. From 2017, Indian municipal bond issuance is again showing signs of life, after a hiatus of several years. Recent bond issues seem to have been stimulated by a 2% interest subsidy from the union government, but the amounts remain small and ULB interest in municipal bonds appears weak.

There are many factors contributing to weak ULB demand. Among these are 1) that commercial and subsidized loans (including loans from state-level intermediaries) are often available to ULBs at equivalent or better interest rates, and with less effort than it takes to issue a municipal bond; and 2) that central and

107 Indian Constitution, Seventy Fourth Amendment Act, 1992
108 Mathangi Chandrasekhar, of the Janaagraha Centre for Citizenship and Democracy, has counted 41 “municipal” issues, through October 2019. Of these, 26 were issued by ULBs, and the remainder by a variety of states, state agencies, urban development funds, and water boards.
109 At the time, this was equivalent to about US $25 million. For a discussion of this bond issue, see C. Vaidya and B. Johnson, Ahmedabad Municipal Bond: Lessons and Pointers, Economic and Political Weekly, Vol. 36, No. 30 (Jul. 28 - Aug. 3, 2001), pp. 2884-2891
110 This was equivalent to about US $28 million on the date of issue.
111 We have not been able to locate aggregated figures on non-bond municipal borrowing in India.
state government transfer schemes have crowded out the demand for municipal bonds.\(^{112}\) Recognizing the need to invest more in urban development, to lay a foundation for continued economic growth, a variety of national and state schemes have provided infrastructure grants to ULBs, especially since the $20 billion JNNURM scheme was launched in 2005. By providing generous grants for local infrastructure, these well-intentioned schemes have weakened the incentive for ULBs to issue bonds.

**State governments’ interest in strong ULBs is doubtful.** While any state could legally empower strong ULBs, giving them substantial functions and finances, there are few incentives for state legislatures to do so, and no states have gone very far in this direction. Some observers have described an anti-urban bias.\(^{113}\) In most states, a minority of legislators represent constituencies that are officially “urban.”\(^{114}\) State legislatures therefore have little incentive to put significant powers and financial resources in the hands of ULBs, given that they represent alternative centres of power, whose leadership may come from opposition political parties.

**Rather than empower strong ULBs, states have created parallel financing channels,** using state-controlled entities that have planning and investment powers within ULB boundaries.\(^{115}\) These include development authorities, industrial development and investment corporations, water and sanitation enterprises, and urban rail and transport authorities, and others.\(^{116}\) These authorities typically receive financial support from the state, and many have their own revenue

\(^{112}\) These began in 2005 with the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and continued with 2011’s JNNURM II, and 2015’s Smart Cities Mission (SCM) and Atal Mission for Rejuvenation and Urban Transformation (AMRUT).


\(^{114}\) Even though many administratively “rural” constituencies have significant urban characteristics, so-called “census towns” come under the 73rd Amendment, rather than the 74th.

\(^{115}\) Gandhi and Pethe cite the Bangalore Metropolitan Region, where master plans for the region “included those prepared by the Bangalore Development Authority, Bangalore Metropolitan Region Development Authority, Bangalore Mysore Infrastructure Corridor Planning Authority, Bangalore International Airport Area Planning Authority, etc.” The various plans are prepared in isolation, and often conflict, Gandhi and Pethe, Emerging Challenges of Metropolitan Governance in India, Economic & Political Weekly July 8, 2017 vol. LII no 27.

\(^{116}\) Similarly, in the United States, many “municipal” bonds are actually issued by counties, school districts, transportation authorities, public universities and colleges, housing authorities, road and highway authorities, water districts, power districts, and other special purpose districts and authorities.
instruments. Indeed, the biggest “municipal bond” to date was not issued by a municipality at all, but rather by the Andhra Pradesh Capital Region Development Authority, to support the development of Amaravati, the State’s new capital.\footnote{https://economictimes.indiatimes.com/markets/stocks/news/andhras-bonds-for-amaravati-oversubscribed-by-1-5-times/articleshow/65501684.cms?from=mdr}

**The Union Government has few regulatory handles.** Although the Government might like to encourage municipal borrowing and municipal bonds, the power of ULBs to borrow, to bind successor councils, to set taxes, fees and charges at an adequate level to service substantial debt, all depend entirely on State law. This leaves the Union Government with limited ability to either empower or constrain the issuance of municipal bonds. There has been discussion about a tax exemption for municipal bond interest, based on the U.S. model, but that has not happened,\footnote{Economic Times, May 15, 2017, Interest subsidy of Rs 400 crore clears way for municipal bonds, accessed February 9 2020 at: https://economictimes.indiatimes.com/news/politics-and-nation/interest-subsidy-of-rs-400-crore-clears-way-for-municipal-bonds/articleshow/58674998.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst} and it is far from clear that such an exemption would make a real difference. The success of the U.S. model of local infrastructure financing does not lie in the municipal bond as an instrument, nor in the tax exemption as a subsidy, but rather in the expectations and trust that most citizens repose in their local government, and that is very different from the reality in India. The Union Government has attempted to encourage/incentivize ULBs to issue municipal bonds through the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), which provided a 2% interest subsidy for bonds. Unfortunately, both the tax exemption and the interest subsidy are based on “cargo cult” imitation of superficial aspects of the U.S. municipal bond market, rather than a contextual and historical understanding of how the U.S. market developed as it did, and why it currently functions as it does. The U.S. interest rate subsidy is certainly part of the story, but it is not a sufficient explanation for the growth of the municipal bond industry. A final aspect of the Union Government’s approach to municipal bonds is that, through SEBI, it has promulgated listing requirements for municipal bonds. This may have had the paradoxical effect of raising entry barriers, and encouraging more loans, rather than municipal bonds.

2. **South Africa**

**South African municipalities have broad powers and functions with respect to local matters,** which include land use planning, streets and street lighting, public transport, the provision of water and sanitation services, storm drainage, solid waste...
disposal, electrical distribution, and many other matters. All municipalities have broad discretion over property rates and tariffs for water and electricity, and a constitutionally guaranteed equitable share of nationally raised revenues. This is a good starting point for a municipal bond market, but it has not proven to be sufficient.

Only metropolitan municipalities (“metros”) have so far issued bonds, and not all of them have done so. None of the smaller municipalities have issued bonds, although many borrow in the form of loans. Metros generally have strong own-source revenues and in the aggregate, they generate close to 90% of their revenues from own-source instruments. Moreover, infrastructure grants from national government to metros increased nearly six-fold over the ten-year period from the 2006 to the 2016. While the 8 metros have substantial borrowing capacity, they also have limited incentive to borrow, given the substantial capital transfers they have been receiving in recent years. In contrast to Indian ULBs, South Africa’s metros, and many of its secondary city municipalities, have the revenues and revenue instruments to be creditworthy, if they manage their fiscal affairs with prudence and discipline. However, this potential has been translated into a growth in real demand for long term investment capital.

The number of municipal bond issues in India and South Africa are similar, as shown on the chart below:

<table>
<thead>
<tr>
<th>Municipal Bonds issued in India and South Africa: 1998 to 2019</th>
<th>India</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of issues</td>
<td>26 to 41</td>
<td>24</td>
</tr>
<tr>
<td>Smallest bond issue</td>
<td>US $2.4 million</td>
<td>US $60.1 million</td>
</tr>
<tr>
<td>Largest issue</td>
<td>US $185.7 million</td>
<td>US $287.8 million</td>
</tr>
</tbody>
</table>

Note: USD equivalents are calculated as of the date of issue

The pool of potential South African bond issuers is much smaller than in India. South Africa has at most 53 potential municipal issuers, whereas India has over 4,000 ULBs, as well as a wide variety of development authorities, water and

---

119 The OECD has characterized South Africa as a unitary state with federal tendencies. https://www.oecd.org/regional/regional-policy/profile-South-Africa.pdf
120 Constitution of South Africa, Section 214
121 South African National Treasury, Municipal Borrowing Bulletin, Issue 2, September 2016, Figure 8
122 See footnote 109
sewerage boards, and other potential issuers. Notwithstanding this broad universe of potential issuers, the total value of Indian municipal bonds to date is just over US $1.2 billion, while the total value of South African municipal bonds issued to date is US $2.8 billion.\(^{123}\) Per capita municipal bond issuance in South Africa is more than 40 times the Indian level (and all of the South African issuers are actually municipalities).

**South African municipal borrowing is static in real terms.** Over the last twenty years, outstanding long-term municipal borrowing has changed little in real terms, even though it has more than tripled in nominal terms.\(^{124}\) As old debt is retired, it is replaced with new debt, but there has been no net growth in real terms. Over the same time period, the proportion of municipal debt represented by municipal bonds has dropped dramatically. Twenty years ago, almost all outstanding long term municipal debt in South Africa was in the form of bonds. Today, loans account for about 70%.\(^{125}\)

**In principle, South Africa has strong policies to enable municipal borrowing from the private sector, whether in the form of bonds or loans.\(^{126}\)** This approach is reflected, *inter alia*, in comprehensive national legislation,\(^{127}\) which regulates the preparation and implementation of municipal budgets and financial statements, short- and long-term borrowing, accountability for financial decisions, and many other matters. South African municipalities may enter into long-term debt obligations only for the purpose of “capital expenditure on property, plant or equipment to be used for the purpose of achieving the objects of local government” or, under specified conditions, for re-financing existing long-term debt.\(^{128}\) A municipal council must authorize the debt obligation after publishing notice and inviting public comment, and no provincial or national government approval is required. The legislation also includes provisions for provincial interventions in the event of financial problems in municipalities.

\(^{123}\) Author’s calculations. Both figures are the aggregate of nominal values, not adjusted for inflation, calculated as of the date of each bond issuance.

\(^{124}\) South African National Treasury, Municipal Borrowing Bulletin, Issue 13, June 2019, Figure 1

\(^{125}\) South African National Treasury, Municipal Borrowing Bulletin, Issue 14, September 2019, Figure 2


\(^{127}\) Municipal Finance Management Act No. 56 of 2003 (MFMA), effective July 2004

\(^{128}\) MFMA, Section 46
Local government financial management policies are not always respected. Despite MFMA requirements for realistic budgeting, many municipalities do not collect all of the revenues they project in annual budgets, and are chronically short of cash. This leads to substantial unpaid bills from suppliers, including public entities that supply bulk water and electricity to municipalities for distribution. Despite a clearly stated policy preference for attracting private sector finance, the government has allowed significant growth in public sector lending to municipalities. Legislative provisions for provincial intervention in the case of financial problems have not always been followed.

3. United States

The U.S. is characterized by a profound decentralism. Although the powers and functions of municipalities vary by state, there is a profound decentralism that underlies American attitudes toward government. A basic trust in local political leaders is basic to the American character, despite formal differences in legal regimes. Some scholars have studied different U.S. states’ approaches based on whether they follow “Dillon’s Rule” or “Home Rule” approaches but recent scholarship points out that the actual level of local autonomy enjoyed by municipalities in different states is not directly related to either Dillon’s Rule or Home Rule. The autonomy enjoyed by local government in the U.S. suits the people - in poll after poll for decades, around 70% of Americans trust their local government. And it is local government that must bear the burden of investing in local infrastructure.

Urbanization, growth and deterioration will drive continued demand for local infrastructure. The population of the U.S. continues to grow and is expected to reach some 434 million by the end of the century. Long term economic growth

129 MFMA, Section 18

130 Tracy Ledger and Mahlatse Rampedi, Mind the Gap: Section 139 Interventions in Theory and in Practise, Public Affairs Research Institute, 2019


132 Justin McCarthy, Americans Still More Trusting of Local Than State Government, Gallup 2018

is likely to continue. The U.S. is 82 percent urbanized, and most urban infrastructure is aging, and badly in need of updating, rehabilitation and replacement. The American Society of Civil Engineers (ASCE) publishes an “infrastructure report card” every four years. For the last two editions, 2013 and 2017, U.S. infrastructure has gotten a grade of D+. The 2017 report estimated that the U.S. needs to spend some $4.5 trillion by 2025 to improve its roads, bridges, dams, airports, schools, and other infrastructure. No doubt actual investment will fall short of these targets, but the demand is there, and the overwhelming majority of the investment that is made will be funded by local government, using municipal bonds.

**Demand for infrastructure investment will drive the growth of the bond market.** The decentralized system of local infrastructure investment in the U.S. is deeply embedded. It is based in the localism of citizens’ expectations, in the habits of municipal officials, in the vested interests of underwriters, bond dealers, rating agencies, fund managers, and other capital market institutions. From 1812 until the present day, the U.S. municipal bond market has grown steadily. Episodic market regulation has come in reaction to problems and abuses, but has never threatened the core business model of financing local infrastructure through the issuance of municipal bonds. One lesson to take from this may be that a regulatory framework alone cannot drive market development. The impetus to use borrowing to build infrastructure originates not in the regulations, but in the aspirations of citizens and civic leaders to build their cities. Borrowing is a means to infrastructure investment, and such investment is seen as the key to building great cities. The dreams of urban residents and businesses demand investment, and local political systems have evolved to meet those demands.

**Conjectures**

**Context is critical.** Municipal bonds have been successful as a means of financing urban infrastructure in the U.S., and continue to finance two-thirds of urban infrastructure investment. It is natural that other countries have sought to emulate this model. And, it would be a mistake to extract a specific tool from its context, and expect it to work in the same way in a very different context. U.S. municipal

---


135 2017 Infrastructure Report Card, American Society of Civil Engineers, retrieved February 9, 2020 at https://www.infrastructurereportcard.org
bonds work as they do because of historical, institutional, legislative and political factors that are different from those in India or South Africa. The investors are different, and the borrowers are different. The challenge in seeking to learn from the U.S. experience is to discern which contextual factors are most relevant, and what differences may be most limiting.

**Bonds and loans both deserve attention.** In all three countries, arguments for the wise use of local borrowing to finance urban infrastructure are well-known: residents and businesses can benefit from economic and social infrastructure today, and cities can spread the capital cost over many years and include future users as part of the financing plan. Cities can repay their borrowing in part from the economic returns on infrastructure and social investments being financed. Borrowing from the private sector allows local government to leverage current resources, and to invest in more infrastructure, more quickly, than could be done otherwise. These advantages are not unique to municipal bonds. Loans can achieve the same benefits, if they are long-term and tap into private sector sources of capital. Both bonds and loans can be tailored to meet specific needs. Although municipal bonds are of perennial interest in both India and South Africa, it is not obvious that they are preferable to loans, especially from municipal borrowers’ perspectives. Loans tend to have fewer transaction costs, and can be more easily crafted to meet the specific needs of borrowers and institutional lenders. Whether at the local and practical level, or at the state or national policy level, a conversation about financing local infrastructure should not be limited to municipal bonds.

**Building a market requires a long-term perspective.** One advantage of bonds is liquidity, and liquidity requires a market. The U.S. has an active municipal bond market, with a significant volume of daily trades. This arguably leads to the allocative efficiency and price discovery we associate with capital markets generally. The evolution of an active bond market takes time, and it takes volume. Although a number of municipal bonds have been brought to market in both India and South Africa, the volume of outstanding bonds in both countries is quite small, and insufficient to support a liquid market. Notably, this is in contrast to the market for sovereign bonds in both countries. While individual municipalities looking to borrow are naturally interested in the best deal they can find at the time they want to borrow, national level policy-makers may have a longer-term perspective, and may see an advantage in encouraging the development of a municipal bond market for a variety of reasons. Doing so requires a systemic approach, patience and flexibility. Supporting individual bond issues is unlikely to lead to a market. The

136 Some kinds of public private partnerships can also finance public infrastructure in much the same way as a bond or a loan.
emerging municipal bond markets in India and South Africa are each tiny in comparison the U.S. market, but we must remember that the U.S. market has a 200-year head-start. The U.S. municipal bond market sits at the intersection of two systems: a system of capital markets that has evolved since the birth of the nation, and an approach to infrastructure finance that involves deep-seated faith in localism, and a general trust in local institutions.

**Investors and bondholders – the supply side of capital.** India and South Africa are blessed and cursed with public sector financial institutions that invest in municipal debt instruments, including loans and bonds. In hard times, these public lenders can invest in municipal debt that might not be attractive to the private sector. But these institutions, and their instinct for self-preservation, can crowd out private sector efforts to finance local infrastructure. In both India and South Africa, institutional investors’ (mutual fund/unit trust, insurance, pension funds) interest in municipal bonds is limited to some degree by government regulations that treat municipal bonds unfavourably in comparison to sovereign instruments. Households and individuals in India and South Africa do not have ready access to municipal bonds as investments, and are not familiar with them. In South Africa, few individuals with significant resources are prepared to invest in municipal bonds – the reputation of all spheres of government has suffered as many state owned enterprises have been mismanaged and some have become insolvent. In India, wealthy individuals seem to have less faith in financial instruments than in hard assets such as real estate and precious metals. By contrast, in the U.S., middle class and wealthy individuals have a long-standing willingness to invest in municipal bonds. For generations, municipal bonds been seen as relatively safe and sensible long-term investment instruments, well-suited to saving for children’s college education or retirement. To build such individual and household interest in India or South Africa would take a confluence of substantive and marketing efforts, but could eventually mobilize substantial additional capital for the public good.

**Local governance and sustainable borrowing – the demand side.** When local government borrows, it borrows on behalf of its people. They must ultimately pay the debt. The demand for infrastructure and the sustainability of borrowing depends on a fundamentally sound social contract between local government and the people. Weaknesses in local governance in India and South Africa limit the demand side of the market. In the case of India, ULBs are legally, institutionally and financially weak, and few people have confidence in their local government institutions. South African municipalities have more power and more reliably revenues, but they also lack the confidence of their citizens. To the extent active citizen participation is evident in either India or South Africa, it often involves wealthy and/or politically connected individuals and groups who bend local government to their own
purposes. Local government borrowing without the confidence of the people can eventually backfire.

**Indians have limited involvement with local government.** Politically active Indian citizens seem more occupied with national, state, and ethnic issues than with local urban development. One author tells us that “while voters may reward or punish incumbents for their public service delivery, they vote for other reasons as well (e.g., caste, religion, patronage benefits, party leader’s charisma), and in any case, a vote could at best express a desire for improved services generally, not for some particular service…”\(^{137}\) Local issues such as inclusive growth and spatial development, and what those things demand in terms of infrastructure investment, do not attract much attention in the press or in social media. This may be because ULBs have little power, or it may be that citizens do not think they can have much impact. Expectations of ULBs are low, urban service delivery and infrastructure are sub-optimal, and this low-level equilibrium will be difficult to shift.\(^{138}\)

**South Africans have little faith in local government.** While the legal framework provides many mechanisms for citizen participation, these are not used or trusted by the masses. In one survey, citizens were asked how much they trust their elected local government council. More than 40% responded “not at all,” and another 24% said “just a little.” Only 14% said they trusted their council “a lot.”\(^{139}\) One South African scholar has written “that for as long as participatory local governance mechanisms are inefficient, and disconnected from the needs, goals, and capacity of local citizens, the various tensions and conflict between citizens and local municipalities in South Africa will continue unabated.”\(^{140}\) The lack of faith in local


\(^{138}\) Delhi may be the one city where local issues drive politics, because of the National Capital Territory’s unique constitutional status. In Government of National Capital Territory of Delhi vs. Union of India, CA No. 2357 of 2017, the Supreme Court ruled that Delhi’s government has substantial legislative and executive powers, more or less on the level of a state government. As one commentator has written, “the Court chose to prioritise the interpretation that would give citizens the biggest say in shaping the policies that govern them at the most immediate level,” Preetika Mathur, NCT Delhi v. Union of India: The Role of the Westminster Style Cabinet System of Government in the Indian Federal Scheme, Indian Journal of Constitutional & Administrative Law, August 7, 2018

\(^{139}\) Afrobarometer (R7 2016/2018), retrieved 8 February 2020 at http://afrobarometer.org/online-data-analysis/analyse-online

\(^{140}\) Matebesi, Sethulego. "Evolution of Local Governance in South Africa: The Triumph or Failure of Participatory Governance?" In Civil Strife against Local Governance: Dynamics of Community
government leads frustrated citizens to dramatic and sometimes violent street protests, which are often covered by media in a way that de-legitimizes the underlying concerns.  

**Most Americans have a general trust in local government.** A 2018 Gallup report found that 72% of U.S. adults have a "great deal" or a "fair amount" of trust in their local government. This is not unanimous or unquestioning trust, but it is a higher level of trust than state or national government enjoy. “Citizens are willing and able to trust city councils and their own voice to come to rational borrowing and investment decisions, and are willing to put the volunteer time into committees and processes that develop land use policies, capital improvement priorities, and budget plans for local government.” The American success with municipal bonds probably has much to do with the autonomy and accountability of municipalities. In genuine and sometimes contentious dialogue with citizens, councillors determine the services to provide, and they set taxes and fees sufficient to pay for those services. These habits are rooted in the historical resourcefulness of U.S. cities. Cities borrowed, beginning 200 years ago, because they had to borrow – no one else was going to pay for local infrastructure. State governments were weak and sometimes far away. The national government was also weak, and still further away. Neither was or is trusted as much as local government. Habits of local self-reliance developed, which continue to guide the way people think about local government finances and infrastructure investment.

**Municipal bonds are simple, markets are complex.** As Indian and South African municipalities have experienced, it is not difficult to issue a municipal bond of modest size with a 10 to 15-year maturity. But in both countries, a direct loan is more common, and that is not likely to change unless the capital markets offer better deals. From a national policy perspective, a municipal bond market might seem to offer advantages in terms of efficiency and financial discipline, but can be a real

---


challenge to influence all of the inputs that ultimately determine the growth or shrinkage of the bond market. South Africa’s bond market has been shrinking steadily in real terms, even as municipal borrowing for infrastructure has remained steady. India’s municipal bond market is much smaller, even though the country is much bigger. The bulk of urban infrastructure in India is driven by states and their agencies, rather than by ULBs, and this seems unlikely to change in the foreseeable future.