

Municipal Bonds and the Future of Urban Finance in India

Alternative Pathways for Funding Urban Growth¹

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2.1. Introduction

Urbanization refers to the process by which people move from rural areas to urban areas, resulting in the growth of urban population in relation to rural population. India is undergoing a rapid urban transformation. This growth in urbanization is primarily driven by factors like: expansion of the private sector, migration from rural to urban areas, and the development of new urban centers. With over 35% of its population now residing in urban areas (*as per the Census 2021 estimates, and subsequent projections*), contributing more than 65 percent of country's GDP (2024-25 estimates), the country is expected to become 50% urban (mostly in Tier 2 and Tier 3 cities) by 2047 (*as per the Amrit Kaal Vision; projections by the MoHUA and NITI Aayog*), contributing more than 75% (expected) to country's GDP by 2030. This trend even though brings many opportunities (e.g. economic growth, innovation, improved living standards), but also possess several challenges (e.g. housing shortages, traffic congestion, pollution, and strains on urban infrastructure). In this context, Urban Local Bodies (ULBs) play a pivotal role in managing urban growth, delivering essential services, and ensuring sustainable urban development, resulting into overall economic development and growth of the nation.

However, weak property tax systems, poor user charge recovery, overdependence on state

transfers, and limited access to market-based instruments leave most ULBs ill-equipped to finance growing urban needs. Municipal bonds may emerge as a cost-effective, transparent, and sustainable financing channel to bridge this gap. In this context, this chapter studies the financing needs, avenues and constraints of ULBs. It traces the evolution of the municipal bond market in India and outlines its potential contribution to ULBs. It also discusses the problems faced by ULBs, in the utilization of the municipal bond market.

The chapter proceeds as follows. The next section discusses the genesis, rationale and challenges of ULBs. Section 2.3 outlines the evolution and avenues for municipal finance. Section 2.4 describes the current trends and challenges for municipal finance. Section 2.5 explores the transition, role and comparative depth of the municipal bond market in India, relative to developed and BRICS countries. Section 2.6 enumerates the scope and challenges faced by ULBs, in tapping the municipal bond market. Section 2.7 concludes.

2.2. Role and Challenges of ULBs

ULBs, comprising Municipal Corporations, Municipalities, and Nagar Panchayats, are the frontline institutions for urban development and governance. Key responsibilities of ULBs includes: (i) Water supply and sanitation, (ii) Waste management, (iii) Urban planning and zoning, (iv) Roads, street lighting, and drainage, (v) Primary health and education, (vi) Slum

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improvement and housing, (vii) Urban poverty alleviation, and (viii) Local economic development. ULBs, formally recognized in the Indian Constitution through the 74th Constitutional Amendment Act, 1992, came into force on June 01, 1993. There are three types of ULBs, based on the population: Nagar Panchayat (Transitional areas, i.e. Rural to Urban), Municipal Council (Small towns), and Municipal Corporation (Larger cities), totalling around 4978 ULBs in India as of 2024 (Source: MoHUA). As per India's federal governance structure, the ULBs come under the Third Tier, after the Union Government (First Tier), and the State Governments (Second Tier). The existence, powers, and functions of ULBs are determined by the State Legislatures.

Success and effective functioning of ULBs, as generally observed in developed economies, largely depends on Financial Autonomy, Sufficient and Predictable Intergovernmental Transfers, and Institutional Capacity (UN Habitat, 2018), enabling the ULBs to effectively deliver the required services and to ensure planning-cum-execution of long-term urban developments.

Despite constitutional recognition and growing importance, ULBs in India face several structural and operational challenges (ICRIER-2019; RBI – 2022). Besides other challenges, such as: Weak Institutional Capacity, Unplanned and Haphazard Urbanization, Governance and Accountability Gaps, Delayed Devolution of Functions and Funds, the most important challenge for the effective functioning of ULBs in India is inadequate financial resources and limited financing channels (ICRIER, 2019).

Total expenditure of ULBs in India remains below 1 percent of country's GDP, as compared to 8 to 14 percent in developed economies (RBI, 2022; ICRIER, 2019). As the major source of financing, the Own-source revenue (OSR) of Indian ULBs is limited. Being the major item of OSR, the property tax collection is even below its potential, contributing just 0.15 percent of GDP. Further, user charges for water, waste, and parking are under-recovered or uncollected. Indian ULBs have a very limited access to the financial market (i.e., raising finance

through municipal bonds), and heavily depend on unpredictable intergovernmental transfers (i.e., financial grants from the Central and State governments).

2.3. Municipal Financing: Evolution and Alternative Channels

Municipal financing refers to the methods through which local governments or Urban Local Bodies (ULBs) mobilize financial resources to perform their functions to support the growing urbanization. Developed economies worldwide have evolved a robust, decentralized, and diversified municipal finance systems enabling an efficient and accountable urban governance. Fiscal Decentralization, Stable Revenue Base, Intergovernmental Transfers, Capital Market Access, Autonomy and Accountability are the key characteristics of Municipal Financing in Developed Economies (OECD, 2022). Accordingly, the important sources of Municipal Finance include:

Own-Source Revenues

ULBs own source revenues (OSR) primarily consists of: Property Tax, Goods and Services Tax (GST), stamp duties, and motor vehicle taxes (Local share or independent levy), User Charges (Fees for water, waste, parking, etc.), Local Business Taxes (Levied on commercial activity), and Advertisement Fees (leasing of advertisement rights on assets owned by various government agencies). This channel is considered to be the most stable and predicted sources of revenue for the ULBs worldwide.

Intergovernmental Transfers

Being an integral part of the federal governance structure, ULBs are expected to significantly depend on various types of intergovernmental (Central and State Governments) transfers, such as: (i) General Purpose Grants (Unconditional transfers based on population, needs, or fiscal capacity); (ii) Conditional Grants (Earmarked for sectors like education, public health, infrastructure, etc.); and (iii) Equalization Transfers (To reduce disparities among regions or municipalities). Size of this revenue source varies across the economies, depending

upon the ULB structure and their dependence on governments.

Borrowings and Capital Market Instruments

Besides borrowing from Multilateral and Bilateral Agencies (e.g. World Bank, Asian Development Bank), Commercial Banks, and Development Finance Institution (HUDCO), ULBs, as followed by the Central and State Governments, can also opt for market borrowing (i.e. issuing Bonds), duly backed by general obligation or specific project revenues, to finance their budgeted deficit.

Land-Based Financing and Asset Monetization

ULBs can impose charges on landowners/developers, benefiting from public infrastructure; provide long-term lease of municipal land; impose fees on real estate developers to fund infrastructures to manage its finance.

Climate and Green Finance

ULBs can also meet its financing requirements through issuance of Green Bonds to fund public transport, renewable energy, etc.; look for Climate Resilience Grants provided by the central Govt., various international agencies; and also using the Carbon Credit Revenues.

Public Private Partnership (PPP)

ULBs may collaborate with private companies to finance, build, and operate public projects, under: (i) Build-Operate-Transfer (A private company constructs and operates a project for a set period before transferring it to the government); (ii) Joint Venture (Municipalities partner with private firms for projects like metro rail, waste management, and smart city initiatives); and (iii) Annuity-Based Model (The government pays a fixed amount to the private firm annually for maintaining and operating infrastructure).

Corporate Social Responsibility (CSR) Funding

Private companies contribute funds for municipal projects under the CSR obligations, where

contributed funds can be utilized for social purposes like sanitation, waste management, education, healthcare, etc.

Foreign Direct Investment (FDI) in Urban Infrastructure

ULB may consider FDI to fund infrastructure projects like metro rail, roads, waste mgt., etc.

A comparative picture towards the contribution from urban sector for the overall economic development (percentage share of Urban produced in GDP), the economies' concern for the Urban growth (captured through Urban expenditure as the percentage share of country's GDP), various financing channels of ULBs, and further break-ups of the borrowing channels of ULBs, in selected developed and emerging economies are presented in Table 2.1. The table clearly highlights the importance of urban development for the overall economic growth of any country, but the initiatives/efforts/contribution made (represented by the Urban Expenditure as % of GDP) to achieve such growth level, even if quite significant (4.5 to 10.50 percent of GDP) in case of developed economies, is relatively very small (1 to 5 percent of GDP), with the least (just 1 to 2 percent of GDP) in India out of the selected countries. This clearly indicate the level of emphasis to be given for the overall and timely development of Indian urban infrastructure to support the growing urbanization and to achieve a sustainable economic growth. Similarly, Table 2.1 also highlights different revenue sources and further breakups of the Borrowing sources, primarily to access the ULBs dependence on various financing channels. Even though the ULBs worldwide are expected to be primarily dependent on their own revenue (Tax and Non-tax) sources, the same is found to be relatively weak in India. At the same time, effective, timely, and sustainable growing urbanization would ideally be supported by a lower (say 20 to 30 percent) dependence on intergovernmental transfers, as seen in the case of developed economies. The table clearly highlights India's overdependence (45 to 55 percent) on intergovernmental transfers (Transfers/Grants), causing a very slow, untimely, and effective growth in urbanization in India. Even if the percentage share of total

TABLE 2.1
Revenue and Borrowing Structures of ULBs: A Global Scenario

Revenue and Borrowing Structures of ULBs: A Global Scenario (Indicative: Year 2020 to 2023)													
		Revenue / Financing Breakups						Breakup of ULB Borrowings (% Share)					
	% Share of GDP produced in urban areas	Urban Exp. (% of GDP)	Own taxes	User charges	Transfers/ Grants	Land & other	Borrowing (Debt)	Market-Based Borrowing	Domes-tic FIs	Multi-lateral & Bilateral Lending	Pooled Financing	State/ Federal Borrow-ing on Behalf	PPP (Debt Compo-nent)
United States (Developed)	80%–90%	8.5%–10.5%	45–55%	12–18%	25–30%	2–5%	3–5%	75%	10%	1%	8%	0%	6%
Canada (Developed)	75%–85%	4.5%–6.0%	40–50%	15–20%	30–35%	2–4%	2–4%	40%	40%	0%	15%	0%	5%
United Kingdom (Developed)	80%–90%	5.5%–7.0%	35–45%	10–15%	35–40%	2–5%	3–5%	10%	80%	0%	5%	0%	5%
Germany (Developed)	70%–80%	6.5%–8.5%	45–55%	10–15%	25–30%	2–4%	3–6%	35%	60%	0%	0%	0%	5%
China (Emerging/Large)	70%–85%	6.0%–9.0%	30–40%	10–15%	20–25%	15–25%	5–10%	0%	20%	5%	0%	70%	5%
India (Emerging)	55%–70%	1.0%–2.0%	20–30%	10–15%	45–55%	5–10%	2–5%	25%	35%	15%	5%	15%	5%
Brazil (Emerging)	75%–88%	3.5%–5.0%	30–40%	15–20%	30–35%	2–4%	3–6%	30%	40%	20%	0%	5%	5%
South Africa (Emerging)	65%–80%	2.5%–4.0%	30–35%	15–20%	30–40%	2–5%	3–6%	45%	35%	10%	0%	5%	5%

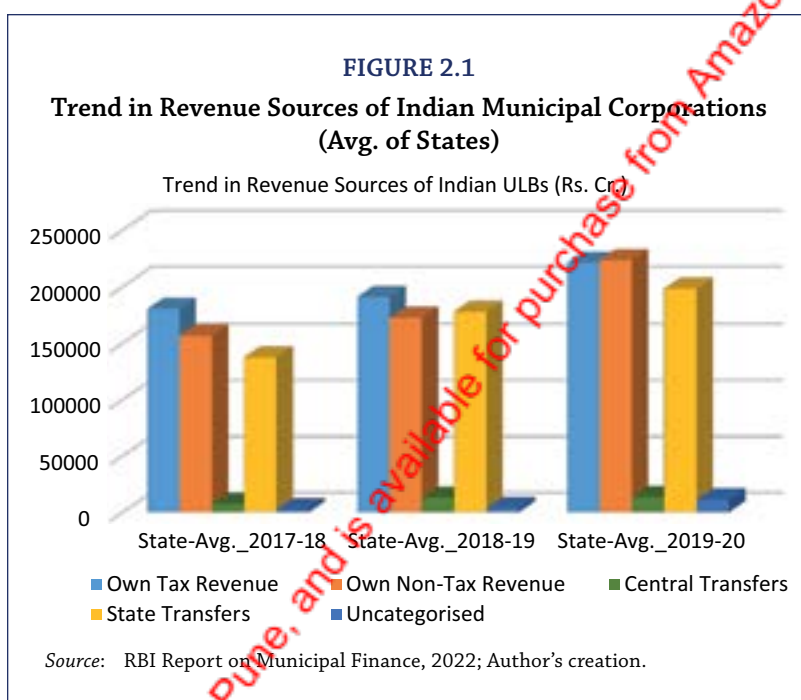
Source: OECD Regional Statistics, World Bank, IMF, MoHUA, RBI; The Table is Author's own creation.

Debt/Borrowing component out of the whole financing of ULBs are mostly similar (3 to 6 percent), the developed economies give more (75 percent in US) emphasis on market based borrowing options (like issuance of Municipal Bonds), whereas the same is relatively very low (around 25 percent) in India, especially due to ULBs overdependence on Domestic FIs (35 percent in India vs 10 percent in US) and Multilateral & Bilateral Institutions (15 percent in India vs 1 percent in US) for borrowing. These facts clearly highlight the importance of a significant enhancement not only in the share of urban expenditure, but also the total revenue of ULBs, with increasing (decreasing) dependence on own revenues and market borrowing (intergovernmental transfers, and borrowing from domestic FIs, Multilateral & Bilateral Institutions).

2.4. Municipal Financing - Practices and Challenges

Municipal finance in India has evolved through distinct historical phases, reflecting the trajectory of urban development and institutional reform in the country. During the colonial period, municipalities primarily relied on local taxes such as property tax and octroi, along with state transfers (MoUD, 2012). However, the focus remained largely administrative rather than developmental. Post-independence, the growing demands of urban infrastructure necessitated a more structured and empowered framework for Urban Local Bodies (ULBs). The turning point moment came with the 74th Constitutional Amendment Act (CAA), 1992, institutionalizing the ULBs as the third tier in the governance structure, enumerating various functional responsibilities (such as: urban planning, regulation of land use, water supply, waste management, slum improvement, etc.) of ULBs, establishing the State Finance Commissions (SFCs) to recommend the devolution of funds to ULBs.

Despite this formal empowerment, the devolution of financial resources did not keep pace with functional responsibilities. The lack of a dedicated municipal finance list in the Constitution meant that the fiscal powers of ULBs were largely determined by state legislations.



Alternatively, the financial autonomy of municipalities has been constrained by inadequate revenue base, poor collection efficiency, and excessive reliance on intergovernmental transfers (RBI, 2022; IIHS, 2022). As a result, municipal revenues remained limited, primarily comprises of: (i) Own-source revenues: property tax, user charges, license fees; (ii) Transfers from State and Central Governments: assigned revenues, grants-in-aid; and (iii) Borrowings and other capital receipts: largely underutilized due to regulatory and capacity constraints. The trend in broader revenue sources of Indian municipal corporations, considering the average of all 14 States (RBI, 2022) and over three financial years 2017-18 to 2019-20 is exhibited in Figure 2.1, clearly highlighting a slower revenue growth, and the overdependence of ULBs in their own revenues (Tax and Non-tax), and the state transfers. Due to lack of comprehensive data on Municipal Financing in India, the similar trend over the last five years couldn't be presented.

Further, the granular details towards the revenue receipts of municipal corporations in India under various heads (Own tax revenue, own non-tax revenue, governmental transfers) are presented in Table 2.2, projecting the average estimates of selected states (14 States, as given in RBI Report, 2022) to understand the

TABLE 2.2

Revenue Receipts of Municipal Corporations in India (State Avg.) (Rs. Cr.)

	State-Average	State-Average	State-Average
Revenue Sources of ULBs	2017-18 (Accounts)	2018-19 (Revised Estimates)	2019-20 (Budg- et Estimates)
1			
Total Revenue Receipts (I+II+III)	482904.39	556239.40	665837.06
I. Own Revenue (A+B+C) (Out of Total Revenue)	70.07%	65.83%	68.73%
A. Own Tax Revenue (Out of Own Revenue)	53.17%	52.02%	48.22%
1 Property Tax	37.10%	44.80%	46.11%
2 Water Tax	10.65%	11.28%	12.37%
3 Sewerage/Drainage Tax	6.63%	5.97%	5.72%
4 Conservancy/Latrine Tax	1.42%	1.51%	1.54%
5 Lighting Tax	0.19%	0.24%	0.26%
6 Education Tax	3.23%	3.09%	3.00%
7 Vehicle Tax	0.89%	0.94%	0.89%
8 Tax on Animals	0.03%	0.00%	0.00%
9 Electricity Tax	0.13%	0.44%	0.49%
10 Professional Tax	1.61%	1.70%	1.61%
11 Advertisement Tax	0.45%	0.46%	0.63%
12 Pilgrimage Tax	0.00%	0.00%	0.00%
13 Export Tax	0.24%	0.00%	0.00%
14 Octroi and Toll	25.29%	14.09%	13.67%
15 Other Taxes	11.35%	14.76%	13.11%
16 Uncategorised	0.87%	0.72%	0.66%
B. Own Non-Tax Revenue (Out of Own Revenue)	46.20%	47.02%	48.80%
1 Rental Income from Municipal Properties	2.84%	4.32%	4.35%
2 Fees and User Charges	68.78%	66.04%	61.68%
3 Sale and Hire Charges	1.50%	2.13%	2.53%
4 Income from Investment	13.15%	14.13%	12.28%
5 Interest Earned	1.56%	1.14%	0.98%
6 Other Income	11.74%	11.88%	17.83%
7 Uncategorised	0.55%	0.60%	0.67%
C. Uncategorised (Out of Own Revenue)	0.94%	0.96%	2.98%
II. Transfers (A+B+C) (Out of Total Revenue)	29.95%	34.24%	31.74%
A. Central Transfers (Out of Total Transfers)	4.94%	6.61%	6.25%
B. State Transfers (Out of Total Transfers)	94.85%	93.20%	93.59%
1 Assigned Revenues, compensation	71.68%	72.76%	71.28%
2 SFC Grants	2.08%	2.08%	2.90%
3 State grant in aid transfers	16.51%	14.95%	15.41%
4 Others	9.72%	10.21%	10.41%
5 Uncategorised	0.00%	0.00%	0.00%
C. Uncategorised (Out of Total Transfers)	0.23%	0.18%	0.16%
III. Uncategorised (Out of Total Revenue)	0.07%	0.15%	0.58%

Source: Author computation based on IBA data.

core sources of municipal financing in India. The table clearly highlights the ratio of Own Revenue and Governmental Transfers (around 70:30) out of their total revenue receipts. Out of own revenue, the ratio of Tax and Non-tax revenue stood at around 53:47; whereas the state transfers are found to be more than 95 percent of the total governmental transfers. These estimates reveal the overdependence of ULBs in their Own revenue and state transfers to support their financing. Out of Own tax revenue, the important (more than 5 percent) sources are: property tax, water tax, Sewerage/ Drainage Tax, Octroi and Toll, and other taxes. The important component of non-tax revenues are fees and user charges, income from investments, and other income.

Despite the constitutional recognition provided by the 74th CAA, Urban Local Bodies (ULBs) in India continue to face significant challenges in financing their operations (RBI, 2022; ICRIER, 2019; IIHS, 2022; UN-Habitat, 2018), due to the following:

(i) *Inadequate Mobilization of Own-Source Revenues (OSR)*

Even though the municipal corporations in India majorly sustained through their own revenues, the same is practically inadequate to support the increasing urbanization. For most ULBs, property tax remains the primary source for their financing, yet it contributes less than 0.25% of India's GDP, far below the global benchmarks (around 3 percent in USA). Structural issues like outdated property valuation methods, incomplete property databases, poor enforcement mechanisms, etc. result into a large revenue leakage for the ULBs. Other own sources like water and electricity tax, advertisement tax, profession tax, rental income from municipal properties, and various user charges also remain underexploited.

(ii) *Overdependence on State Transfers*

Intergovernmental transfers, specially from state government, comprising of various grants and shared taxes, form a major portion of municipal finances for Indian ULBs. These

transfers are not only unpredictable, inadequate, and creates a disruption in the financial planning of ULBs, but also tied to specific schemes, leading to a lack of flexibility in utilization. Too much of state dependency also undermines the autonomy of ULBs and weakens their accountability mechanisms.

(iii) *Inability to Leverage Municipal Borrowings*

ULBs are not able to leverage various borrowing channels. The weak financial position of ULBs and lack of sufficient independence and predictability of revenues makes it difficult for them to leverage municipal borrowings through various instruments like term loans, public private partnerships, municipal bonds, pooled finance, etc. In several states, ULBs require prior approval from the state government to avail municipal borrowings facility. Besides that, ULBs would also require to achieve higher standards of financial reporting and public disclosure to build confidence among potential investors or lenders, and recruit high quality talent required to structure projects and transactions.

(iv) *Lack of Clarity in Medium-term and Long-term Financing Requirements*

ULBs generally do not have clear estimates towards their long-term capital requirements based on the current infrastructure and service delivery gap and future projections, leading to improper estimates of financing required by ULBs.

(v) *Poor Financial Management Practices*

Many ULBs lack standardized and transparent financial accounting systems. Despite initiatives like the National Municipal Accounts Manual (NMAM), compliance remains intermittent, leading to several challenges: delay in preparation and auditing of annual accounts; absence of accrual-based accounting in most ULBs; weak internal controls and lack of outcome budgeting.

(vi) Inadequate Capital Expenditure

Out of even inadequate total revenue receipts, the ULBs generally spend a disproportionately large share (around 70 percent as per the RBI's Report, 2022) on establishment and administrative expenses, leaving very little for capital expenditure in creating infrastructure.

(vii) Regulatory and Institutional Constraints

Even though Borrowing could be a very important source of municipal finance, the same is strictly regulated by the respective state governments, with complex approval processes. Further, most ULBs lack the required creditworthiness and institutional capacity to secure loans (from commercial banks, Multilateral and Bilateral Agencies) and/or tap into capital markets (issuing bonds).

(viii) Lack of Incentives for Performance

Lack of proper system to reward financially prudent ULBs, and penalize inefficient ones, creates another challenge for effective functioning of ULBs and management of their financing. Even though recent reforms emphasize on performance linked grants to ULBs, their implementation remains partial.

The aforesaid challenges faced by ULBs in managing municipal finances are deep-rooted and multifaceted. In order to address the same, not only the necessary structural reforms need to be undertaken, but also would require a shift in governance paradigms. The roadmap for financial sustainability and financial accountability of ULBs in India includes: (i) Fiscal Decentralisation (State governments to devolve more own revenue streams to ULBs and giving them greater powers over such revenue streams); (ii) Revenue optimisation; (iii) Institutional capacity building; (iv) Transparency, accountability and citizens' participation.

This report attempts to highlight: (i) the challenges faced by Indian ULBs especially in financing their capital/infrastructure expenditure; (ii) issuance of Municipal Bonds as an alternative channel of municipal financing, considering the experience of developed economies; (iii) Current status, major deterrents for

market development, and future potential of Municipal Bond market in India.

2.5. Role of Municipal Bond Market in Financing ULBs

With increasing urbanization and growing pressure on urban infrastructure, traditional revenue sources (Own tax and non-tax revenues of ULBs, and Governmental transfers) are becoming sufficiently inadequate for Indian ULBs to support the increasing urbanization in the country. In this context, consideration of market borrowing programme (i.e., issuing municipal bonds) have emerged as a crucial alternative financing option to supplement existing revenue streams, and enhance financial discipline.

Municipal Bonds: A Brief

Municipal bonds are debt instruments/securities issued by local governing bodies, such as municipal corporations or urban local bodies (ULBs) to raise funds from the capital market for financing their capital-intensive large-scale infrastructure and development projects. Just like other debt securities/bonds issued by Govt. and Non-Govt. entities, investors purchasing these bonds receive periodic (Semi-annually or annually) interest/coupon payments and the payment of principal at maturity. Municipal Bonds, based on their repayment structure, are generally classified into two categories:

- (i) *General Obligation Bonds:* General Obligation Bonds are backed by the creditworthiness of the issuing municipal authority/ULB and therefore considered to be relatively secure. These bonds are used to fund broad infrastructure projects and are repaid from general tax revenues (e.g., property tax, local levies, etc.).
- (ii) *Revenue Bonds:* Revenue Bonds are issued for specific projects (such as: toll roads, water supply, etc.), tying up their repayment directly with the revenues generated by those projects, and therefore making these bonds relatively riskier (depends on project success) and high yield generating for investors.

As of other non-Govt. securities, Municipal Bonds can be Listed or Non-Listed; and can be Privately Placed or Publicly Issued. Such bonds can also be Taxable or Tax-free. Municipal bonds can also be in the nature of green bond, where the raised fund is used in environmentally sustainable projects (like, waste management, renewable energy, etc.), attracting ESG-focused investors.

Municipal Bond Market: Global Picture vs India

Globally, municipal bonds are quite popular in Municipal Financing, United States alone capturing around 90 percent of the market share (Brookings Institution, 2015), with more than 50000 issuers taping the market, with a total outstanding amount of USD 4.2 trillion (as per SIFMA, 2024), and a daily secondary market trading (mostly in OTC market) volume of around USD 10 to 12 billion; followed by Canada and Europe (with around 3 to 4 percent share of global Munis), Japan (1 to 2 percent share).

Table 2.3 highlights the trend over last one decade in the structure of municipal bond market in US. The table clearly exhibits some special features of the US municipal bond market, witnessing its continuous growth over the years (with yearly issuance size of from USD 405 billion in 2015 to USD 514 billion in 2024). The municipal bonds issued in US are majorly Revenue Bonds (annual average of 62 percent), providing a higher level of certainty to the bond holder in terms of servicing the cash flows. The most important features of the US municipal bond market, unlike that in India, are: (i) Bonds are majorly issued through Public Issues (annual average of 94 percent), (ii) They are mostly Tax-free (annual average of 83 percent), and (iii) Majority of the municipal bonds are Callable (annual average of 89 percent). All these features create a special preference for these municipal bonds to the individual/retail investors, as depicted from their direct (annual average of 44 percent) and indirect (with annual average of 24 percent investments through mutual funds), leading to a total holding of 68 percent by the individuals/retail investors out of the total outstanding volume.

India's municipal bond market is still in a nascent stage. India's first municipal bond was issued in 1997 by Bengaluru, raising INR 125 crores. A total of INR 1,200 crores was raised by 9 municipalities through municipal bonds between 1997 and 2000. However, the launch of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in 2005, providing ULBs with grants and subsidies to support modernization of cities, reduced their emphasis on market-based funding mechanism (UN-Habitat, 2018). As a result, the total issuance of municipal bonds during 1997 to 2015 (Pre-SEBI regulation era, where bonds were issued under state approvals and with support from MoUD and NIUA guidelines) was restricted to around INR 1,800 crores. Details of issuance of municipal bonds in India are given in Table 2.4. Further, the municipality-wise issuance post 2016, in order of the total issuance size, is presented in Figure 2.2, clearly exhibiting the relative dominance (top three issuers) of Hyderabad, Pimpri Chinchwad, Ahmedabad, Indore municipalities in taping the municipal bond market to fund their projects.

Even if ULBs in India are considered to be in the third level under the 3-Tier federal structure, the municipal bonds are practically considered as PSU bonds under the broad category of non-Govt. securities, and therefore are subject to credit risk. Unlike in the case of Govt. (Central and State Govt.) securities the market of which is regulated by the Reserve Bank of India (RBI), Indian municipal bond market is regulated by the Securities and Exchange Board of India (SEBI).

Municipal bond market is generally tapped by ULBs with better creditworthiness. Therefore, smaller ULBs with limited creditworthiness find it difficult to get access to this municipal financing channel. To support such smaller ULBs, Pooled Financing emerged as a significant innovation, facilitating bond issuance by aggregating the borrowing needs of multiple municipalities. Under pooled financing, ULBs can successfully mobilized resources through bond markets even with partial credit enhancements and guarantees from multilateral institutions.

TABLE 2.3
Trend in Municipal Bond Market Structure in US

(Billion USD)													
Nature of Municipal Bonds Issued in US					Features of Municipal Bonds Issues in US					Municipal Bond Holding Pattern in US (% of Total Outstanding)			
Type of Bonds (% of Total Issue)		Total Issue (\$ Bn)	Type of Issu- ance (% of Total Issue)		Avg. Mat. at Issuance (Yrs)	Total Outstanding Vol. (\$ Billion)	Tax Type (% of Total Public Issue)			Coupon Type (% of Total Public Issue)	Callable Status (% of Total Public Issue)		Others
			Pub. Issue	Pvt. Plac.			AMT	Tax Ex- empt	Tax- able		Call- able	Non- Calla- ble	
Year	Gen. Obl. Bond	Rev. Bond											
2015	39	61	405	93	7	3880	3	90	7	96	91	9	3
2016	40	60	452	94	6	3930	3	90	7	96	92	8	4
2017	37	63	449	91	9	3948	4	88	8	96	91	9	4
2018	36	64	347	93	7	3904	5	86	9	92	90	10	4
2019	38	62	426	95	5	3915	5	78	17	93	88	12	4
2020	41	59	485	93	7	4002	2	67	31	96	86	14	4
2021	37	63	483	95	5	4081	3	72	25	94	86	14	4
2022	37	63	391	92	8	4029	6	81	13	93	87	13	4
2023	39	61	385	94	6	4079	5	86	9	89	90	10	5
2024	33	67	514	97	3	4197	5	88	7	90	91	9	5
2025 (till Aug.)	37	63	388	99	1	4233	4	90	6	89	89	11	5
Average	38	62	430	94	6	18	4	83	13	93	89	11	4

Source: Data is collected from SIFMA; but summarised in the Table by the Author.

TABLE 2.4
Outstanding Market for Municipal Bonds in India

Year	Issuing Municipality	No. of Issue	(Rs. Cr.)			Other Details
			Issuance Amount	Wtd. Avg. Tenor (Year)	Wtd. Avg. Coupon (%)	
Till 2016	Bangalore, Ahmedabad, Ludhiana, Nasik, Madurai, Nagpur, Hyderabad, Indore, Vishakhapatnam	28	1830.79	6.88	7.19	Bond Type: Revenue Bond; Taxability: Taxable & Tax-free; Purpose: Urban infrastructure, Road & Transport, Water Supply, Sewerage, Sanitation
2017	Pune	1	200.00	10	7.59	Revenue Bond; Taxable; Water Project
2018	Amravati, Hyderabad, Indore, Bhopal, Vishakhapatnam	6	2789.90	10	10.04	Revenue Bond; Taxable; Road & Infra Development, Sewerage System & Water Supply
2019	Ahmedabad, Surat, Hyderabad	3	500.00	6	9.00	Revenue Bond; Taxable; Urban infrastructure, Road & Transport, Water Supply & Sanitation, Sewerage, Smart city Infrastructure, Solar Power
2020	Lucknow	1	200.00	10	8.50	Revenue Bond; Taxable; Water Supply & Residential Projects
2021	Ghaziabad	1	150.00	10	8.10	Revenue Bond; Taxable; Tertiary Sewage Treatment Plant
2022	Vadodara	1	100.00	5	7.15	Revenue Bond; Taxable; Water Supply & Sewerage
2023	Indore, Pimpri Chinchwad	2	444.00	7.20	8.20	Revenue Bond; Taxable; Public Issue (Indore); Solar Power, Green urban infrastructure projects
2024	Ahmedabad, Vadodara, Rajkot	3	400.00	4.75	7.9	Revenue Bond; Taxable; Green and sustainable urban infrastructure projects
2025 (till Jun.)	Agra, Prayagraj, Varanasi, Greater Chennai, Pimpri Chinchwad, Gandhinagar	6	575.00	7.26	7.94	Revenue Bond; Taxable; Stormwater drainage and flood mitigation projects, Sewerage and sanitation upgrades, water supply, Sewerage and drainage, Solid waste management
2017 -2025		24	5358.90	8.62	9.15	
1997 -2025		52	7189.69	8.17	8.65	

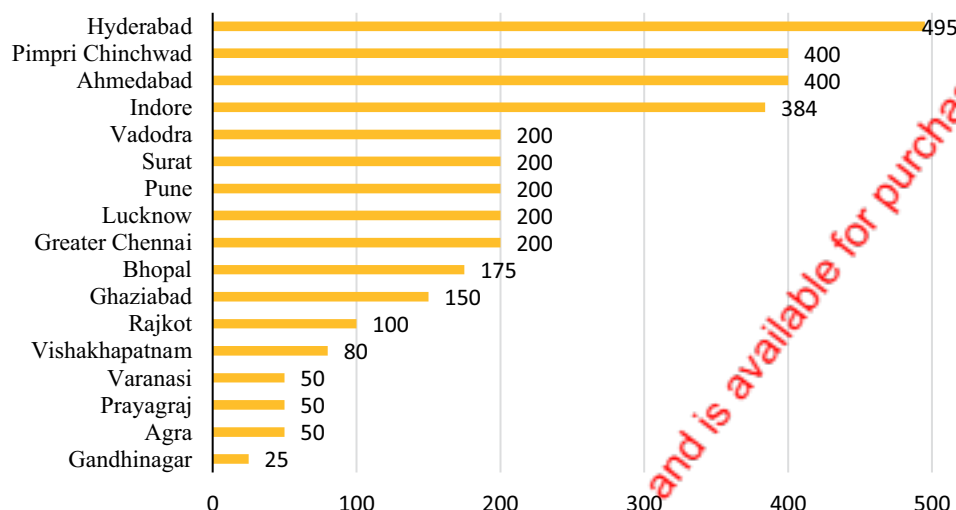
Source: SEBI Statistics on Municipal Bonds, Various Research Papers and Reports; Author's creation.

Type and Nature of Municipal Bonds Issued in India

The municipal bonds issued (around 52 issuances till June 2025, totalling an outstanding amount of INR 7189 crores) in India generally have a tenure of 3 to 10 years (with an average maturity of around 8 years), offering an annual coupon in the range of 7.15 to 10.23 percent

(average coupon of 8.65 percent). These bonds are mostly Taxable (issued after 2016) and are revenue bond in nature, issued for specific projects (such as: Urban infrastructure, Road & Transport, Water Supply & Sanitation, Sewerage, Smart city Infrastructure, Solar Power, etc.), tying up their repayment directly with the revenues generated by those respective projects. However, challenges such as lack of

FIGURE 2.2
Municipal Bond Issuance in India (2017-25) (Rs. Cr.)



Source: SEBI Statistics on Municipal Bonds. Author's creation.

liquidity (majorly privately placed), limited investor awareness, poor financial health and therefore the creditworthiness (i.e., Credit Rating) of many ULBs, and absence of guarantees from the respective state governments continue to hinder the growth of India's municipal bond market. Moreover, majority of the municipal bonds in India are issued through private placements and have a high face value of INR10 lakhs, restricting the access for retail investors, and thereby limiting the investor base.

Importance of Municipal Bond in support of Growing Urbanization in India

Even if the traditional channels (Own Tax and Non-tax Revenue, Governmental Transfers) continue to be the important sources for municipal financing in majority of the world economies, municipal bonds could be a suitable, effective, and sustainable option (World Bank, 2014), especially for those economies with a reasonably developed market for bonds (Govt. and Non-Govt.), for the ULBs to support the increasing urbanization in emerging economies like India.

More specifically, the importance of Municipal Bonds to support India's growing urbanization are as follows:

- (a) *Addressing Urban Infrastructure Deficit:* In line with India's vision of urbanization by the year 2050, the urban infrastructure investment requirement of the country is estimated to be a few trillion rupees over the next two decades. Municipal bonds market can prove to be an important avenue to tap into long-term capital for large-scale projects such as water supply, sanitation, waste management, and urban mobility.
- (b) *Encouraging Financial Discipline and Transparency:* ULBs with poor and non-transparent financial management practices once approach the capital market for financing their long-term projects, would require them to follow a standard process (credit rating, project feasibility, audited accounts, etc) of preparing for the bond issuance, that automatically promotes a better financial practices, financial discipline and transparency within
- (c) *Reducing Dependence on Grants and Loans:* Overdependency on slow and unpredictable intergovernmental transfers and loans from commercial banks, multilateral and bilateral agencies, developmental financial institutions,

etc., leading to a mismatch between growing urbanization and the required infrastructure, could be avoided by diversifying the financing portfolio of ULBs through issuing municipal bonds.

Municipal bond market undoubtedly offers a transformational opportunity for Indian ULBs to enhance their fiscal capacity and take charge of urban infrastructure development. However, their effective use hinges on improved governance, institutional capacity, and a supportive regulatory ecosystem.

Government Initiatives to Develop the Municipal Bond Market in India

Growing urbanization, huge infrastructure deficit and fiscal limitations of ULBs to support the same, limitations of traditional financing channels, etc. are all well recognized by all the stakeholders, especially the Government bodies, impacting a successful urbanization and an overall economic growth. The Central and State Governments in India have not only initiated several reforms, but also introduced targeted schemes and policies to create an enabling environment, promote financial discipline, and stimulate capital market access for the ULBs. Following are a few important initiatives in support of ULBs raising finance through municipal bond market.

- (i) *Smart Cities Mission*: The Govt. has launched the Smart Cities Mission (SCM) in the year 2015 aimed to drive citizen-centric and technology-enabled urban transformation. ULBs under SCM were encouraged to mobilize private and capital market resources, such as issuance of municipal bonds.
- (ii) *Atal Mission for Rejuvenation and Urban Transformation (AMRUT)*: The AMRUT scheme, launched alongside SCM, focusing on projects like water supply, sewerage, and urban transport, encouraged ULBs to have valid credit rating as a preparatory step for the issuance of municipal bonds. This scheme also supported reforms in property tax and user charges, aimed at improving revenue base for debt servicing.

The AMRUT scheme also has an Interest Subsidy Mechanism, lowering the cost of borrowing even for smaller and low rated ULBs, under which ULBs may get up to 2 percent of the interest cost reimbursed by the Central Government per year for a maximum of 7 years, with a cap of INR 13 crore per INR 100 crore of bond issue under the scheme. The concerned ULB would require to fulfil a few eligibility criteria: (a) ULB must have completed a credit rating exercise under AMRUT; (b) ULB must achieve at least investment grade (BBB- or equivalent); and (c) ULB must successfully issue municipal bonds for infrastructure projects aligned with the AMRUT goals.

- (iii) *Pooled Finance Development Fund (PFDF)*: The PFDF Scheme, managed by MoHUA, provides financial and technical support to state-level pooled finance mechanisms, enabling ULBs, especially small ULBs with poor creditworthiness, to access bond markets collectively, with partial credit enhancement via guarantees and escrow accounts.
- (iv) *Credit Rating and Capacity Support*: As part of capacity building, MoHUA launched credit rating exercises for over 160 cities in collaboration with ICRA, CARE, and CRISIL. Necessary grants were also made available to fund transaction advisors and help bond issuing ULBs to prepare bond documentation.
- (v) *Incentives for Green and Sustainable Bonds*: With growing interest in climate-resilient infrastructure, ULBs issuing green bonds may qualify for preferential tax treatment, priority evaluation under urban climate initiatives, partnerships with development banks for blended finance.
- (vi) *Digital Tools and Transparency Platforms*: The government, with support from civil society (e.g., Janaagraha), introduced online platform (like www.cityfinance.in) to improve budget transparency, track grants and bond proceeds, publish

audited financials, and thereby enhance investor confidence and improve the readiness of ULBs to access the bond market.

2.6. Scope of Indian ULBs to use the Bond Market to Raise Finance

Being an economy with reasonably deep market for Govt. and Non-Govt. securities, the practice and utility of market borrowing is quite established in India. At the same time, the importance of municipal bonds as an effective channel for municipal financing is also well recognized. Therefore, there is a tremendous scope, as supported by the following points, for Indian ULBs to tap the municipal bond market to raise finance:

- (A) *Rising Urban Investment Needs:* India's urban population is projected to rise to nearly 600 million by 2030 (NITI Aayog, 2018), placing immense pressure to create sufficient housing, sanitation, mobility, and climate-resilient infrastructure. As estimated by a High-Powered Expert Committee (HPEC), there would be a requirement of around INR 39 lakh crores in capital investment over 20 years to create such urban infrastructure. Municipal bonds offer a viable long-term financing option, especially for revenue generating projects like: Water supply and sewerage systems, Solid waste management, Renewable energy and urban mobility projects, Smart city infrastructure and integrated command centres.
- (B) *Bankable Project Pipelines:* ULBs that are financially stronger and have access to a clear pipeline of revenue-generating projects (such as: User charge-based water supply systems, Metered municipal services, Solar and green infrastructure projects with viable tariff structures, etc.) are better positioned to issue bonds.
- (C) *Enabling Creditworthiness:* Municipalities with regular audits, clean balance sheets, and reasonable credit rating are

more likely to attract investor interest. ULBs can further enhance their creditworthiness by: improving property tax collection efficiency, reducing receivables and operational leakages, and demonstrating consistent surpluses from core services.

- (D) *Institutional Support and Capacity Building:* Support from state governments and central schemes (e.g., AMRUT, Smart Cities) can enable this capacity transformation.

Challenges faced by ULBs to Tap the Municipal Bond Market

Despite a tremendous scope for ULBs to tap the bond market, supported by multiple reforms and schemes, many Urban Local Bodies in India continue to face significant barriers/challenges (financial, institutional, regulatory, and market-related dimensions) in accessing the municipal bond market. A list of them are summarised below:

- (i) *Weak Financial Health:* A key deterrent for ULBs for its overall smooth functioning is their fragile financial condition, caused by: inadequate own-source revenues (OSR); poor collection efficiency in property taxes and user charges; and high dependency on unpredictable intergovernmental transfers. In order to meet the debt servicing requirements of bond issuances, ULBs need to ensure a sustained revenue surplus.
- (ii) *Absence of Credit Ratings and Financial Audits:* Many ULBs do not possess a formal credit rating, even after the Govt. initiative to rate a large number of cities under the AMRUT scheme, which are a prerequisite for bond issuance under SEBI guidelines. Although over 160 cities were rated under AMRUT, only a small fraction achieved investment-grade ratings (BBB and above), providing investors a level of confidence. Further, delays in auditing of accounts and lack of standardized financial statements reduce transparency and investor trust.

- (iii) *Legal and Institutional Constraints*: ULBs are subject to state-specific municipal acts, many of which impose borrowing caps, require multiple layers of approval, or lack provisions for market borrowing.
- (iv) *Capacity Deficits*: Limited technical and managerial expertise hampers the ability of ULBs to undertake the necessary pre-issuance formalities, such as preparation of bankable projects, conducting financial modelling and risk analysis, navigating regulatory compliance and disclosure processes, etc.
- (v) *Weak Investor base*: The municipal bond market in India is still very shallow, majorly dominated by institutional investors and minimal retail participation, negligible liquidity in the secondary market, lack of awareness and lower risk appetite for municipal bonds.
- (vi) *Political Interference and Governance Issues*: Even though the ULBs are expected to strengthen their own revenue (tax and non-tax), they often face political constraints in raising tariffs or enforcing user charges. Further, short tenure of elected officials and frequent transfers of senior bureaucrats affect continuity and long-term planning, which are essential for successful bond programs.
- (vii) *Absence of Credit Enhancement Mechanisms*: Credit enhancement, such as partial guarantees or escrow accounts, are very important to improve the credit rating of municipal bonds. However, a few states only have established institutional mechanisms for providing these facilities.
- (viii) *Coordination with State Governments*: ULBs often lack autonomy in capital planning, and lacks proper coordination with state departments, resulting into procedural delays and misalignment of project priorities.

2.7. Summary and Conclusions

India is entering a decisive phase of urban transformation, with nearly half of its population projected to live in cities by 2047 and urban areas expected to contribute more than 75% of GDP by 2030. This demographic and economic shift creates unprecedented demand for housing, water, sanitation, transport, and climate-resilient infrastructure. However, India's Urban Local Bodies (ULBs) face chronic underfunding, with their expenditures at less than 1% of GDP, compared to 8%–14% in developed economies.

Global experience, especially in the United States where municipal bonds account for over USD 4 trillion outstanding, shows that well-structured muni markets enable cities to mobilize long-term, low-cost funds while promoting accountability and investor confidence. In India, the municipal bond journey began in 1997 (Bangalore) and, after a long pause, revived post-2015 under SEBI's framework and MoHUA's AMRUT and Smart Cities Mission. Between 1997 and mid-2025, around 52 bond issuances totalling ~ INR 7,200 crore have taken place. Cities like Ahmedabad, Indore, Hyderabad, Pune, Pimpri Chinchwad, and Lucknow have demonstrated the potential of muni bonds, including green-labelled bonds financing water, sewage, solid waste, flood mitigation, and renewable energy projects.

To unlock the full potential of municipal bonds, facilitating Indian ULBs to effectively finance their infrastructure expenditure, and thereby meaningfully contributing to the growing urbanization, a series of important reforms need to be gradually undertaken: (i) Expand credit enhancement mechanisms (escrow, pooled finance, state-level guarantees) to improve ratings and thereby lowering the borrowing costs of Indian ULBs; (ii) Introducing tax incentives (partial or full tax exemption) to widen the investor base and attract retail participation; (iii) Deepening market infrastructure by lowering face value, enabling wider participation from individual/retail investors, mutual funds, and also promoting active secondary market trading; (iv) Institutionalizing transparency and accountability, making audited

financials, project pipelines, and bond proceeds tracking available on public platforms; and (v) Promoting green municipal bonds, aligned with ESG finance and climate adaptation needs.

In conclusion, municipal bonds in India are not just a financial tool but a strategic instru-

ment for sustainable urbanization. By aligning governance reforms, fiscal decentralization, and market development, India can scale its municipal bond market closer to the standards of the US and Europe, ensuring that ULBs become self-reliant engines of urban growth and national economic development.

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