Assessment of Municipal Borrowing Policy Framework for Improved Infrastructure Financing

Submitted By

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A research report submitted to the Faculty of Management, University of the Witwatersrand, in 50% requirement of the requirements for the degree of Master of Management (in the field of Public Policy).

January, 2023

Abstract

Since the advent of democracy, there has been pressure to increase investments in public infrastructure. Municipalities are at the centre of socio-economic development and are best placed to redress historical infrastructure inequalities. This requires adequate budgets; however, the fiscal landscape has deteriorated significantly since the 2008 financial crisis. As a result, municipal budget allocations have been reduced. This has triggered a discourse on alternative municipal financing mechanisms. The purpose of this study was to determine the determinants of municipal borrowing and if the Municipal Borrowing Policy Framework has improved borrowing for infrastructure investment. The study elevates 15 determinants of municipal borrowing in the financial, socio-economic, political and governance, and institutional categories. The financial variables dominate the findings with a 60 percent prevalence rate. The top four determinants are poor municipal credit worthiness, poor municipal fiscal capacity and effort, overreliance on developmental funding and failure to crowd-in international funding, and non-payment of services.

Declaration

I, **Moramahoele JJ Matsie,** declare that this report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Management in the field of Public Policy (MMPP) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other university.

Moramahoele JJ Matsie
06 January 2023

Dedication

This study is dedicated to my wife, Brenda Mpho Matsie and the broader family for the love and unwavering support they provided throughout the academic journey.

Acknowledgements

“What you know is merely another form of prejudice, a different kind of conditioning. All response of thought is conditioned” - J. Krishnamurti.

I am eternally grateful to my colleagues in the local government sector for all the lessons over the years. Thanks to all the respondents for participating in the study. I am also grateful to my supervisor, Dr John Khumalo, for the guidance and counsel provided throughout the study. Thanks for your belief and patience throughout this academic journey.

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List of abbreviations

Abbreviations	Description
BRT	Bus Rapid Transit
DBSA	Development Bank of Southern Africa
DFIs	Development Finance Institutions
CIPFA	Chartered Institute of Public Finance and Accountancy
GAAP	Generally Accepted Accounting Practices
GDP	Gross Domestic Product
IDPs	Integrated Development Plans
JSE	Johannesburg Stock Exchange
LGFF	Local Government Fiscal Framework
LGFV	Local Government Financing Vehicle
LOBO	Lender Option Borrower Option
MBA	Municipal Bond Agency
MBPF	Municipal Borrowing Policy Framework
MDBs	Multilateral Development Banks
MFMA	Municipal Finance Management Act
MFPFA	Municipal Fiscal Powers and Functions Act
MPF	Municipal Pooled Financing
MPRA	Municipal Property Rates Act
NDP	National Development Plan
PBF	Prudential Borrowing Framework
PPPs	Public Private Partnerships
PWLB	Public Works Loan Board
PFMA	Public Finance Management Act
RFI	Request for Information
SALGA	South African Local Government Association
SPV	Special Purpose Vehicle
TIF	Tax Incremental Financing
WSE	Warsaw Stock Exchange

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CHAPTER ONE - INTRODUCTION

1.1 General introduction

Developmental local government is a term used to describe a system of local government that focuses on attaining pre-determined socio-economic development objectives (Koma, 2012). Municipalities must catalyse strategic infrastructure investments within local and regional economies to achieve the objectives of developmental local government (Local Government White Paper, 1998; Constitution of South Africa, 1996). The National Development Plan (NDP) 2030 identifies infrastructure development as a catalyst for spurring economic growth, reducing unemployment, and promoting inclusion. The cost of infrastructure development is substantial relative to municipal revenue, and it cannot only be funded from grants, rates, and taxes. Therefore, other complementary revenue sources should be explored by municipalities to achieve their developmental mandate.

The decentralised local government system in South Africa grants municipalities various revenue-generating instruments to meet their constitutional obligations. It also creates an enabling environment for municipal borrowing. The differentiated characteristics of municipalities mean that not all can access debt capital markets to finance infrastructure development (Glasser & White, 2004). Metropolitan and intermediate cities with diversified economic sectors can access debt capital markets, while rural and small municipalities are struggling to do so. Local government has three sources of revenue for the performance of its roles and responsibilities. These revenue instruments are comprised of self-generated revenue (rates and taxes), intergovernmental grants / transfers, and municipal borrowing (National Treasury, 2011). This study focuses on municipal borrowing, a revenue stream that is yet to be fully explored by most municipalities. Municipal borrowing is an important fiscal instrument for expanding and diversifying municipal revenue bases to enable capital investment (Financial and Fiscal Commission, 2014).

Borrowing is often regarded as a revenue instrument that is suitable for financing infrastructure. It allows for financing and debt repayment costs to be matched with the accrued socio-economic benefits, in line with the intergenerational equity principle. The Municipal Borrowing Policy Framework (MBPF) was promulgated in the year 2000 to regulate municipal borrowing. The latest version of the MBPF was published in 2017. It gives municipalities the authority to access debt capital markets in order to invest in economic infrastructure (National Treasury, 2017a).

The MBPF is premised on the principles that municipal borrowing is a function of creditworthiness, long-term borrowing and repayment capacity, adequate risk rating and pricing, and no guarantees from the central government. To enhance municipal borrowing levels, the MBPF was updated to include alternative financing instruments such as municipal pooled financing (MPF), tax incremental financing (TIF), revenue bonds, and project finance mechanisms (National Treasury, 2017a). There are many antecedent studies that focus on municipal own revenue and intergovernmental transfers (Mazibuko & Fourie, 2013; Madumo, 2015). However, few studies that focus on municipal borrowing exist. This study seeks to evaluate the impact of MBPF in facilitating municipal debt for infrastructure financing and development over five years, from 2015 to 2019.

1.2 Municipal sectoral context

The advent of South Africa's democracy in 1994 exposed extreme inequalities along racial lines for the new government. Prior to 1994, there were significant backlogs in basic services for the majority black Africans (Statistics South Africa, 2019). The democratic government identified municipalities as key institutions for driving socio-economic development. Municipal functions are listed in Part B of Schedules 4 and 5 of the Constitution. The main functions of municipalities include, electricity and gas reticulation, storm water management, water and sanitation, municipal roads, sports facilities, and refuse removal. In relation to municipal budget composition, basic services such as electricity, and water and sanitation, account for approximately R127 billion (30 percent) of the aggregated municipal operational budgets of R419 billion (National Treasury, 2022a). Most of this expenditure is incurred by the metropolitan and local municipalities.

Table 1.1 shows that municipal capital revenue was R73.4 billion in 2019. This amounted to 17 percent of total municipal revenue of R363 billion. Capital revenue is composed of grants, which make up 55 percent, borrowing and own revenue, each at 22 percent (National Treasury, 2019). Therefore, there is a heavy reliance on grant funding by municipalities. There is room for diversifying the municipal revenue mix through the introduction of new own revenue and debt-raising instruments to augment or optimise the existing revenue streams.

Table 1.1 Municipal capital budget: 2015 – 2019

Revenue Item	2015	%	2016	%	2017	%	2018	%	2019	%
Grants	32,489	59	40,533	60	39,653	58	42,208	60	40,319	55
Public contributions	4,953	9	1,618	2	999	1	835	1	741	1
Borrowing	7,837	14	11,674	17	11,603	17	13,327	19	16,196	22
Internally generated	10,170	18	14,093	21	16,594	24	14,253	20	16,154	22
Total	**55,449**	**100**	**67,917**	**100**	**68,849**	**100**	**70,623**	**100**	**73,411**	**100**

Sources: National Treasury, 2015c, 2016b, 2017a, 2017b, 2018b, 2019.
Note: All numbers in Rand millions

Municipal borrowing is a function of municipal revenue, socio-economic profile, good municipal governance and performance. To be eligible for financing, municipalities must have adequate fiscal capacity and effort. This should be supported by institutional and governance stability (Vulovic, 2010). Therefore, any municipal borrowing assessment should take into consideration all these important variables. Municipalities governing small towns with singular economic sectors like farming tend to have low revenue bases, outflows of population, and limited reasons for infrastructure expansion. It is mostly metros and secondary cities that are utilising their borrowing powers due to large economies, populations, and revenue bases.

Table 1.2 illustrates varying municipal revenue generation, debt capacity, and repayment levels. These variations are stark even within the same category of municipalities. Metros' average debt-to-revenue ratio is approximately 23 percent, while that of other municipalities is 5.1 percent. In relation to borrowing, municipalities participate in primary and secondary financing markets, where they interact with various lenders. Table 1.2 shows that metropolitan municipalities account for R61.2 billion, or 87 percent, of total outstanding municipal debt. The City of Johannesburg is the single biggest borrower, accounting for approximately 33 percent, or R23.2 billion. The collective debt owed by other municipalities is R9.1 billion, a rate that is equal to the debt of Ekurhuleni metro.

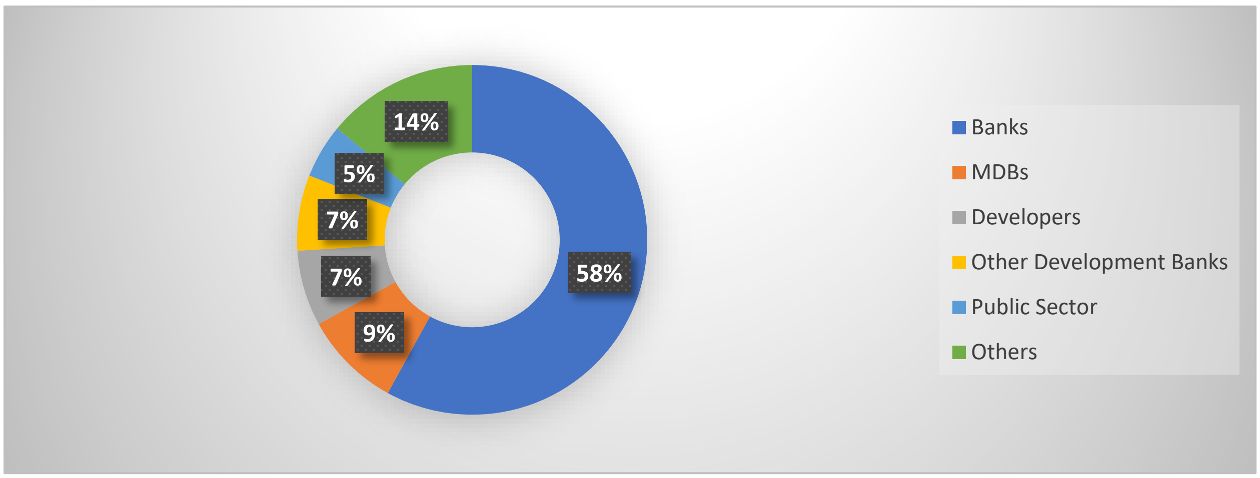
Table 1.2 Outstanding long-term debt: 31 December 2021

Municipalities	Total Outstanding Debt (R' Millions)	% of Total Outstanding Debt	Budgeted Operational Revenue (R'million)	Debt to Revenue Ratio %
Metros				
Buffalo City	211	0.3%	8,234	2.6%
Nelson Mandela Bay	1,134	1.6%	12,836	8.8%
Mangaung	679	1.0%	8,074	8.4%
Ekurhuleni	9,270	13.2%	42,936	21.6%
Johannesburg	23,181	32.9%	65,847	35.2%
Tshwane	11,255	16.0%	38,994	28.9%
eThekwini	8,622	12.3%	43,657	19.7%
Cape Town	6,890	9.8%	47,512	14.5%
All Metros	**61,242**	**87.0%**	**268,090**	**22.8%**
Locals and Districts				
19 Category B1 Local Municipalities	5,939	8.4%	64,475	9.2%
Other Local Municipalities	2,699	3.8%	91,076	3.0%
District Municipalities	476	0.7%	24,234	2.0%
All Local and District Municipalities	**9,114**	**13.0%**	**179,785**	**5.1%**
All Municipalities	**70,356**	**100.0%**	**447,875**	**15.7%**

Source: National Treasury, 2022b.

Public sector lenders continue to dominate municipal borrowing. In December 2021, they were owed R36.2 billion, compared to the R33.9 billion owed to the private lenders. Municipalities borrow from domestic development finance institutions (DFIs), pension funds and insurers, international DFIs, commercial banks, and other lenders. The Development Bank of Southern Africa (DBSA) was owed R31.2 billion, or 44.4 percent, and commercial banks about R19 billion, or 27 percent. The rest is shared amongst other lenders in proportions not exceeding R10 billion (National Treasury, 2022b). Aggregated outstanding long-term debt for all municipalities grew by almost R1.9 billion between December 2020 and December 2021. Despite municipalities having taken up a total of R5.2 billion in new long-term borrowings between December 2020 and December 2021, the overall outstanding long-term municipal debt has only gone up by about R1.9 billion over the same period (National Treasury, 2022b). Figure 1.1 illustrates global investment patterns. It shows that municipalities can forge partnerships with the commercial banking community to crowd-in private investment into public infrastructure. DFIs and multilateral development banks (MDBs) also remain key players in the infrastructure financing space.

Figure 1.1 Private investment in infrastructure projects by middle- and low-income countries and financier type: 2021



Source: Global Infrastructure Hub, 2022.

The lingering effects of the COVID-19 pandemic imply declining investment trends in low-to-middle-income countries. In 2021, private investment in infrastructure projects grew by 8.3 percent in high-income countries, while investment in middle- and low-income countries fell by 8.8 percent (Global Infrastructure Hub, 2022). This trend is also applicable to South Africa, with the public infrastructure investment to Gross Domestic Product (GDP) ratio being around 13 percent (1960 levels). The NDP targets a 30 percent investment-to-GDP ratio by 2030. Given the fiscal constraints, substantial private capital is necessary to reach this target. It is in this context that the study considers municipal borrowing as an important developmental ingredient.

1.3 Problem statement

South Africa's developmental agenda requires municipalities to invest in large scale infrastructure projects to meet their objectives. Despite borrowing generally being one of the infrastructure financing instruments, Table 1.1 above demonstrates that borrowing is not the main source of municipal infrastructure financing in South Africa. Capital grants or intergovernmental transfers are the main source of capital financing. To provide an optimal infrastructure financing mix, municipalities must consider borrowing to balance against their other own revenue sources. Although municipal borrowing has experienced nominal growth over time, in real terms after adjusting for inflation, the trends have remained flat (National Treasury, 2017a; Glasser, 2020). However, there is capacity for municipalities to take on additional borrowing (National Treasury, 2020b). This is supported by the debt-to-revenue ratio in Table 1.2.

Despite the country's laws allowing municipalities to borrow for capital investments, many municipalities have not taken up borrowing or other alternative infrastructure financing opportunities. This is despite those municipalities being creditworthy (Financial and Fiscal Commission, 2017). Municipalities have struggled to generate surpluses from their own revenue sources to fund capital budgets since the 2008 recession (Financial and Fiscal Commission, 2014). As indicated earlier, municipal capital budgets between 2015 and 2019 show significant reliance by municipalities on national grants at an average of 58 percent of total capital budgets. Internally generated sources averaged 21 percent, while municipal borrowing was the third largest contributor at 18 percent.

1.4 Purpose

The purpose of this study is to investigate various factors that are impeding the MBPF to further enable or enhance municipal borrowing levels for infrastructure development. Therefore, the main objective of this study is to evaluate the determinants of municipal borrowing and if the MBPF is sufficient to result in improved municipal borrowing for infrastructure financing in South Africa.

1.5 Research questions

The study's research questions are as follows:

- What are the determinants and drivers of municipal borrowing performance between 2015 and 2019?
- Is the MBPF adequate for improving municipal borrowing performance and trends?

1.6 Research methodology and sampling

The study used two qualitative methods where interviews and documents reviews were conducted to achieve its intended purpose and objectives. Therefore, various municipal strategic documents, such as annual reports and integrated development plans (IDPs), and National Treasury publications covering the five-year period have been reviewed. 15 respondents from the National Treasury, the City of Johannesburg, and the Midvaal municipalities were interviewed. In other words, these three institutions comprise the study's sample.

1.7 Research outline and structure

The research consists of five chapters that are outlined in Table 1.3.

Table 1.3 Structure of thesis

Chapter	Description
Chapter 1: Introduction	Summarises the introduction, context, problem statement, purpose, research methods and the outline of the study.
Chapter 2: Literature review	Covers the review of relevant municipal borrowing literature.
Chapter 3: Research methodology and data	Outlines the research methodology and provides the rationale for research methods and sample.
Chapter 4: Research findings	Presents, analyses, and interprets the research findings.
Chapter 5: Conclusions and recommendations	Summarises the conclusions and recommendations of the research.

CHAPTER TWO – LITERATURE REVIEW

2.1 Introduction

A review of the literature is necessary for the critical analysis and achievement of the study's objectives. Literature review is essential for establishing antecedent research already conducted in related fields of study. It entails the review of existing scholarly publications and the available body of knowledge to determine the way the problem statement was investigated by other researchers. More importantly, the aim of the literature review is to determine how other scholars theorised and conceptualised emerging issues and presented empirical findings in a particular field of study (Mouton, 2001). Therefore, a literature review acquaints the researcher with discussions and contemporary discourse in the field of interest. This is to validate the relevance of the research and provide a source of triangulation for research findings (Lourens, 2007).

This chapter reviews the relevant domestic and international municipal borrowing literature to survey existing studies, debates, and literature gaps. It is the foundation of the thesis. The South African literature is considered within the context of the MBPF and related public policy and legislation. This is done in Sections 2.2 and 2.3. Section 2.4 summarises relevant public economics theories, while Section 2.5 deals with international municipal borrowing literature covering China, Poland, India, and the United Kingdom. Finally, a conceptual framework is developed and presented in Section 2.6, based on the reviewed literature.

2.2 The South African local government fiscal framework

The local government fiscal framework (LGFF) is comprised of council approved budget choices. The fiscal decisions on the expenditure side must be supported by various revenue options on the income side (Mazibuko & Fourie, 2013). As indicated in Chapter 1, municipal sources of revenue include own rates and taxes, intergovernmental transfers, and borrowing. Sources of revenue are outlined in the LGFF. Fiscal framework is defined as arrangements, procedures, rules, and institutions underlying the conduct of government's budgetary policies. An ideal fiscal framework allots municipalities revenue sources that correspond to their assigned functions (National Treasury 2011). The LGFF provides policy guidelines and supporting revenue instruments for municipal borrowing to stimulate infrastructure financing. Municipalities may use all three sources of revenue to finance their infrastructure investments.

As indicated in Chapter 1, an adequate municipal revenue base comprising of rates and taxes and supported by grants is necessary for the positive creditworthiness of municipalities. To access borrowing, municipalities must demonstrate fiscal discipline and integrity in their governance to stimulate investor confidence. Intergovernmental conditional grants are allocated to municipalities for infrastructure development in the fulfilment of broader national priorities (free basic services and infrastructure backlog eradication). Table 2.1 below summarises the key legislative provisions within the LGFF.

Table 2.1 Legal framework for local government funding sources

Source of local government Funding	Constitutional Provisions	Governing Legislation	Description
Rates on property	Section 229 and 227(2)	Municipal Property Rates Act (MPRA)	MPRA of 2004 allows local and metropolitan municipalities to charge property rates – a general tax to pay for services whose consumption is not exclusive.
Surcharges on fees for services provided by or on behalf of the municipality	Section 229 and 227(2)	Municipal Fiscal Powers and Functions Act (MFPFA)	Surcharges, other taxes, levies, and duties other than property rates, are regulated by the MFPFA.
Service charges/ fees, administrative fees, fines, credit control and debt collection	Section 229 and 227(2)	Municipal Systems Act Municipal Finance Management Act (MFMA) National Roads Traffic Act Electricity Act and Electricity Regulation Act National Water Act Spatial Planning and Land Use Management Act	Municipalities may charge tariffs for services consumed. Section 74(2) of the Municipal systems Act prescribes the tariff policies municipalities must apply to levy fees for services provided.
Other taxes, levies, or duties	Section 229 and 227(2)	MFPFA	Surcharges, other taxes, levies, and duties other than property rates, are regulated by the MFPFA.
Borrowing	Section 230A	MFMA	The MFMA aims to modernise local budget, accounting, and financial

			management practices. Municipal borrowing is recognised in the Constitution. Borrowing linked to the municipalities' capital budget through access to financial markets.
Local government equitable share of nationally collected revenue	Section 214 and 227	Intergovernmental Fiscal Relations Act The annual Division of Revenue Act	The local government equitable share – an unconditional transfer aiming to address the vertical fiscal imbalances between national and local government. The main objective is to subsidise the constitutional obligations of free basic services for households that cannot afford them.
Fuel levy sharing with metropolitan municipalities	Section 229(1)(b)	The annual Taxation Laws Amendment Act	Regional service council (RSC) levies replacement grant and the General Fuel Levy for districts and metros.
Conditional grants from national government	Section 214(c), 226(3) and 227(1)(c)	Intergovernmental Fiscal Relations Act The annual Division of Revenue Act The annual National Appropriation Act	Conditional grants are transfers to municipalities for specific infrastructure purposes set out in the conditional grant frameworks in the Division of Revenue Bill. The Division of Revenue Bill published annually by National Treasury provides detailed schedules and conditions governing intergovernmental grants and their allocations.
Conditional grants from Provincial government	Section 226	The annual Division of Revenue Act The annual Appropriation Act of the relevant province	

Source: National Treasury, 2011.

The Constitution of the Republic of South Africa recognises municipalities as executive authority institutions with their own objects, functions, and fiscal assignments. The Constitution, in Section 230A, goes further to outline the rights and conditions under which municipal councils can raise loans. The Constitution states that a municipal council may raise a loan for both capital and current expenditures. Loans for capital expenditures must be long-term in nature, with short-term debt incurred and repaid within a year to bridge expenditure gaps.

The period between 1998 and 2003 resulted in the enactment of various important pieces of municipal borrowing legislation. The MFMA came into law in 2003, after extensive political consultation and consensus amongst all key stakeholders (Brown et al., 2013). Chapter 6 of the Act details conditions under which borrowing may be undertaken by municipalities. The MFMA allows long-term debt for new infrastructure investment and refinancing of existing long-term debt. It makes provision for public participation processes to be undertaken by municipalities intending to incur any long-term debt.

The MFMA also details other expenses that can be capitalised into the long-term debt, like interest incurred and initial transaction costs. The golden fiscal rule is that local government debt will not be guaranteed by provincial and national governments. According to Brown et al. (2013), the MFMA brought regulatory certainty to municipal borrowing and procedures. Vulovic (2010) observes that the golden rule coupled with debt limits can reduce the chances of a debt crisis. The results of the local government revenue assignment are summarised in Table 2.2. Revenue from service charges is the single largest operational revenue source at 49.4 percent or R213.5 billion, property rates account for 17.8 percent, and operational transfers mostly made up of the local government equitable share, are the second largest revenue source at 21.2 percent.

Table 2.2 Consolidated municipal budget and actual performance: 2021

Component	R' Millions	% of Total
Budgeted Items		
Operational Revenue	447,875	91.6%
Capital Revenue	41,143	8.4%
Total Revenue	**489,018**	**100.0%**
Operating Expenditure	452,274	86.8%
Capital Expenditure	69,016	13.2%
Total Expenditure	**521,290**	**100.0%**
Actual Items - Operational		
Property Rates	76,785	17.8%
Service Charges	213,551	49.4%
Transfers and Subsidies	91,851	21.2%
Other Own Revenue Sources	50,329	11.6%
Total Operational Revenue	**432,516**	**100.0%**
Employee Costs	130,032	39.0%
Materials and Bulk Purchases	138,592	41.6%
Depreciation and finance charges	34,107	10.2%
Other Expenditure	30,373	9.1%
Total Operational Expenditure	**333,104**	**100.0%**

Source: National Treasury, 2022c

2.3 Domestic municipal borrowing policy framework

The MBPF falls within the ambit of public regulatory policy. Chochran & Malone (1999) define public regulatory policy as rules and laws that allow the national government to direct the behaviour of local governments. The MBPF falls within the realm of regulatory policy as it aims to regulate municipal borrowing conduct. The key objective of the MBPF regulations is to respond to a changing municipal borrowing environment, improve municipal creditworthiness, and stimulate additional private sector municipal lending appetite (Glasser et al., 1998). Municipal credit worthiness implies that municipalities have sufficient revenue sources, financial capabilities, and experience in debt management. Creditworthiness constitutes demand and supply side factors that are assessed in the lending process. Credit worthiness is a prerequisite for municipal borrowing (Liebig et al., 2008). Municipal borrowing is a function of credit worthiness defined by proper budgeting practices and sound financial management (Local Government White paper, 1998). Martinez-Vazquez & Vulovic (2017) emphasise the importance of a good reputation in the debt capital markets.

The 2017 MBPF Update acknowledges that the municipal sectoral context is dynamic and has changed since the publication of the original policy framework. Investment priorities by municipalities have evolved to include greater emphasis on urbanisation, economic growth, and maintenance of existing infrastructure. Innovative and sustainable financing is necessary for mitigating climate change effects in relation to new and existing infrastructure. Public infrastructure investment needs remain high, however, borrowing from the public sector has outpaced private lending, mainly due to bankability challenges. To worsen the situation, the fiscal landscape is constrained, and fiscal consolidation has a negative effect on infrastructure grants to municipalities. This further constrains their revenue sources.

The South African MBPF adheres to some practices that published literature deems necessary to maintain optimal municipal borrowing practices. The 2017 MBPF Update maintains the core underlying principles of the original policy. The fiscal rules and core principles include continued commitment to creditworthiness as the primary eligibility requirement for municipal borrowing. The MBPF maintains the golden rule of only allowing long-term borrowing for capital infrastructure, with municipalities not permitted to receive debt guarantees from other spheres of government. Therefore, there are no bailouts for municipal defaults. As a result, approval by the National Treasury for pledging municipal conditional grants as loan or debt securities was removed in the Division of Revenue Bill (National Treasury, 2021).

This approval by the National Treasury was misconstrued by lenders as the National Treasury guaranteeing municipal debt. Dzialo (2019) argues that the national government's control of municipal debt might be misconstrued by creditors as a guarantee with sovereign contingent liability implications in cases of default by municipalities. The exclusion of grant pledge approvals by National Treasury removes any ambiguity about National Treasury's co-ownership of the debt to be incurred. These firm principles have ensured that municipal councils are squarely responsible and accountable for municipal debt. The rules promote municipal fiscal discipline.

On the innovation front, the updated MBPF removed legislative limitations to enable increased municipal participation in debt capital markets. It has introduced alternative borrowing options for municipalities such as MPF, TIF, revenue bonds, and project financing approaches. Despite this, municipal borrowing remains a linear function of good creditworthiness. The alternative options must be considered within the ambit of the MFMA and its compliance requirements. Despite the reforms, South Africa is yet to have a successful special purpose vehicle (SPV) type of financing arrangement for local government. The DBSA has been piloted as the prospective SPV for municipal pooled bonds. The MBPF proposes that a full review of the potential of the bank to undertake this role be explored.

The current MBPF posits that DFIs must place more emphasis on their developmental mandates and objectives to improve societal outcomes. The policy argues that there is no clear policy on DFI's lending practices towards municipalities. For example, the financing of creditworthy municipalities by DFIs has distorted the financing markets that should have been financed by the private sector. Public lending institutions tend to provide competitive rates, which creates a disincentive for municipalities to consider private banks for lending (Freire & Petersen, 2004). DFIs are public sector lenders that foster, finance, and promote investment for economic growth (Massa, 2011). DFIs are meant to take on riskier aspects of municipal borrowing. DFIs should prioritise financing poor and rural municipalities. The policy advocates for the setting of developmental objectives and indicators for DFIs when transacting with municipalities. The DBSA has been a key contributor to local government debt finance since the advent of democracy. Concerns about the DBSA crowding out private markets are prevalent in South African municipal borrowing literature (Glasser et al., 1998; Glasser & White, 2004; Brown et al., 2013).

2.3.1 Municipal bonds

The municipal bond market in South Africa makes up less than 1 percent of the total securities market. Conventional loans have surpassed bonds in financing municipal infrastructure. Initially, municipal bonds used to dominate the municipal borrowing environment, but now loans account for 70 percent of total municipal borrowing (National Treasury, 2016a). Municipal bonds are listed on the Johannesburg Stock Exchange (JSE). The JSE requires compliance with certain debt listing requirements, while the MFMA also imposes certain requirements. The JSE requires that audited annual financial statements be submitted seven months after the end of the financial year. Policies on executive personnel and transacting officers, goods and services procurement policies, and disclosure on the use of loans are also JSE's mandatory requirements (Johannesburg Stock Exchange, 2020).

Revenue bonds that are issued by government institutions are underpinned by specific revenue streams. The security of revenue bonds is linked to infrastructure financing and ancillary revenue (Rose, 1953). Therefore, infrastructure that is financed through revenue bonds is self-liquidating. These are capital assets that are related to basic services infrastructure, such as water and sanitation and energy services. Municipalities are considering the use of revenue bonds as they are increasingly constrained by fiscal rules and declining revenue. Revenue bonds have a clear purpose and have an advantage of pinning or ringfencing revenue to a specific financed asset. This promotes accountability and oversight (Feng, 2013).

According to Makay (2004), municipal bond issuance is affected by municipal capability, political leadership stability, intergovernmental approval processes, and the administrative and managerial experience of the municipalities issuing the bonds. Therefore, municipal bonds are impractical to issue in an environment where revenue streams are unpredictable and unstable. Property taxes, user charges, and intergovernmental transfers are critical for supporting municipal bond issuance. 53 of the 257 municipalities have the potential to issue bonds, however, only Cape Town, Johannesburg, Ekurhuleni, and Tshwane metros have issued bonds since the advent of democracy (Glasser, 2020).

The prevailing MBPF maintains that the development and support of the secondary municipal bonds market is critical for expanding municipal borrowing. A liquid secondary market keeps municipal bonds tradable, broadens investor access, and makes them less risky for investors. Municipalities have a permanent existence with clear revenue-raising powers that are enshrined in the Constitution, therefore, municipal bonds should be positioned like sovereign bonds rather than traded as corporate bonds. Municipal bond issuance attracts substantial transaction costs. Secondary municipal bond markets could reduce such costs where financial institutions can standardise municipal debt instruments and processes.

In South Africa, institutional investors like pension funds can only have a limited participatory role in municipal bonds issuance (National Treasury, 2011). In 2021, amendments were made to Regulation 28 of the Pension Fund Act. Regulation 28 puts limits on where pooled retirement money can be invested. The new proposals allow pension funds to invest 45 percent of their funds in public infrastructure. However, there will be a limit of 25 percent on investments with a single entity. Pension funds can also invest in infrastructure via shares or bonds funding specific projects. The new amendments broaden the scope of municipal infrastructure financing (National Treasury, 2021).

2.3.2 Municipal pooled financing

The MBPF update also addresses uncertainties that are related to the MPF mechanism. The mechanism facilitates aggregate borrowing for municipalities with limited borrowing capabilities and obtains competitive rates through loans or bonds. Pooled financing is seen as an ideal mechanism for small municipalities, which would normally struggle to individually access affordable credit (National Treasury, 2015a). MPF mechanisms provide financing for municipalities at cheaper and more competitive rates than when municipalities undertake debt on their own. This is achieved by pooling municipal debts, thereby improving the credit rating of the associated SPVs, where debt issuance is in local currency. In the United States of America, MPF mechanisms are called bond banks or municipal financing corporations in Canada. The primary purpose of MPF mechanisms is to lower the cost of borrowing for municipalities that participate in them. However, on the risk side, one municipality could be responsible for another municipality's credit profile. The 2017 Update concludes that MPF mechanisms should never be considered for uncreditworthy municipalities.

Capital markets are information-sensitive, and since many municipalities do not have the required expertise to participate in these markets, MPF mechanisms are a solution (Gilbert & Pike, 1998). MPF mechanisms are most beneficial for small, less capacitated, and non-credit rated municipalities (De Angelis et al., 2017). A MPF mechanism in the form of a bond bank consolidates lending for smaller municipalities into a single debt issuance. It harmonises and standardises all the procedures and processes required for bond lending. Therefore, it results in economies of scope in administration. The proceeds from the bond bank are lent to participating municipalities to finance municipal infrastructure projects. Bond banks in the United States of America have maintained strong credit ratings without any guarantees from the national government and are yet to encounter defaults. However, as with any type of borrowing, the success of a MPF mechanism rests on the creditworthiness of municipalities borrowing from the incorporated SPVs (De Angelis et al., 2017).

2.3.3 Tax incremental financing

Land-based infrastructure financing instruments like TIF and development charges are included in the MBPF (Kitchen, 2006). TIF is a subset of land-based financing instruments. Land-based financing mechanisms leverage the increase in property rates to fund socio-economic infrastructure. There are land-based mechanisms that recoup costs directly from the beneficiaries of infrastructure investment and land-based mechanisms that capture the value not directly associated with the cost of the infrastructure investment. Development charges are land-based financing mechanisms that are levied on developers to finance enabling bulk infrastructure up front. The aim of development charges is to shift the infrastructure costs to those who will use and benefit from the infrastructure (National Treasury, 2017).

There must be a robust legal framework to facilitate TIF. The application of development charges in South Africa has been inconsistent, and policy is being reviewed to make their application more consistent (McGaffin et al., 2019). As a result, the impact of development charges in South Africa has been minimal. Developers are often unable to incur upfront costs because the tenure of real estate developments is long-term in nature and often incompatible with the available funds for large scale bulk infrastructure financing. As a result, municipalities end up having to fund bulk infrastructure costs over time. Development charges are legislated through the Municipal Fiscal Powers and Functions Amendment Bill (National Treasury, 2020a).

2.3.4 Project financing

Project financing is a form of infrastructure financing that does not depend on the viability and creditworthiness of the institution launching the project (project sponsor). It revolves around the financial viability of the financed project. Project financing does not consider the value of assets as a form of collateral by the project sponsor. What is taken into consideration is the project's ability to generate enough cash flows to repay the debt and capital invested. This structured form of financing occurs through a specific economic entity, an SPV (Gatti, 2012). Initially, project finance arrangements were only undertaken in the private sector. With time, project finance deals are increasingly being concluded in the public sector. The theory of project finance is grounded on the financial economics theory. Project finance provides a theory where separate incorporation creates avoidance of contamination.

2.4 Public finance theories associated with MBPF

2.4.1 Fiscal federalism

The fiscal federalism theory underpins the process of decentralising certain government functions to lower-tier municipalities. Oates (1999) defines fiscal federalism as a normative framework for assigning revenue and expenditure powers, functions, and fiscal instruments to the appropriate level of government. Borrowing is one of the key fiscal instruments within the fiscal federalism system that is assigned to municipalities for financing capital investments (Wehner, 2000).

2.4.2 Fiscal illusion

Fiscal illusion can be defined as circumstances of government that manipulate taxpayer's perceptions of a tax obligation (Dell'Anno & Dollery, 2014). The costs and benefits of municipalities may be consistently misinterpreted by the citizens due to lack information, leading to obscured perceptions (Dollery & Worthington,1996; Afonso, 2014). A specific fiscal illusion hypothesis that is applicable to municipal borrowing is debt illusion. Voters are more aware of public sector costs when they are paid through current taxation as opposed to borrowing (Dell'Anno & Dollery, 2014). The resultant fiscal illusion is from taxpayers underestimating present discounted values of future tax liabilities under debt financing (Dollery and Worthington,1996). Although debt and current revenues result in similar obligations because they are capitalised into property values, citizens are still more likely to note the costs of public spending financed through own revenue than through debt (Afonso, 2014).

2.4.3 Economic growth

Economic theory provides five ways in which infrastructure can positively impact on economic growth. Firstly, infrastructure as a factor of production; secondly, infrastructure as a compliment to other factors of production; thirdly, infrastructure as a stimulus to factors of production; fourthly, infrastructure as a stimulus to aggregate demand, and finally, infrastructure as a tool of industrial policy (Fedderke & Galick, 2008). Barro's growth model provides a theoretical case on how infrastructure investment can provide a positive economic growth impact. Moreover, public infrastructure raises the marginal product of private sector capital, which in turn raise the rate of economic growth (Perkins, 2011).

2.4.4 Urbanisation

Urbanisation is social life phenomenon involving the migration of people from rural areas to cities (Kumar, 2017). Just as with economic growth, literature creates a correlation between urbanisation and infrastructure investment. There is a chain link between urban density, economic growth, rising land values, revenue generation and infrastructure investment (Turok, 2016).

2.4.5 Creditworthiness

There are two credit theories which are directly applicable to local government. The first is called the capital raising theory of credit. It holds that credit can set in motion factors of production to create wealth and capital. The second is the theory of credit regulation. It proffers that credit regulation is key for the economy and can facilitate development during a crisis. Credit worthiness first appeared as a concept in literature in the 18th century. It remains the main object of assessing the viability of credit relationships (Caplinska & Tvaronaviciene, 2020). Economists have differed in the underlying definition of credit worthiness. Three groups of economists deviate along the lines of credit worthiness as follows: (i) moral image of customer, (ii) efficiency and appropriateness in the use of borrowed assets, and (iii) the notion of paying capacity (Caplinska & Tvaronaviciene, 2020).

A municipal credit worthiness assessment incorporates other variables such as the local economic profile, social, political circumstances, and infrastructure needs. Credit worthiness is calculated as a basket of variables that takes into consideration municipal performance and internal and external factors. These factors are measured against pre-determined sets of norms to make credit extension decisions. Therefore, Creditworthiness is a measurement of comparative risk of ability to pay debt (Scott, 2001; Petersen & Huertas, 2004).

2.4.6 Markets

The hypothesis for efficiency in capital markets is that prices should reflect fully all the information available. There should be no information asymmetry. Market conditions for efficiency include transaction costs and readily accessible information for investors. This ensures that all investors understand the implications of the available information on prices and market dynamics (Fama, 1970).

2.4.7 Capital structure

Capital structure theory relates to debt-to-equity choices (Myers, 2001). Capital structure is concerned with the quality of financing decisions and their impact on institutional financial viability. Capital structure reflects institutional resources and future investment potential. The theories of capital structure originated in the private sector but have recently become applicable to public institutions. For public institutions, the equity component is recognised as retained earnings generated from internal revenues. Another differentiator for government entities is that they do not pay taxes, nor do they trade in stocks (Jn-Marie 2019).

There are capital structure theories that can be differentiated as theories of capital irrelevance and capital relevance (Jn-Marie, 2019). Theories of capital irrelevance are not applicable to municipalities since their hypothesis is centred on corporate taxes. The theory of capital relevance that is applicable to municipalities is the pecking order theory. Pecking order theory states that a firm is likely to borrow than issue equity when it has constrained internally generated cash (Myers, 2001). According to the pecking order theory, decisions to finance infrastructure are based on risk probability. External finance by bonds or general debt bears the most risk potential, while internally generated cash bears the least risk (Jn-Marie, 2019).

2.5 International country focus

2.5.1 People's Republic of China

China considers addressing fiscal risks that are associated with local government debts as one of its key economic policy and structural reform agenda (Ahmad & Colenbrander, 2020). The country has adjusted its local government borrowing policies and institutional arrangements in response to macroeconomic dynamics (Rajbhandari, 2021; Guo, 2019). From 1985, Chinese municipalities were not allowed to raise debt for infrastructure financing. In 1994, a tax sharing reform introduced a revenue-sharing mechanism amongst various spheres of government (Rajbhandari, 2021). This revenue model resulted in municipalities in China not having sufficient own revenue sources. Another critical reform was the 1994 Budget Law which prescribed balanced budgets and disallowed any direct borrowing by municipalities (Gao et al., 2017).

To circumvent the effects of the Budget Law on municipal borrowing, municipalities established infrastructure investment company, the local government financing vehicle (LGFV). The negative effects of the 2008 subprime recession catalysed the use of LGFV. LGFV raised finance through state fixed assets and local government guarantees (on balance-sheet financing). The Chinese public bank issued a joint statement with the banking regulatory commission, encouraging municipalities to explore infrastructure financing through LGFV (Rajbhandari, 2021).

The LGFV would support the national government treasury bond programmes at a local level (Guo, 2019). However, while the LGFV provided opportunities for off-balance sheet borrowing, its unintended consequence was a debt spiral for Chinese municipalities (Rajbhandari, 2021). To respond to this debt spiral, national government issued guidelines on how to strengthen management of LGFV debt, including limits on guarantees. Land-based financing is also very key for LGFV since land can be used as collateral in LGFV transactions (Feng et al., 2022).

To improve the local government's fiscal position and to ease the impact of the Asian financial crisis, the national government issued Treasury bonds in 1998. This was to expand domestic demand and promote growth (Smith et al., 2019). Some of the bond proceeds were borrowed by municipalities. Essentially, the national government issued bonds on behalf of local government (Guo, 2019). This practice promoted soft budget constraints. The 2008 global financial crisis greatly impacted China's municipal borrowing policy. The Ministry of Finance issued bonds on behalf of municipalities to respond to municipal financial challenges and stimulate output for municipal capital expenditure (Smith et al. 2019). This created the perception that the national government guarantees municipal debt. It brought down the cost of borrowing and resulted in excessive borrowing due to its positive credit enhancement effect.

In 2011, China explored a pilot programme for fiscal borrowing that allowed megacities to issue bonds. The metropolitan regions were selected based on regional economic performance, sound financial management, market confidence, and treasury capabilities. However, the national government imposed bond issuance caps and term limits on the pilot programme. Although municipalities issued bonds, the national government was responsible for the principal payment of these bonds. This created market perceptions of sovereign guarantees and made credit rating the debt difficult due to the uncertainty of who bore the risk for these bonds. In 2014, the programme was extended to other municipalities and regions. In this segment of the programme, the national government did not settle the principal and interest payments but still maintained the term and debt limits of the bonds (Guo, 2019).

In 2014, national government issued another borrowing institutional reform document (State Council No, 43) aimed at improving the management of municipal debts (Feng et al. 2022). The aim of the institutional reforms was to instill financial discipline in municipalities. In 2015, the Budget Law was revised to introduce market-based lending practices, transform LGFV and convert all bonds to local government bonds (Feng et al. 2022). This removed ambiguity of debt ownership in local government (Guo, 2019).

China applied an experimental approach towards its local government fiscal policies over the years. The country adopted administrative borrowing control regime for local government, and this has resulted in soft budget effects. The lack of own revenue instruments for Chinese municipalities coupled with late approval of debt financing has led to municipalities exploring alternative off-balance sheet (project finance) and land-based financing options for urban investments. The difficulty of instilling market-based controls for municipal debt policies are mainly due to the country's communist legacies and public sector driven economic development. This resulted in poor and unreliable records of debt liabilities especially in small Chinese cities (Ahmad & Colenbrander, 2020).

2.5.2 Republic of India

The Indian local government system suffers from stunted and stagnating own revenue sources (Chattopadhyay, 2006; Bandyopadhyay, 2014; Gandhi & Pethe, 2017; Chattopadhyay, 2015; Glasser, 2020). In 2015, municipal budgets accounted for an average 3 percent of total national budgets in India. In other countries, this equates to 35 percent. As a result, municipal infrastructure is financed through national government grants and loans (Chattopadhyay, 2015). India annually spends US$17 per capita on infrastructure investments, compared to China and South Africa, who are respectively spending US$116 and US$127 (Glasser, 2020). The 74th constitutional amendment made in 1992 assigned municipalities their legal status and functions. These constitutional mandates were not accompanied by adequate revenue instruments, and as a result, most are unfunded (Chattopadhyay, 2015).

India is a federation, therefore, decentralisation of revenue sources, including borrowing, is determined on a province-to-province basis (Glasser, 2020; White & Wahba, 2019). Athar et al. (2022) maintain that provincial regulatory frameworks do not create a conducive environment for municipal borrowing. India's municipal borrowing controls can be classified as administrative and rule-based controls (Ter-Minassian & Craig, 1997). The administrative controls relate to municipal borrowing intentions for investing in long-term infrastructure. The rule-based controls require the creation of sinking funds for infrastructure investments and the imposition of debt limits on municipal properties (Chattopadhyay, 2006). Market-based controls for municipal borrowing are not usually considered in India (Bandyopadhyay, 2014). According to Chattopadhyay (2006), the main shortcoming of India's municipal borrowing framework pertains to the lack of guiding legislation on municipal insolvency processes.

As it relates to borrowing, municipalities with strong financial positions have issued bonds in the past (Gandhi & Pethe, 2017). MPF is another important source of funding for municipalities, particularly small municipalities with limited access to debt markets (Bandyopadhyay, 2014). DFIs in India have not had a significant contribution to the quantity of urban infrastructure financing (Chattopadhyay, 2015). An alternative view is that DFIs in certain provinces crowd out private finance institutions (Athar et al., 2022). The use of development charges is also recommended by the national government for infrastructure financing (Bandyopadhyay, 2014).

Despite strict provincial regulations, India is one of the few countries in Asia that allows municipal borrowing for infrastructure financing. Despite this, municipal borrowing in India has remains limited (White & Wahba, 2019; Gandhi & Pethe, 2017). Lack of regulatory reforms and poor creditworthiness of municipalities are the culprits (White & Wahba, 2019). The unreliability of municipal financial information is another factor that negatively affects municipalities' infrastructure financing in India (Chattopadhyay, 2015). Revenue and expenditure gaps are difficult to determine. Therefore, financiers cannot measure the ability of municipalities to repay their loans. The inability to build a systematic framework that guides how municipal financial information should be maintained has been deemed one of the main structural and administrative shortcomings of a vibrant bond market. The bond issuance process is long and complicated.

2.5.3 Republic of Poland

In the 1990s, when South Africa was transitioning from apartheid, Poland was also transitioning from a socialist structured economy to a market economy. This resulted in what Galinski (2015) termed a parallel reactivation of decentralisation and formalisation of local government in Poland. This transition occurred under challenging conditions of hyperinflation and underdeveloped financial markets, which systemically led to high borrowing costs (Kopanska & Levitas, 2004).

In Poland, the legal framework for municipal borrowing is regulated by the Public Finance Act (Kozera et al., 2020). The Polish Constitution provides legal safeguards for local government revenue assignment. The financial system of local government and the distribution of resources are standardised in the Constitution (Charkiewicz & Poplawski, 2022). The Polish municipal borrowing regulations have undergone several amendments over the years. In 1990, only short-term loans not exceeding 5 percent of planned expenditures in a budget year were allowed (Galinski, 2015). In 1998, further borrowing restrictions were introduced with the passing of the Law of Public Finance. There was a limit on the amount of debt service or guarantees issued at 15 percent of annual revenue. Total sectoral debt was limited to 60 percent per year (Kopanska & Levitas, 2004). Moreover, all debt should be denominated in local currency (Kopanska & Levitas, 2004; Valdez & Petersen, 2004).

Poland does not allow for multi-year budgeting like South Africa. Poland makes provision for borrowing to fund budget deficits (Kopanska & Levitas, 2004; Valdez & Petersen, 2004). To prevent a fiscal crisis, Poland requires municipalities to mostly have budget surpluses (Parlinska & Yavuz, 2017). Poland has an interesting system of borrowing control that pegs local government borrowing to the country's debt to GDP as soon as the consolidated national/public debt to GDP reaches 50 percent. In this instance, when the national debt to GDP breaches 50 percent, local government debt must also not be higher than the national government's planned deficit over revenue. For example, if the national government with a 50 percent debt to GDP ratio decides to limit borrowing to 5 percent of annual revenue, local government debt must also be adjusted to 5 percent of annual revenue (Kopanska & Levitas, 2004). This borrowing rule mitigates the risk of local government debt impacting negatively on the macroeconomic stability of the country.

Poland relies on market discipline to regulate municipal borrowing and avoids central control (Dzialo, 2019). In 2014, a reform to the borrowing legislation was introduced. The Individual Debt Limit is a ratio that requires municipal debt not to be greater than the three-year average of municipal cash balances and proceeds from the sale of assets (Dzialo, 2019).

The value of municipal bonds in Poland increased between 2008 and 2012 but has since declined. Municipal bonds uptake is mainly directed towards infrastructure projects. Municipal bonds provide a grace period or postponement of debt payment obligations. The grace period can last for two to three years. Interest rates on bonds are lower than bank loans. In some cases, old bonds can be rolled into new ones with better terms (refinancing). The bonds are publicly traded on the Warsaw Stock Exchange (WSE). The municipal bond market in Poland was stimulated by the country's joining the European Union in 2004. Though they offer better financing terms, municipal bonds in Poland still have a low uptake when compared with other financing instruments. The liquidity of the bonds in the secondary market was highest between 2008 and 2010. In subsequent years, the secondary market contracted. It is mainly metropolitan cities that explore municipal bonds. Poland has had some success in catalysing municipal debt. As a result, the majority of the literature on Polish municipal borrowing is concerned with the ability of policies and legislation to promote stricter debt limits (Kozera et al.,; 2020; Bialek-Jaworska, 2021).

2.5.4 United Kingdom

At the beginning of the 20th century, municipalities in the United Kingdom received 21 and 19 percent of their operational and capital revenue respectively from national government. By the of the 20th century, support from the central government was 65 and 90 percent, respectively (Webster, 2022; Avino & de Wildt, 2022). In relation to municipal borrowing, municipalities are limited to a borrowing term of five years. Municipalities were discouraged from private bank lending by promoting loans from the Public Works Loan Board (PWLB), a statutory body that provided loans to public institutions. This board has since been abolished in 2020, and its loan facility functions were transferred to the Department of Treasury (Sandford, 2020). This abolishment is in line with the national government's view of improving local government fiscal autonomy within the regulated frameworks (Webster, 2022). The PWLB played a similar role as the DBSA. The MBPF observes how municipal lending has been dominated by the DBSA in South Africa. The PWLB was set up by the government to be the main debt provider to municipalities until the Local Government Act was promulgated in 2003.

The Local Government Act of 2003 introduced the Prudential Borrowing Framework (PBF), which effectively removed local government infrastructure borrowing limitations (Avino & de Wildt, 2022). The framework act regulates codes for borrowing prudence that were developed by the Chartered Institute of Public Finance and Accountancy (CIPFA). These codes obligate municipalities to maintain affordable and sustainable three-year capital investment plans that are aligned to prudential indicators that are outlined in the PBF. The indicators are quantitative and provide councils and the public with municipal infrastructure debt risk assessments. The capital prudential indicators include capital expenditure plans detailing infrastructure projects and capital financing requirements. The affordability prudential ratios include the ratio of financing costs to net revenue stream, which estimates the incremental impact of capital investment decisions on council taxes. Finally, the Treasury indicators include the operational boundary and the authorised limit for external debt.

Municipalities must further set debt limits based on their own institutional policies and regional risk assessments. These debt limits are not imposed by the PBF but are at the discretion of chief financial officers in line with the Generally Accepted Accounting Practices (GAAP) (Avino & de Wildt, 2022). The framework allows flexibility for each municipality to set its own debt limits based on revenue streams available to repay debts. It prohibits municipal properties from being used as collateral for debts (Sandford, 2020). The PWLB published a circular in 2007 (Circular 141) to inculcate a market-based borrowing culture in municipalities and provide incentives for entering debt markets.

In 2016, the national government also established a Municipal Bond Agency (MBA) to further develop the municipal bond market and provide alternative borrowing options (Medda & Cocconcelli, 2018; Deruytter & Moller, 2020). The MBA was conceptualised by the Local Government Association of the UK (Sandford, 2020). The MBA is owned by a collective of 56 shareholding municipalities, and its main purpose is to pool bonds for smaller municipalities at lower interest rates (Sandford, 2020). In the years following PBF regulation legislation, there has been a noticeable increase in municipalities exploring alternative financing options other than PWLB. Municipalities have been taking up what is called Lender Option Borrower Option (LOBO) loans offered by private banks with interest incentives meant to compete with PWLB (Avino & de Wildt, 2022). Eltrudis & Monfardini (2020) report that the PBF is a form of rule-based borrowing controls.

The policy and regulatory amendments of recent years through the Local Government Act (2003) occurred at the same time as South Africa's democratic dispensation suite of local government legislation, the MBPF (2000) and the MFMA (2006). The MBA is an MPF facility that South Africa has yet to fully explore. The South African Local Government Association (SALGA) attempted to facilitate a pooled finance agency for the Gauteng Metro City Region (Leseane, 2015), but without much success. In the United Kingdom, the MBA issued four bonds between 2020 and 2022. To solve the risk of joint liability in pooled bond issuance, liability was revised to be proportional in 2019 (Sandford, 2020).

2.6 The conceptual framework

The intention of local government borrowing regulations is to enforce fiscal discipline. Key local government fiscal concerns are that municipalities could be obsessed with internal microeconomic objectives and worry less about macroeconomic stability and related national spillovers (Martinez-Vazquez & Vulovic, 2017). That is, a moral hazard exists where municipalities might act recklessly as they may not be accountable for the risks that are associated with their actions. Fiscal rules and debt ceilings reduce this moral hazard while improving macroeconomic stability (Freire & Petersen, 2004).

Municipal borrowing regulations can be classified into ex-ante and ex-post regulations. Ex-ante regulations are controls that are placed upfront to constrain borrowing. Ex-post regulations give effect to the consequences that municipalities can face if they behave imprudently or dishonour their debts. The four ex-ante controls are; (i) market discipline approach, where capital markets enforce borrowing rules; (ii) rule-based, where borrowing rules are enforced by the national government (iii) administrative approach, national government has direct control over municipal borrowing and (iv) the cooperative approach, where municipal borrowing controls are designed through negotiation amongst different spheres of government (Martinez-Vazquez & Vulovic, 2017; Vulovic, 2010; Webb, 2004; Plekhanov & Singh, 2007; Ter-Minassian, 2007).

Markets can exert more pressure to ensure fiscal discipline, thereby giving the national government the opportunity to focus less on overseeing local government debt (Ter-Minissian 2007). This requires complete information, responses to market signals by municipalities, no special privileges to financing, no history of expectation of bailouts, and an adequate base of their own sources of revenue. Administrative (direct) borrowing control regulations require municipalities to obtain permission from the national government before borrowing (Ter–Minissian & Craig, 1997). Vulovic (2011) maintains that this kind of municipal debt regulation defeats the spirit of decentralisation and can create an obligation for the national government to guarantee municipal borrowing.

Galli & Grembi (2010) define fiscal rules as formal numerical restrictions on key fiscal indicators. They help reduce the number of decisions needed on borrowing choices and promote fiscal sustainability. Fiscal rules have recently become key policy instruments for achieving responsible fiscal practices. The cooperation strategy of controlling municipal debts does not impose any laws or central government controls. It is facilitated through negotiations between different spheres of government and has the advantage of raising awareness amongst councillors of fiscal implications of high debts; it is however most effective in countries with established culture of fiscal discipline (Dzialo, 2019).

In terms of ex-ante controls, the South African MBPF applies a combination of a cooperative and market-based approach. The market-based approach is deemed to be the best regime for developing countries, and South Africa has a mature financial sector capable of instilling this approach (Liebig et al., 2008). The cooperative aspect is embedded in Chapter 3 of the Constitution. Ter-Minassian & Graig (1997) highlight the advantages of the cooperative approach as improving municipal officials' awareness of the impact of their decisions on macroeconomic objectives and fiscal policy. Galli & Grembi (2010) identify the following fiscal rules that are applicable to South Africa: (i) rules on budget balance and (ii) restrictions on the type of expenditure that can be financed with borrowing. Section 18(1) of the MFMA provides that budgets must be (i) funded through realistically anticipated revenue, (ii) cash-backed reserves accumulated in prior years, and (iii) borrowed funds must only be for capital projects. Fiscal rules only work best in politically stable environments. Eltrudis & Monfardini (2020) further expand on the models of management of municipal borrowing in Table 2.3.

Table 2.3 Municipal borrowing management models

Features	Market (Markets) Discipline and Control model	Political (Cooperative) Discipline and Control Model	Centralised (Administrative) Discipline and Control Model	Professional (Rules) Discipline and Control Model
Depends on	Technical evaluations	Soft factors	Bureaucratic controls and detailed rules	Fiscal supervision and sustainability rules
Standard Setter	The financial and capital market	Voters and taxpayers	Higher levels of government	Public sector accounting bodies
Control Method	Credit and bond ratings expel bad borrowers	Democratic accountability mechanisms	Imposition of borrowing limits and sanctions	Technical factors developed for public sector
Requires	Mature markets	Accountability culture	Central government guarantee	Financial education and experience

Source: Eltrudis & Monfardini, 2020.

The market model directly tests the principle of creditworthiness that municipalities must adhere to. It also tests the role of financial institutions insofar as they relate to municipalities. The cooperative model incorporates the role of councils as the final approvers of municipal debt as per the Constitution and the involvement of key stakeholders in municipal borrowing processes as per the MFMA (community and stakeholders). The centralised model crowds in the role of intergovernmental transfers. The rules model tests how municipalities should be setup institutionally to manage debt.

2.7 Conclusion

The chapter reviewed domestic and international municipal borrowing literature. It sets the framework for the application of the selected qualitative research methodologies that will be outlined in Chapter 3.

CHAPTER THREE - RESEARCH METHODOLOGY AND DATA

3.1 Introduction

This chapter discusses the research methodology that is used to investigate and assess municipal borrowing trends from the perspectives of various practitioners. It also identifies and evaluates determinants of municipal borrowing and assesses the adequacy of MBPF to support and enhance municipal borrowing capacity and performance. Chapter 3 further covers the two qualitative research approaches adopted in the study, research design and sample description, data collection methods, analysis, and synthesis, as well as ethical considerations.

3.2 Qualitative research approaches

The study adopted two qualitative research approaches. The research is based on empirical questions that are attempted to be answered through document analysis and interviews (Mouton, 2001). Qualitative methods provide an opportunity to learn about a particular phenomenon (in this case, municipal borrowing) from research participants' perspective (Merriam, 2002). According to Nieuwenhuis & Smit (2012), qualitative research attempts to examine and understand factors that define behavioural patterns in social and cultural contexts. It uses the experiences and situations of the study's participants to draw observations and conclusions about a particular subject matter. The interpretivism philosophical position, or paradigm, underpins most qualitative research. Interpretivism, according to Chilisa & Kawulich (2012), is a socially constructed reality formed by people involved in its formation. Interpretivism considers cultural and historical interpretations of the social world (Owen, 2014). In the context of this study, qualitative methods are used to derive various perspectives of municipal borrowing policy formulators and implementers about municipal borrowing performance over a five-year period (from 2015 to 2019).

Bloomberg & Volpe (2016) state that qualitative research can be used to interpret natural settings by studying concepts and objects. In this case, the researcher examines social situations that are affecting other variables. Therefore, the findings of the research are explained from the participants' perspectives. In other words, research data is gathered by the researcher directly from the participants. Since qualitative research involves the collection of empirical material, it employs a wide range of approaches. Such approaches allow the researcher to process the collected data for interpretation.

Semi-structured interviews are used prevalently as qualitative research tools. This study uses interviews to collect data from experts and practitioners to address the study's objectives. The respondents (interviewees) for the interviews are from National Treasury, the City of Johannesburg metropolitan and Midvaal local municipalities. A three-step approach was applied in selecting respondents: (i) identification of the target population, (ii) construction of the sampling frame, and (iii) sampling of respondents from the frame (Beyers et al., 2014). The second qualitative method adopted for the study involves various document reviews.

In qualitative studies, it is important to understand the values and biases of the researcher, as they can impact neutrality and study validity. The researcher for this study has over ten years of experience in local government. The researcher's biases are that the legislative framework is sufficient to facilitate municipalities borrowing for infrastructure investments. Moreover, the researcher perceives municipal challenges to borrowing as being caused by institutional and governance challenges. The inability to generate and collect revenue, reliance on grants, and corruption through the supply chain management process have a far greater impact on municipal borrowing abilities.

3.3 Research sample

The choice of a sampling strategy should be based on the ease of accessing data for conducting a study, the researcher's resources, relevant research methodology, and the study's objectives (Bloomberg & Volpes, 2016). Purposive sampling is a strategy that provides such a possibility. It is defined as the most useful sampling method for non-probability options. In purposive sampling, the researcher has latitude to use their own experience and knowledge in selecting study participants that are representative of the population (Laher & Botha, 2012).

In terms of the study's sample, the Midvaal local and City of Johannesburg metropolitan municipalities were selected for the study. These municipalities provide the widest range of municipal borrowing opportunities. There are many requirements that institutions must meet before qualifying for borrowing. Both municipalities have distinct characteristics that enable them to meet borrowing requirements for infrastructure investments. The City of Johannesburg is the country's economic powerhouse and is highly urbanised with access to specialised and diverse skills. It has the biggest capital budget in the country and is deemed the wealthiest city in Africa per capita (Oluwelo, 2022). The City of Johannesburg has explored diverse mechanisms of infrastructure financing. It is the first city to issue a municipal bond in South Africa. It also issued the first successful green bond in Africa in 2014 (Gorelick, 2014). The city as a research site provides rich insights and experiences on municipal borrowing. It has dedicated units for municipal borrowing and planning. The city has experience interacting with investors through its many bond issuances. It has been a pioneer in contributing towards the development of a municipal bond market in the country.

Midvaal local municipality is a local municipality with a large town (Statistics South Africa, 2021). Benchmarking of municipal financial health governance indicators from 2015 to 2019 reflects that Midvaal municipality has consistently performed better than its peers. The municipality has received accolades over the years for its good governance performance and service delivery ratings. It has also achieved five conservative clean audits for the period under review (Fengu, 2019). The municipality's institutional and environmental setup meet the primary requirements of creditworthiness. A Municipal Financial Sustainability Index constructed by Ratings Afrika places the municipality first in the country in terms of financial sustainability, stable liquidity, and financial position (Ryan, 2022). The municipality's financial health is a positive indicator of its creditworthy status. Midvaal's institutional culture is underpinned by values of ethics, accessibility, collaboration, innovation, sustainability, and excellence.

In relation to the participants of the study, the sample was derived from municipal corporate finance departments and intergovernmental relations division staff within

National Treasury, who formulated and administer the MBPF. Overall, research participants within these municipalities were budget and treasury officers and councillors serving in the mayoral committees for finance. Purposive sampling approach that was used to select the two municipalities is also used to select participants. Table 3.1 below summarises the composition of the study's participants.

Table 3.1 Research participants

Participants	Number
Municipal Senior Managers	6
Municipal Councillors	4
National Treasury Officials	5
Total	**15**

Source: Author's Own Table

3.4 Data collection methods

As indicated earlier, the study uses document analysis and interviews as its principal instruments for collecting data. This multi-pronged data collection strategy provides an in-depth understanding of municipal borrowing performance. The conducted interviews provided detailed information on municipal borrowing. The interview protocol is based on the objectives of the study and research questions that are beneficial for the research (Nieuwenhuis & Smit, 2012). The study primarily uses interviews to triangulate emerging patterns from the document review process.

Document analysis is a process of analysing government records and policy documents that are related to the subject matter (municipal borrowing) (Silva, 2012). It is also described as a systematic process of reviewing and assessing printed and electronic material (Bowen, 2009). The advantages of document analysis include easy access to documents at minimal cost to the researcher. Document analysis also requires minimal ethical clearance for the research. Research through documentary analysis may be undertaken through unobtrusive approaches, allowing the researcher to conduct work off-site (Cardno, 2018). For this study, documents used for reviews are statutory in nature. They are compiled and required for submission and publication by law. The MFMA and the Municipal Systems Act legislate the compilation of annual reports, budgets, financial statements, and IDPs. Moreover, the MFMA provides formats for reporting. In sum, data for the study is available for document analysis as the sources of information are published annually in line with legislation.

A semi-structured interview protocol was developed to conduct interviews with municipal practitioners and policy developers. The design of the interviews determines subjective responses from participants' lived experiences. They involve detailed interviews based on knowledge about lived experiences (Mcintosh & Morse, 2015). Barriball & While (1994) state that personal interview methods of data collection are adept at managing poor responses associated with questionnaire surveys. They can explore belief and value systems and facilitate comparability. Personal interviews also ensure that participants are not helped by others in answering research questions. They are also effective at collecting information in professional and academic settings (Barriball & While, 1994).

3.5 Data analysis and synthesis

A questionnaire was developed and employed in interview protocols with research participants. A phenomenological analysis was undertaken to establish consistencies and divergent views among the various participants. Data collected from the interviews was analysed by deriving codes from the data. The research applied similar codes for responses to the same questions. Therefore, common finding categories allow for data comparison (Mcintosh & Morse, 2015). In terms of procedure and execution, interviews were conducted on the Microsoft Teams virtual platform. Consent was received from the participants to record and transcribe the interviews. Session recordings were stopped immediately after the interviews.

Strategic documents from 2015 to 2019 for the two municipalities were downloaded for the analysis from the National Treasury's local government database. A systematic approach was adopted for analysing the data. The study used deductive and inductive data analysis approaches. The themes from the literature review guide the deductive approach, whereas the inductive approach identifies any emerging themes from the data (Bloomberg & Volpes, 2016).

3.6 Study limitations and ethical considerations

Since the study was undertaken using the interpretivism paradigm, therefore, its findings are subjective (Chilisa & Kawulich, 2012). The researcher is currently employed by SALGA. Therefore, the relationship that the researcher has with the institutions is indirect. There are regular engagements with the National Treasury. SALGA, as a representative body of municipalities, has a distinct relationship with municipalities. As a result, it was critical for the researcher to observe their relationship with sampled institutions and respondents. This was for the proactive management of bias and distortion of the study's outcomes. Too much familiarity with research participants could have resulted in participants being too cooperative with the researcher or being too guarded and sparse with information. To manage this bias, all the names of participants were removed, and interview transcripts were coded blindly during data analysis (Bloomberg & Volpe, 2016).

A qualitative research study should be reliable and valid. Compliance with these standards makes qualitative studies trustworthy. Reliability refers to when a phenomenon that is being studied by two separate researchers yields the same observations. Validity is about accurate measurement of research instruments in assessing the studied phenomenon. Most importantly, triangulation by using multiple data sources and research methodologies also helped in maintaining the validity of the study.

3.7 Conclusion

In this chapter, qualitative research methods were described and applied for establishing the determinants of municipal borrowing and assessing whether the MBPF has facilitated additional municipal borrowing. A purposive selection of the research sample of 15 individuals and two municipalities was explained. The main findings of the study are presented in Chapter 4.

CHAPTER FOUR - RESEARCH FINDINGS

4.1 Introduction

The findings of the study are derived from personal interviews and the analysis of various documents that were described in Chapter 3. Chapter 4 outlines the research findings. The findings of the study are presented under two broad qualitative research approaches covering document analysis and interviews.

4.2 Document analysis

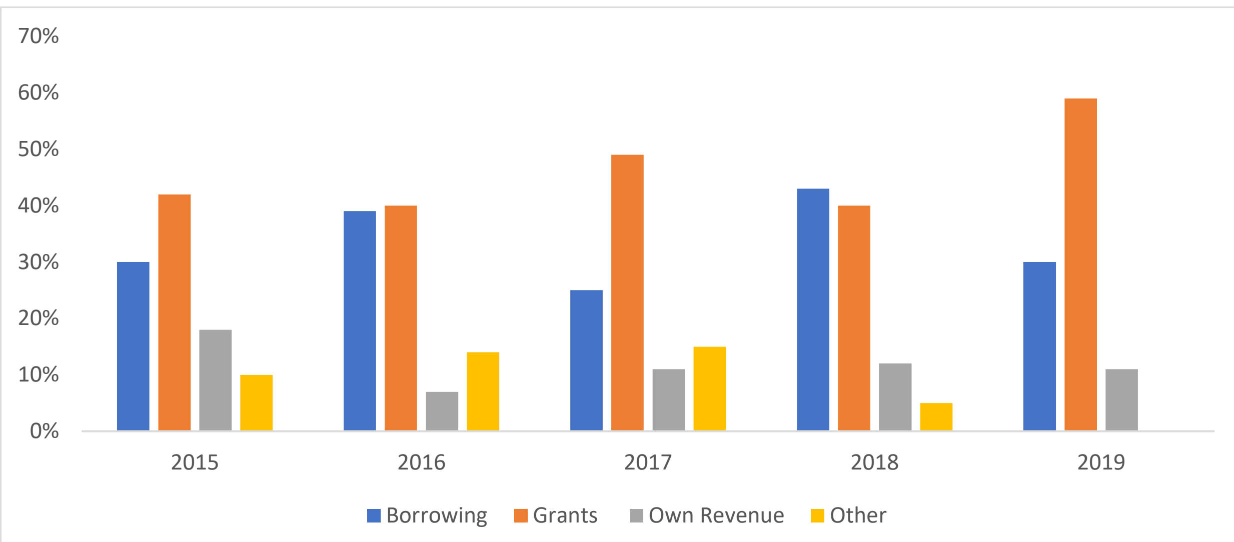
The National Treasury introduced a set of uniform norms and financial ratios for benchmarking municipal performance. National Treasury (2014) provides a detailed list of financial ratios. For purposes of assessing municipal borrowing capacity, the study applied the current ratio, which forms part of the liquidity ratios; cost of capital as a percentage of total operating expenditure and debt to total operating revenue, which forms part of the liability management ratios (National Treasury, 2014). The current ratio measures the ability of municipalities to use short-term assets to repay short-term liabilities. The high current ratio signals a strong liquidity position and short-term assets that are adequate to cover short-term liabilities. Therefore, if municipal current liabilities exceed current assets, the situation poses serious liquidity challenges. The normative level of this ratio is in the range of 1.5 to 2.1 times. (National Treasury, 2014).

The cost of capital as a percentage of total operating expenditure ratio depicts the funds required to service debt. It assesses debt repayment obligations as a percentage of total operating expenditure. A lower ratio means the municipality has room to incur more debt. Exceeding the norm signifies an inability to absorb more debt or service existing debt. The norm for this ratio is 6 to 8 percent. A high ratio above the norm shows that municipalities would have a higher burden of debt service costs as a proportion of total expenditure. Therefore, debt service costs would crowd out other expenditure line items (National Treasury, 2014). The third measure is the debt to total operating revenue ratio. It correlates municipal borrowing with total operating revenue. This ratio measures the adequacy of municipal revenue to pay off borrowings. A lower ratio indicates capacity to increase borrowing levels. The norm is that it should not exceed 45 percent (National Treasury, 2014).

4.2.1 Midvaal local municipality

The average annual capital revenue budget of the Midvaal local municipality for the five-year period amounts to R103 million. Figure 4.1 illustrates that grants are the highest capital expenditure funding source. On average, grants accounted for R44.4 million of capital revenue, or 46 percent. Borrowing is the second highest funding option, comprising R34.8 million, or 33 percent. The other financing options include office machinery and vehicles and development charges. Own revenue sources are part of a cash backed capital replacement reserve built for investment in infrastructure.

Figure 4.1 Midvaal municipality capital budget funding sources



Sources: Midvaal Municipality, 2015, 2016, 2017, 2018, 2019.

The IDP of the municipality pegs the level of external borrowing at 40 percent of total operating expenditure. The National Treasury's norms allow for a cap of 45 percent. Table 4.1 below illustrates that Midvaal's current ratio is within the norm and has increased over the five-year period under consideration. The debt coverage ratio indicates Midvaal's ability to meet its debt service payments from cash and short-term investments, without collecting any additional revenue. The norm is 15 times, and Midvaal's debt coverage is within the norm and has improved over the five years. Midvaal's capital charges over total operating expenditure is below the norm and becomes lower over the five years. Overall, the debt matrices of Midvaal municipality indicate the capacity to manage existing debt and the potential to absorb more debt. The municipality is performing well within the broader debt covenants regulated by the National Treasury.

Table 4.1 Midvaal municipality borrowing capacity ratios

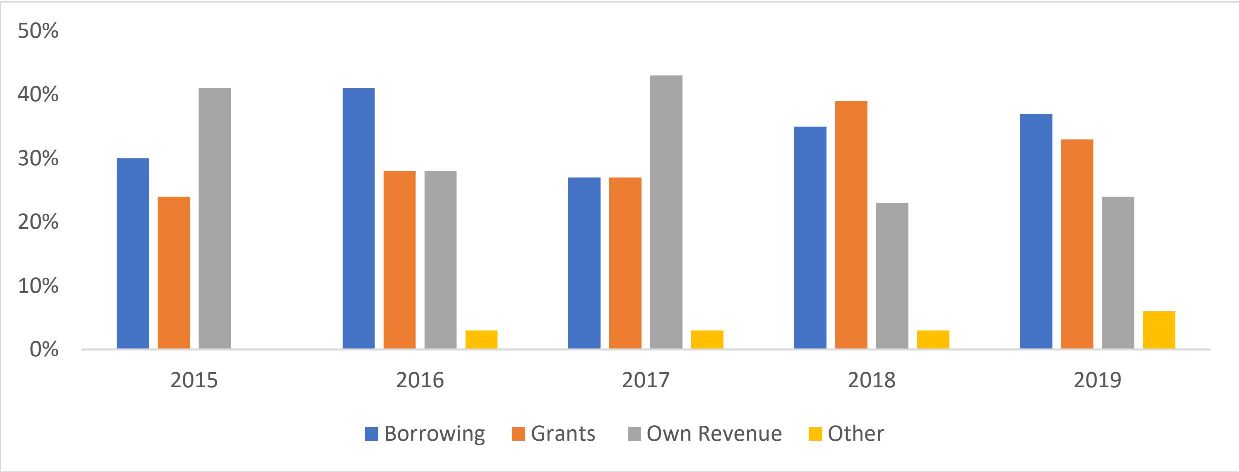
Financial Ratios	Norm	2015	2016	2017	2018	2019
Current Ratio	1.5 - 2:1	1.78:1	1.68:1	2.08:1	2.32:1	2.18:1
Debt to Revenue	45%	32%	28%	24%	26%	24%
Debt Coverage	15	17.22	18.05	21.36	24.85	24.01
Capital charges / operating expenditure	6%-8%	4.88%	4.66%	4.12%	3.56%	2.75%

Sources: Midvaal Municipality, 2015, 2016, 2017, 2018, 2019.

4.2.2 City of Johannesburg

The annual average capital revenue budget of City of Johannesburg for the five-year period amounts to R 9.3 billion. Figure 4.2 illustrates that the highest capital funding source is borrowing. On average, borrowing accounted for R3.4 billion of capital revenue, or 34 percent. Own revenue is the second highest funding option, comprising R3 billion or 32 percent. The other financing options include demand side management levies and development charges.

Figure 4.2 Johannesburg municipality capital budget funding sources



Sources: City of Johannesburg Municipality 2015, 2016, 2017, 2018, 2019.

The City of Johannesburg has the capacity to generate its own revenue to meet its capital expenditure needs. The city bases its level of capital expenditure on principles of affordability, prudence, and sustainability. These prudential indicators include the debt ratio, operating surpluses, and impact or return on investment. Table 4.2 summarises the City of Johannesburg's key debt matrices. The trends for the City of Johannesburg are mostly on the downside or lower end of the debt sustainability measurement scale. They show higher gearing rates for the city. That is, the metro uses more debt to finance its infrastructure portfolio. As a result, the municipality is exposed to more debt charges, and a significant portion of its revenue is directed toward debt repayments. Despite its current ratio being lower than the norm, it is not far off. The fluctuating ratios indicate the net effect of existing debt redemptions and repayments and the absorption of new debt. Overall, the capacity of the metro to increase debt significantly is constrained. That is, the municipality is fully utilising its debt capacity more than any other municipality in South Africa.

Table 4.2 Johannesburg metro borrowing capacity ratios

Financial Ratios	Norm	2015	2016	2017	2018	2019
Current Ratio	1.5 – 2.1	1	0.95	0.78	0.78	1.08
Debt to Revenue	45%	45%	44%	45%	42%	40%
Capital charges / operating expenditure	6%-8%	5%	4.83%	5.5%	6%	6%

Sources: City of Johannesburg Municipality 2015, 2016, 2017, 2018, 2019.

4.3 Interview findings

The interviews were conducted from 19 November 2021 to 10 May 2022. 15 participants, 6 National Treasury and 9 from the municipalities, were interviewed. Of the 15 participants interviewed, four, or 27 percent, were interviewed face-to-face. 11 or 73 percent were interviewed via virtual platforms. The major findings from the interviews are based on the themes that were identified in Chapter 2. The findings straddle across fiscal federalism and fiscal illusion, capital structure, creditworthiness, and markets, public policy and legislation, alternative financing and project finance, and economic growth and urbanisation. The main findings are discussed in the following sections.

4.4 National Treasury interview findings

4.4.1 Fiscal federalism and illusion

All the participants raised concerns about declining municipal own revenue sources over time. Some participants identified critical events that eroded the ability of municipalities to generate their own revenue. Two participants indicated that intergovernmental infrastructure grants have grown substantially over the past 15 years. This resulted in a low appetite for municipal borrowing. One participant raised the issue of municipalities being comfortable and complacent with the current revenue mix because grants provide substantial funds. Another participant stated that municipalities perceive grants in general as free money. This statement was substantiated by another's response that free grants are more appealing than exploring borrowing and own revenue instruments. Two respondents mentioned how the increase in infrastructure grants has created alternatives to borrowing, thereby implicitly removing the obligation of municipalities to work on their creditworthiness.

Moreover, the participants acknowledged that not all municipalities have strong economic bases and their own revenue potential to explore borrowing. One participant shared some observations from the study they conducted on municipal capital expenditure trends. It was reported that the 2010 FIFA World Cup was a defining moment for municipal investment trends. At that juncture, local government infrastructure funding mix changed from high reliance on borrowing to reliance on infrastructure grants. This was due to the increased construction of critical sports infrastructure. After the tournament, this financing method was maintained.

One participant suggested that instead of substantially increasing conditional infrastructure grants, the unconditional equitable share should have been increased. Respondents raised concerns that infrastructure grants shifted municipal infrastructure focus from regional needs to national intervention programmes. This has eroded the ability of municipalities to develop infrastructure financing strategies for local needs. In general, all participants acknowledged the importance of infrastructure grants to respond to critical infrastructure backlogs in previously underserviced communities.

A respondent provided a divergent view, saying that there is no credible research that demonstrates a positive direct correlation between infrastructure grants and municipal borrowing. Therefore, a direct positive correlation cannot be proven between high levels of infrastructure grants and low municipal borrowing levels. The respondent argued that municipalities are generally struggling to spend their allocated infrastructure grants efficiently. Therefore, this makes their case for borrowing weak. Another respondent with a different view suggested that rather than generalising in relation to the impact of grants on borrowing, municipalities must be differentiated by category to firmly understand the impact of grants on their borrowing capacity.

While the interviews were about municipal borrowing, the participants generally indicated that borrowing is stifled by high levels of intergovernmental transfers. The case for the City of Johannesburg in Section 4.2 appears to corroborate this assertion. This city relies less on grants, and consequently, it raises more capital funding from its own revenues and borrowing. This is also a function of its vibrant and diversified economic structure. In smaller municipalities like Midvaal, reliance on grants is greater, while borrowing and own revenue levels are slightly lower. Therefore, document analysis and interviews suggest a negative correlation between grants and borrowing levels.

4.4.2 Capital structure, credit worthiness and markets

The original MBPF was meant to reinvigorate the debt capital markets and help improve municipal creditworthiness. This would help them access private sector funding. Four respondents identified creditworthiness as the most important requirement for municipal borrowing. Few respondents reported that adequate and reliable revenue streams are positive determinants of municipal creditworthiness. Therefore, poor municipal financial health erodes creditworthiness. Two respondents stated that the MBPF focuses more on the creditworthiness of municipalities, while few municipalities are actually creditworthy. A respondent argued that the National Treasury does not place a lot of effort into supporting non-creditworthy municipalities.

All the six respondents from National Treasury, deemed the relationship between municipalities and lenders as eroded. One respondent referred to a recent attempt by a metropolitan municipality to issue a bond and said that there was a muted interest in the capital markets. A respondent mentioned the perception of financiers as being as important as what they consider good municipal governance in making pricing and credit extension decisions. Lenders are unwilling to extend financing to most municipalities. A respondent posited that low borrowing levels can also be attributed to the effectiveness of the MBPF in keeping out “loan shark” lenders and only crowding in credible lenders (banks and financiers).

Another respondent indicated that the DBSA constantly crowds out other lenders in the municipal financing market. As per development finance principles, the DBSA should be focusing its lending efforts on high-risk emerging municipalities rather than competing with other lenders, especially for metropolitan and intermediate city borrowing. The respondent mentioned that the municipal borrowing market is not ideal for the participation of international DFIs because they struggle to tender for municipal contracts. Two respondents mentioned that, given a choice, municipalities would rather use other sources of infrastructure financing other borrowing. Two respondents cited the negative and conservative municipal borrowing that chief financial officers have. They said that municipalities would rather build up their own reserves to invest in infrastructure development because they deem borrowing a high-risk financial option.

4.4.3 Public policy and legislation

According to one respondent, there is a policy vacuum when it comes to regulating municipal borrowing. So, the MBPF was promulgated for this purpose. The respondent explained how the adoption of the MBPF laid the groundwork for what ultimately became chapters 6 and 13 of the MFMA. The same respondent explained how the process of promulgating the MBPF triggered a constitutional amendment binding municipal councils to long-term debts they approve. The respondent described the process of developing the first policy framework as a multi-stakeholder process. All respondents reported that policies and legislation governing municipal borrowing had improved municipal borrowing capacity levels. Two respondents stated that despite the MBPF improving borrowing levels, the real municipal borrowing growth rate has remained flat. Two respondents stated that by not guaranteeing municipal debt, the national government avoids a moral hazard in municipalities recklessly borrowing with no sense of obligation, responsibility, or accountability.

Two respondents raised concerns about the long turnaround times for parliamentary approval of policies and legislation. Both respondents mentioned that the MBPF updates are still going through parliamentary channels. The parliamentary endorsements will strengthen the longer tenure of contracts issued by lenders. One respondent mentioned that the MFPFA, which legislates development charges, is also going through Parliament for enactment. The general sentiment of the National Treasury is that the MBPF has been working well.

4.4.4 Alternative financing and project financing mechanisms

Various respondents provided their views on alternative and project financing mechanisms. Alternative financing mechanisms are an attempt to assist municipalities in leveraging more private sector funding. A respondent explained that alternative financing mechanisms were included in the MBPF following inquiries from the local government sector. The respondent asserted that, irrespective of the introduction of various innovative financing instruments, municipalities will not be able to explore them. The core fundamentals of creditworthiness as contained in the MBPF remain. That is, no innovative financing instruments would have a potentially significant impact if municipal creditworthiness did not improve. As a result, alternative financing mechanisms are relegated to being long-term strategies that will only have an impact within the next five years. These mechanisms have not yet been applied since being introduced. As an example, two respondents cited the City of Johannesburg’s attempts to explore TIF and said that only insignificant progress has been made.

In relation to MPF, a respondent argued that it is already being applied by the DBSA. A respondent mentioned how the City of Johannesburg, together with a group of other municipalities and stakeholders, attempted to initiate a MPF project. A study tour to Europe was undertaken in November 2015 by the City of Johannesburg, the City of

Tshwane, the City of Ekurhuleni, Mogale City, Sedibeng District, and SALGA Gauteng. The aim of the study tour was to visit European municipal agencies to learn about their institutional setups and identify the best operational models for South Africa. Another respondent said that there is no will from municipalities to participate in alternative financing mechanisms.

Two respondents observed little progress in relation to project financing. Private sector financiers prefer project financing mechanisms where credible revenue projections and diligent preparation of projects have been undertaken by municipalities. On the other hand, municipalities tend to prefer conventional corporate financing. The insights of the respondents on revenue bonds mirror their views on other alternative financing mechanisms. Revenue bonds have not gained traction because municipalities are still familiarising themselves with issuing general obligation bonds. There is no vibrant municipal bond market. Most municipalities do not issue bonds, and the structure of municipal bonds and cash flows is not preferable for bond portfolio managers.

Prevalent impediments to municipal bond issuance are that investors tend to hold on to the bonds, and their tenure is short (10 to 15 years). Moreover, with the two green bonds issued in South Africa (from the cities of Cape Town and Johannesburg), the municipalities received no value on price elements distinguishing green bonds from general or conventional bonds. Municipalities do not go frequently into the bond market as legislation limits returns on municipal bond issuances. The Pension Fund Act recognises public bonds only within the confines of institutions that are regulated by the Public Finance Management Act (PFMA). Municipalities being MFMA institutions, their bonds are recognised as unlisted corporate debts with portfolio limits imposed on them.

Two respondents provided challenges that have emerged since the introduction of the MBPF updates in 2017. One example being proposals of blended financing by pledging infrastructure grants to credit enhance private lending. This proposal created a reporting challenge for infrastructure grants as per the Division of Revenue Act. Grants are reported in three-year cycles, whereas financing is long-term in nature. Another respondent mentioned disagreements among stakeholders on how SPVs for project finance initiatives can be structured and located. On the solutions front, one respondent reported that Public Private Partnerships (PPPs) are mechanisms that can assist municipalities struggling with creditworthiness. PPPs do not primarily require a strong institutional balance sheet position but rather positive and sustainable revenue generating projects. A respondent mentioned a process of amending the MFPFA to incorporate development charges into the Act. This would enrich alternative municipal financing mechanisms.

4.4.5 Economic growth and urbanisation

A respondent cited economic growth and urbanisation as two key emerging challenges that municipalities face. Given the significant municipal infrastructure backlogs, the MBPF needed to be improved. The urban dividend is an indicator of municipal capital expenditure funding choices and the positive effects of urbanisation. This provides potential scope for municipal borrowing and increased infrastructure investment. However, the structure and nature of urban transitions in South Africa explain the choice by intermediate cities and metropolitan municipalities to use grants for infrastructure financing. People migrating to cities are mainly poor and indigent. Therefore, municipalities will not borrow to invest in infrastructure for beneficiaries that are unable to service the debts. As a result, most councils direct their funding toward social infrastructure investments. In general, the respondents submitted that low capital expenditure trends in major cities mirror years of suppressed macroeconomic activity. Therefore, constrained borrowing levels should also be analysed within the same context.

4.4.6 Emerging themes

Institutional theory emerged as a key defining feature of the strengths and weaknesses that affect municipal infrastructure financing. There is a need to build municipal planning, financing, leadership, and oversight capacity for the effective management of local economies and finances. All respondents deemed the sector to be lacking in technical capabilities. Lack of all these qualities and poor consultation with citizens are serious inhibitors of sustainable infrastructure investments. One respondent cited a corruption case study related to the Nelson Mandela Bay metro. All respondents stated that capital budget choices are hindered by poor financial management.

4.5 Midvaal municipality interview findings

4.5.1 Capital structure, credit worthiness and markets

The respondents highlighted that the municipality's revenue collection levels were not negatively affected by the adverse effects of the COVID-19 pandemic. The municipality's collection rate was reported by one respondent to be higher during the hard lockdown than the period preceding it. A respondent critiqued the municipality's good debt to revenue ratio. The municipality's infrastructure, as per the asset register, is ageing and requires major and urgent overhauling. The argument was that it is pointless to have a healthy capital reserve and borrowing capacity when there is no aggressive investment in critical infrastructure.

4.5.2 Public policy and legislation

A respondent explained that the municipality's borrowing processes are guided by its borrowing policy, which complies with the MFMA. Another respondent explained how the planning and prioritisation of projects are led by the council through the IDP. Two respondents criticised the municipal legislation and deemed it too cumbersome and bureaucratic to positively impact municipal efficiency. Interviewed Midvaal officials were more familiar with the MFMA and not that familiar with the MBPF, they could not provide an opinion on the MBPF and its impact on municipal borrowing.

4.5.3 Alternative financing and project financing mechanisms

The municipality is currently in the process of procuring a PPP contract for electricity services. The PPP contract is for helping the municipality to manage its distribution losses. The contract is at the procurement stage as the previous transaction advisor's contract lapsed. The municipal officials earmarked to be involved in the PPP contract have been resistant to the process. Consultation processes have failed to yield results and buy-in from the municipal officials. A respondent applauded the incoming council for embracing the PPP project as political resistance was deemed the highest risk to the project continuing. There have been many revisions to the PPP contract due to the 30 years proposed concession period. However, in the initial PPP contract negotiations and through some peer learning with the private contractor, the Midvaal municipality realised a reduction in distribution losses from 18 to 7.8 percent per annum. There was value for money in the PPP alternative infrastructure financing and implementation solution. Respondents explained that development charges are important sources of infrastructure financing for the municipality.

4.5.4 Emerging themes

The respondents described detailed processes underlying the municipality's day-to-day operations. Borrowing decisions are a multi-departmental process based on prioritised critical projects. The municipality has two project management units responsible for monitoring infrastructure grants expenditure and project management. One of the key success factors for the municipality is the effective performance management process. On a quarterly basis, staff's performance is evaluated against set deliverables. Another important aspect is the manageable size and structure of the municipality. The flat structure between the executive (heads of departments) and operation staff means that strategic decisions and instructions are clearer and direct. Operational stuff has easy access to key decision makers because of the size of the municipality.

4.6 City of Johannesburg municipality interview findings

4.6.1 Fiscal federalism and illusion

Despite substantial infrastructure grants received from the national government by the city, they are not largest infrastructure funding item. Another respondent said that the impact of grants is insignificant due their structural design and conditions. Grants are inflexible and are not responding to direct issues that affect the city. An observation was made that the bullet-type financing options, where the principal value gets paid in one lump sum upon maturity date, create a form of fiscal illusion for the municipal council and rate payers. This financing mechanism has become risker with coalition governments given their instability. Councils tends to change before the completion of their five-year term with coalitions. The proposed solution is to amortise loan payments over the longer term of contracts than opting for bullet payments, especially for infrastructure spanning 30 to 50 years.

4.6.2 Capital structure, creditworthiness and markets

A respondent estimates the average borrowing by the city to be 26 percent of the total capital budget over the past five years. In terms of borrowing frequency, it was reported that the city undertakes borrowing every year. The respondent further confirmed that a large portion of the city's own revenue is used for capital budget financing. The documents analysed for the city from 2015 to 2019, show that the average borrowing for the same period is 34 percent of capital budget. Respondents were of a view that since the conception of the MBPF, financial markets have developed, and debt capital suppliers have increased. The financial ratios introduced by the MBPF are helpful to the city to manage its existing loan book obligations. They assist the city not to be indebted and to constantly review its financial position and borrowing capacity. As a result, City of Johannesburg engages lenders who will not impose cumbersome and restrictive loan covenants that could potentially cross-default the loan book.

One responded indicated that the city balances financial prudence with service delivery. That is, just maintaining good financial ratios at the expense of services provision also undermines other municipal objectives. Moreover, other aspects like market appetite, city's risk profile and country's sovereign credit rating also determine borrowing capacity and credit extension. The respondent stated that the city derives its creditworthiness profile from the credit rating agencies, amongst others. One respondent said that the DBSA does not operate like a DFI, it prioritises profits over development.

4.6.3 Public policy and legislation

Just like with Midvaal municipality, City of Johannesburg interviewees communicated their understanding of MFMA over the MBPF. A respondent argued that the MFMA assumes that capital markets are constant and all else is equal. Borrowing legislation is limiting from an operational perspective. The legislation has not kept abreast with the growth and innovation of the financial and debt capital markets. The MBPF fails to consider constant market dynamics and fluctuations. The respondent provided a scenario detailing that lenders' financing terms and rates proposed before municipal consultation processes would have changed by the time municipalities finalise procurement processes. Moreover, the MFMA is not accommodating international DFIs to bid for municipal borrowing contracts. Another respondent argued that borrowing capacity must be determined by credit rating agencies and that councils should endorse their ratings than borrowing decisions being made solely through council approved capital budget.

A respondent praised some positive aspects of municipal borrowing legislation. The MFMA helps with transparency in terms of insuring consultation of all parties potentially to be affected by municipal borrowing. The MBPF provides rights for municipal borrowing but not guiding frameworks for municipalities to explore different borrowing approaches. For example, advice on handling different structures and management of liabilities. The respondent admitted that there is no certainty in measuring the ability of legislation in catalysing markets and attracting investors.

4.6.4 Alternative financing and project financing mechanisms

In relation to alternative financing mechanisms, a respondent bemoaned the National Treasury's feedback to the city, to have been only focusing on the risks associated with MPF. The respondent argued that there are potential economic spin-offs and economies of scale that far outweighed credit erosion risks if the pooled finance mechanism was explored in full. For example, a respondent argued that critical bulk municipal infrastructure is usually regional in nature and does not recognise municipal borders. MPF could help remove the silo planning undertaken by municipalities within a similar region. The respondent argued that the Bus Rapid Transit (BRT) systems implemented by Johannesburg, Tshwane and Ekurhuleni metros could have been more successful, if the three metropolitan municipalities within the Gauteng City Region worked together and pooled financial resources. Two respondents mentioned that a TIF project was explored with the help of the DBSA and that the Municipal Systems Act limitations inhibited the exploration of the TIF mechanism. Section 85 of Act provides conditions under which internal municipal service districts may be established and these requirements do not accommodate the establishment of TIF (McGaffin et al., 2019).

A respondent perceived municipal bonds to be traditional infrastructure financing mechanisms. The respondent did not understand the rationale for investors avoiding municipal bonds with a long-term tenure beyond ten years, as municipalities have perpetual existence. Moreover, municipal rates and service charges always increase above inflation to provide a stable municipal financial profile. The average bond tenure for the city is between seven and 10 years. The respondent deemed the 10-year tenure bonds as the market's preferred and "sweet spot." It is very difficult for the municipality to get 15-year bonds. The main reasons that were provided by investors for avoiding anything above 10 years include high municipal debtor's book and non-payment of services by residents. The same respondent referred to the United States of America's municipal bonds market as a good case study to be used for improving the South African municipal bonds market. For example, municipal bonds in America are tax exempt and this incentives investor participation. A respondent indicated that the city was currently in the process of exploring a revenue bond project. In terms of current alternative financing mechanisms, two respondents mentioned that the city was exploring a PPP waste-to-energy project through its waste utility, Pick-it-Up.

4.6.5 Economic growth and urbanisation

Respondents commented on the city's revenue declining during the pandemic. This was due to proliferation in office closures, virtual platforms, and working-from-home options. As a result, the real estate and business rental market lost tenants, implying low revenue economic activity and declining capital investments. However, with economic recovery, the city's large size and extent of urbanisation will by default always attract potential investors for infrastructure financing.

4.7 Analysis of findings

The findings of the study derived from the interviews and document reviews indicated that the key determinants of municipal borrowing can be summarised as follows:

i. Substantial levels of intergovernmental transfers;
ii. Low municipal borrowing appetite by investors;
iii. Significant municipal borrowing bankability factors;
iv. Low municipal socio-economic profiles;
v. Poor municipal credit worthiness;
vi. Poor municipal fiscal capacity and efforts;
vii. Poor municipal understanding of debt capital market requirements;
viii. Lack of advisory services for municipal borrowing support;

ix. Overreliance on DBSA for borrowing and failure to crowd-in international DFIs;
x. Negative municipal attitudes towards borrowing;
xi. Culture of using conventional corporate financing than new alternative financing mechanisms or both;
xii. Lack of appetite by the commercial banking sector for long-dated debt;
xiii. Poor municipal planning, financing, leadership and oversight capacity;
xiv. Poor municipal governance and instability, especially in coalition led councils; and
xv. Non-payment of services by residents.

Table 4.3 shows summarises the main determinants of municipal borrowing in terms of priority and significance. The top four determinants are poor municipal credit worthiness, poor municipal fiscal capacity and effort, overreliance on the DBSA for borrowing and failure to crowd-in international DFIs and non-payment of municipal services by residents. 80 to 100 percent of respondents reported on these top four determinants. The first three determinants are financial or related to debt capital markets while the last one is socio-economic. Five determinants scored a response rate of 67 percent. These are: low municipal borrowing appetite by investors, significant municipal borrowing bankability factors, lack of advisory services for municipal borrowing support, negative municipal attitudes towards borrowing and poor municipal planning, financing, leadership, and oversight capacity. The first three determinants in this category are financial or debt market related while the last two are institutional. They are collectively ranked 5th in terms significance as they attracted the same response weighting.

Table 4.3 Main determinants of municipal borrowing

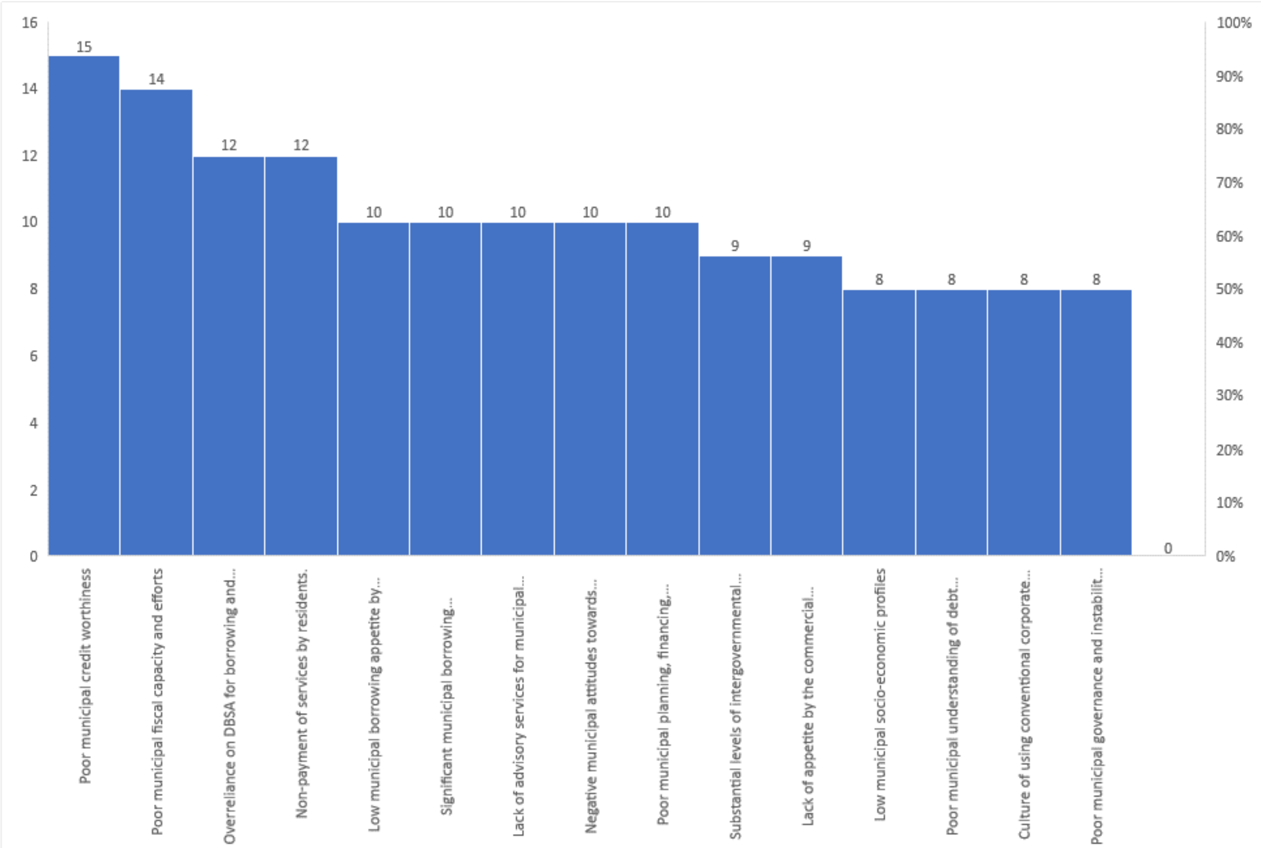
Determinants	Category	Number of Respondents	Percentage of Respondents	Determinant ranking
1. Poor municipal credit worthiness	Financial /Debt Market	15	100%	1
2. Poor municipal fiscal capacity and efforts	Financial /Debt Market	14	93%	2
3. Overreliance on DBSA for borrowing and failure to crowd-in international DFIs	Financial /Debt Market	12	80%	3
4. Non-payment of services by residents.	Socio-Economic	12	80%	4
5. Low municipal borrowing appetite by investors	Financial /Debt Market	10	67%	5
6. Significant municipal borrowing bankability factors	Financial /Debt Market	10	67%	5

7. Lack of advisory services for municipal borrowing support	Financial /Debt Market	10	67%	5
8. Negative municipal attitudes towards borrowing	Institutional	10	67%	5
9. Poor municipal planning, financing, leadership, and oversight capacity	Institutional	10	67%	5
10. Substantial levels of intergovernmental transfers	Financial /Debt Market	9	60%	6
11. Lack of appetite by the commercial banking sector for long-dated debt	Financial /Debt Market	9	60%	6
12. Low municipal socio-economic profiles	Socio-Economic	8	53%	7
13. Poor municipal understanding of debt capital market requirements	Financial /Debt Market	8	53%	7
14. Culture of using conventional corporate financing than new alternative financing mechanisms or both	Institutional	8	53%	7
15. Poor municipal governance and instability, especially in coalition led councils	Institutional / Political	8	53%	7

Source: Author's Table Extrapolated from Interviews

The last six determinants are ranked 6th and 7th as they received response rates ranging from 53 to 60 percent. Three are financial or debt capital market related, while others are institutional and socio-economic. Overall, nine determinants are financial, four are institutional and two are socio-economic. In other words, municipal borrowing reforms should mostly focus on financial and institutional matters. Figure 4.3 summarises in graphical format the findings of the study.

Figure 4.3 Main determinants of municipal borrowing in South Africa



Source: Author's Graph based on Interview Findings

4.8 Conclusion

This chapter provided insights on key municipal borrowing determinants within the Midvaal and City of Johannesburg municipalities. The main determinants of municipal borrowing identified through document analysis and interviews straddled across financial, political, governance, socio-economic, and personal subjective factors. In essence, the existing MBPF should be further reformed by the resolution of these factors for the improvement of municipal borrowing performance in South Africa.

CHAPTER FIVE – CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Two qualitative data collection and research methods (document analysis and interviews) were used to assess the perceptions of borrowing practitioners from the National Treasury and municipalities. Chapter 4 outlined the main findings of the research. This study provided 15 main determinants of municipal borrowing within the context of the MBPF. These factors are related to financial, socio-economic, institutional, and political dimensions in municipalities. Most respondents did not report that the MBPF is stifling borrowing, nor did they report that it improves it. However, a closer assessment of the 15 determinants suggests that while the MBPF has been instrumental in supporting or improving municipal borrowing, this could be further optimised by addressing the challenges related to the 15 determinants of municipal borrowing. The study findings and recommendations are summarised in Section 5.2. Section 5.3 details the practical and theoretical contributions of the research. Section 5.4 reports on the limitations of the research, while Section 5.5 makes suggestions for future research, and Section 5.6 concludes the study.

5.2 Summary of findings and recommendations

The main findings of the study are summarised in relation to the 15 determinants of municipal borrowing. It is important for the findings of any study to be complemented by recommendations. Table 5.1 below summarises the study recommendations.

Table 5.1 Summary of study findings and recommendations

Determinants	Recommendations
1. Poor municipal credit worthiness	**Recommendation 1**: It is proposed that National Treasury issues blanket requests for information (RFI) into the debt capital market for various categories of municipalities. This will serve as a market sounding exercise for National Treasury and municipalities to further unearth the factors that are making them to be unattractive to the market. The funders will also make proposals in terms of fixing the challenges. Alternatively, National Treasury can request the RFIs from successful municipalities in the debt market and develop programmes for those with limited capacity and success.

2.	Poor municipal fiscal capacity and efforts	**Recommendation 2**: The country should accept that certain categories of municipalities will never be able to borrow. They should be funded through intergovernmental transfers with borrowing improvement efforts being focused on municipalities with borrowing potential. While the legislative framework grants all municipalities borrowing powers, National Treasury should adopt a list of qualifying municipalities and prioritise them for borrowing market support.
3.	Overreliance on DBSA for borrowing and failure to crowd-in international DFIs	**Recommendation 3**: There is an urgent need to address core bankability issues from the proposed market sounding exercise. The resolution of such issues will automatically de-risk the municipal borrowing sector and credit-enhance it. This will increase investment market confidence and crowd-in various potential lenders. Investigate legislative impediments raised for international DFI's. The role of the DBSA in municipal borrowing should be studies further with outcomes used in reforms.
4.	Non-payment of services by residents.	**Recommendation 4**: Councils should implement their credit control policies and cut services where non-payment is prevalent. This requires political will. Councillors should be educated on the impact that non-payment for services has on municipal finances and on investor confidence.
5.	Low municipal borrowing appetite by investors	**Recommendation 5**: It is proposed that National Treasury issues blanket RFIs into the debt capital market for various categories of municipalities. This will serve as a market sounding exercise for National Treasury and municipalities to further unearth the factors that are making them to be unattractive to the market. The funders will also make proposals in terms of fixing the challenges. Alternatively, National Treasury can request the RFIs from successful municipalities in the debt market and develop programmes for those with limited capacity and success.
6.	Significant municipal borrowing bankability factors	Recommendation 2 is also applicable to this issue. The respondents did not explicitly specify the variables that relate to bankability. An extensive market sounding exercise could assist in determining bankability challenges.
7.	Lack of advisory services for municipal borrowing support	**Recommendation 6**: National Treasury, SALGA and municipalities should develop a municipal borrowing capacity support and improvement programme, targeting prioritised municipalities. This can be supported within the existing financial management support programmes within National Treasury and Cooperative Governance and Traditional Affairs. The private sector should be included as part of the engagements. The experience of the DBSA in the market should also be leveraged.
8.	Negative municipal attitudes towards borrowing	**Recommendation 7**: The borrowing decisions in municipalities should be guided by borrowing policies which should be synchronised with the proposed reforms. Decisions should not be personal or subjective but should be based on institutional needs and capabilities of municipalities.
9.	Poor municipal planning, financing, leadership and oversight capacity	**Recommendation 8**: These factors should be addressed as part of the incentives and conditions that are proposed for inclusion into the infrastructure conditional grants.

10. Substantial levels of intergovernmental transfers	**Recommendation 9**: Intergovernmental transfers are an important fiscal policy instruments for areas with low socio-economic profiles. To improve own revenue and borrowing in more affluent municipalities, their grants should be incentive-based and conditional on municipalities addressing the financial, institutional, governance, socio-economic and political factors that are negatively affecting borrowing.
11. Lack of appetite by the commercial banking sector for long-dated debt	**Recommendation 10**: This is a function of commercial lending perceptions of municipal borrowing risks. Lenders will always look for opportunities to exit risky transactions quickly. Therefore, addressing the municipal bankability risks from the proposed market sounding could also address the issue of debt tenure.
12. Low municipal socio-economic profiles	Recommendation 2 is applicable. The country should accept that certain categories of municipalities will never be able to borrow. They should be funded through intergovernmental transfers with borrowing improvement efforts being focused on municipalities with borrowing potential. While the legislative framework grants all municipalities borrowing powers, National Treasury should adopt a list of municipalities and prioritise them for borrowing market support.
13. Poor municipal understanding of debt capital market requirements	Recommendation 2 and 3 are applicable.
14. Culture of using conventional corporate financing than new alternative financing mechanisms or both	**Recommendation 11**: Municipalities should be supported to adopt more project financing borrowing mechanisms for specific projects. Lenders often raise lack of ring-fencing of risks and revenue as a major issue that causes them not to invest in the sector. Various credit enhancement mechanisms and delivery vehicles should be explored. This approach should be tested on few projects as proof of concept. Practice notes should be published by National Treasury on alternative financing mechanisms listed in the MBPF.
15. Poor municipal governance and instability, especially in coalition led councils	**Recommendation 12**: This is a political issue that cannot be resolved with technical solutions. Good governance could be influenced through the incentives and conditions that are proposed for inclusion into the infrastructure conditional grants. Municipal educational campaigns should be introduced for them to understand the impact on instability on the attraction and pricing municipal debt.

Source: Author's Table Extrapolated from Interviews

The objective of the study was to establish if the MBPF and its updates have improved municipal borrowing in South Africa. The overwhelming response from the respondents is that the MBPF introduced useful reforms, however, it should be supported by addressing the above listed 15 determinants of municipal borrowing issues. This has the potential to further facilitate and increase municipal borrowing levels at scale. Failure to resolve the underlying issues related to the 15 determinants will always trigger questions like the main research questions.

5.3 Study contributions

The study identified 15 main determinants of municipal borrowing that should be addressed to complement the prevailing MBPF. The research has qualitatively elevated the main variables that policymakers should explore to de-risk the municipal borrowing sector. Given that the research draws its findings from interviews with municipal borrowing practitioners within National Treasury, Midvaal, and Johannesburg municipalities, its findings and recommendations constitute practical contributions. The study will also be used by researchers in the public and commercial financing spaces to understand the factors that are stifling municipal borrowing performance. There are few existing studies on municipal borrowing and its determinants in South Africa. This study augments existing literature, therefore, it brings in theoretical contributions while laying the groundwork for future research in the same discipline. To the best of the author's knowledge, this is the first study to present findings from semi-structured interviews about the perceptions of municipal borrowing practitioners in South Africa. Therefore, the study generates new knowledge.

5.4 Limitations of the study

Given that the study's methodology is qualitative in nature, the research also suffers from the limitations of qualitative research. Qualitative research is resource and time intensive. It is very difficult to investigate causality effects with qualitative studies. It is not statistically representative and does not provide the alternative rigour that is associated with quantitative or econometric studies. The sample of the study focused on Midvaal and Johannesburg, which, while differentiated, do not comprise the entire local government sector. The research suffers from a small sample size limitation. Suffice to indicate that the City of Johannesburg is a municipality that is most exposed to borrowing, therefore, its experiences provide valuable lessons.

5.5 Suggestions for possible future research

There is scope to use the main variables and findings of the study in quantitative research. For example, non-parametric and parametric research methods could be used in the future to determine the efficiency of municipal borrowing. Correlation analysis for variables assessed in the presented qualitative study could also be conducted using quantitative methods. Such quantitative methods allow for sampling of various municipalities, which will improve statistical representativity.

5.6 Conclusion

The research explored various determinants of municipal borrowing within the context of the MBPF. It reviewed domestic and global literature, which revealed that municipal borrowing is tightly regulated and constrained across the globe to prevent negative macroeconomic imbalances. The levels of municipal borrowing are also varied across various countries. The main findings of the study indicate that substantial work should be done to improve municipal borrowing capacity and that the MBPF alone is not wholly geared for this purpose. It needs to be supported by financial or debt capital market, institutional, socio-economic, governance, and political reforms.

The study provided useful information emerging from National Treasury, the City of Johannesburg, and Midvaal municipalities. The scientific information provided by the study can be used to support future research and reforms. Therefore, the study contributes immensely to South Africa's intergovernmental fiscal relations discourse. Most importantly, the study achieved its objective of assessing if the MBPF is adequate to improve or facilitate municipal borrowing.

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APPENDICES

APPENDIX A: Research Instrument – Semi-Structured Questionnaire – National Treasury

Main Questions

1. What is your role in National Treasury and in answering the question may you please elaborate on how you are involved in the formulation/implementation of the municipal borrowing policy framework?

2. How effective is the municipal borrowing policy framework in enabling municipalities to borrow for infrastructure investment? **(PROBING)**

a. Probe: Please elaborate on your response?

3. List and explain 3 factors or less that has led to municipalities not borrowing for their infrastructure investments **(PROBING)**

4. Of the factors listed above, which ones do you rank as the main factor and explain why? **(PROBING)**

5. Describe any measures considered or put in place by National Treasury to address the factors listed above?

6. Are you familiar with any of the below **alternative financing mechanisms**?
    a. Municipal Bonds (revenue bonds)
    b. Public Private Partnerships
    c. Municipal Pooled Finance
    d. Project Finance
    e. Development Charges

7. How does the municipal borrowing framework and its supporting legislation enable the uptake of these alternative financing mechanisms?

8. How has National Treasury supported an improvement in uptake of these alternative financing options? **(PROBING)**

9. What are your general views on the regulatory framework for Municipal Borrowing?

Closing

Do you have any questions on anything we discussed or anything that took place during the interview?

Are there any responses you would like to further elaborate upon?

Is there any recent information you would like to share with me?

APPENDIX B: Research Instrument – Semi-Structured Questionnaire – Municipalities

Main Questions

1. Are you familiar with the municipal borrowing policy framework?
   a. if you are, what is your perspective of its ability to enable municipal borrowing?
   b. if not, what is your understanding of the policy that guides municipal borrowing?

2. List and explain 3 factors or less that have led to your municipality not borrowing for infrastructure investments?

3. Of the factors listed above, which ones do you rank as the main factor and explain why?

4. Describe any measures considered or put in place by your municipality to address the factors listed above?

5. Are you familiar with any of the below alternative financing mechanisms?
   a. Municipal Bonds
   b. Public Private Partnerships
   c. Municipal Pooled Finance
   d. Project Finance
   e. Development Charges

6. Has your municipality considered exploring any of the above alternative financing mechanisms?
   a. Explain the process, opportunities and challenges encountered in exploring the alternative financing mechanisms? (Probing)

7. Describe your municipality's current liquidity position?

8. What is your municipality's current creditworthiness profile?
   a. How has this creditworthiness profile assisted your municipality to finance investment funding of major capital projects?
   b. If the creditworthiness profile is a challenge for your municipality, how are you working towards improving it?

9. The COVID19 pandemic has impacted the global economy and resulted in a decline of municipal own-revenues sources;
   a. Describe what your municipality's strategy is to fund critical infrastructure under the current economic climate?

Closing

Do you have any questions on anything we discussed or anything that took place during the interview?

Are there any responses you would like to further elaborate upon?

APPENDIX C: Participant Information Sheet

Dear Sir/Madam

My name is ***James Matsie*** and I am a Masters student in Public Policy at the Wits School of Governance in Johannesburg. As part of my studies I have to undertake a research project, and I am conducting a study on perspectives on the municipal borrowing policy framework and how it might improve municipal infrastructure financing. The aim of this research project is to understand experiences and views on municipal borrowing policy framework and if it can improve municipal infrastructure financing for South African municipalities.

As part of this project I would like to invite you to take part in an interview. This activity will involve a telephonic or online interview and will take around 45 - 60 minutes. If a follow up interview is required, I will seek your consent again before setting up the interview. With your permission, I would also like to record the interview using a digital or audio device. The recording will be used for purposes of this research only and will be stored on a password protected computer.

You will not receive any direct benefits from participating in this study, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. The interview will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely on a password protected computer and not disclosed to anyone else. I will be using a pseudonym (false name) to represent your participation, in my final research report. If you experience any distress or discomfort, we will stop the interview or resume another time.

If you have any questions afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report. If you wish to receive a summary of this report, I will be happy to send it to you upon request. If you have any queries, concerns or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (non-medical), telephone + 27(0)11 717 1408, email Shaun.Schoeman@wits.ac.za

Yours sincerely,

Researcher:

Supervisor: Dr. John Khumalo, john.khumalo@wits.ac.za , +27 11 717 3493

APPENDIX D: Participant Consent Form

Title of project

Perspectives on The Municipal Borrowing Policy Framework for an Improved Municipal Infrastructure Financing.

University – University of the Witwatersrand, Johannesburg

Name of researcher – MJJ Matsie **Student No. 2014925**

I, ……………………………………….., agree to participate in this research project. The research has been explained to me and I understand what my participation will involve. I agree to the following:

(Please circle the relevant options below).

I agree that my participation will remain anonymous	YES	NO
I agree that the researcher may use anonymous quotes in his / her research report	YES	NO
I agree that the interview may be audio recorded	YES	NO

I agree that the information I provide may be used anonymously after this project has ended, for academic purposes by other researchers, subject to their own ethics clearance being obtained.	YES	NO

…………………………………… (signature)
…………………………………… (name of participant)
…………………………………… (date)

…………………………………… (signature)
…………………… (name of person seeking consent)
…………………………………… (date)

APPENDIX E: Letter of Permission from Midvaal Municipality

MIDVAAL
LOCAL MUNICIPALITY

Midvaal Local Municipality
PO Box 9, Meyerton, 1960
Tel: 016 360 7400
Fax: 016 360 7519
www.midvaal.gov.za

Tel: 016 360 7411 * Fax: 086 502 2834 * E-mail: mm@midvaal.gov.za

OFFICE OF THE MUNICIPAL MANAGER

Ref: 17/2/R

4 November 2021

TO WHOM IT MAY CONCERN

E-mail: john.khumalo@wits.ac.za
20149125@student.wits.ac.za

Dear Mr Matsie

SUBJECT: PERMISSION TO CONDUCT RESEARCH AT MIDVAAL LOCAL MUNICIPALITY

Permission is hereby granted to the below mentioned student to conduct research at Midvaal Local Municipality.

Student name: James Matsie
Topic: Municipal Borrowing Policy Framework and its updates

The municipality supports academic research and requests that the findings and recommendations of the research be shared with the municipality.

While permission is granted the municipality cannot be held accountable for delayed responses from the targeted respondents. The municipality encourages the use of electronic methods of data collection in light of COVID19.

Trust that you will find the above in order.

Yours faithfully

S.M. MOSIDI
ACTING MUNICIPAL MANAGER

APPENDIX F: Letter of Permission from City of Johannesburg Metropolitan Municipality

Joburg

City of Johannesburg
Department of Corporate & Shared Services
Office of the Group Head: Group Human Capital Management

6th Floor, B Block
Metropolitan Centre
158 Civic Boulevard
Braamfontein

PO Box 1049
Johannesburg
South Africa
2000

Tel +27(0) 11 407 6926
Fax +27(0) 11 339 1878

www.joburg.org.za

8 November 2021

James Matsie
Master of Management for Public Policy
Wits School of Governance at the University of the Witwatersrand

Ref: Permission to conduct research study

This letter serves to acknowledge receiving the letter requesting permission to conduct research in the City of Johannesburg under the title:

"Perspectives on The Municipal Borrowing Policy Framework for an Improved Municipal Infrastructure Financing".

I am aware that the study entails the collection of information from the City and participants through semi-structured interviews, by city officials and observation participation in section 79 committees, IDP sessions and other critical fora of the city.

The research study is promoted by the City of Johannesburg because it helps both students and practitioners to gain an understanding of the sociology of the City as it evolves and contributes towards the building of developmental local government.

I, Tersia Johanna Groenewald, as delegated authority of the City of Johannesburg Municipality (the City), hereby give permission to the primary researcher, James Matsie the following:

To collect and publish information about the City is publically not available, for the research project titled:

"Perspectives on The Municipal Borrowing Policy Framework for an Improved Municipal Infrastructure Financing".

This authorisation is based on mutual understanding that the City's name can be revealed in her/his project; and

- The researcher contacts the relevant department for arrangements pertaining to the research; and
- The information provided by the employees or any other means (such as company's archived documents or reports) of the City is purely for academic purposes and cannot be used for any other purpose.

Please note that on completion of the study, a copy of the research report should be submitted to the City of Johannesburg in honour of your commitment.

I urge you to present this letter of permission whenever you come across officials and participants in the research study. I thank you for choosing the City of Johannesburg to conduct the study.

Kind Regards

Tersia J. Groenewald
Deputy Director: Employee Relations and Development
Tel: (011) 407- 6124

Page 1 of 2

APPENDIX G: Letter of Permission from National Treasury

national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

Private Bag X115, Pretoria, 0001 • 40 Church Square, PRETORIA, 0002 • Tel: +27 12 315 5111, Fax: +27 12 406 9055 • www.treasury.gov.za

FROM: Ms Malijeng Ngqaleni, Tel: +27 12 315 5164, **Email:** Malijeng.Ngqaleni@treasury.gov.za

University of the Witwatersrand
School of Governance
2 St. David's Place
Donald Gordon Building
Park town
Johannesburg

Dear Mr James Matsi

RE: PERMISION TO CONDUCT RESEARCH AT NATIONAL TREASURY: MUNICIPAL BORROWING POLICY FRAMEWORK AND ITS UPDATES: HAS THE POLICY ENABLED MUNICIPAL INFRASTRUCTURE FINANCING

Your letter requesting permission to conduct research on municipal borrowing policy framework and its updates, to understand if the policy has enabled municipal infrastructure financing, has reference.

You are granted permission to conduct the study within our institution. You may approach officials who will exercise their discretion to participate in interviews.

Wishing you well in your studies.

Kind regards,

MALIJENG NGQALENI
DEPUTY DIRECTOR-GENERAL: INTER-GOVERNMENTAL RELATIONS
Date: 8 November 2021

Nkwama ya Tiko • Gwama la Mashuso • Nasionale Tesourie • Lefapha la Bosetšhaba la Matlotlo • uMnyango wezeziMali • Litiko leTimali taVelonkhe • Tirelo ya Matlotlo a Bosetšhaba
Tshebeletso ya Matlotlo a Naha • UMnyango wezeMali • Isebe leNgxowa Mali yeLizwe

National Treasury | @TreasuryRSA

APPENDIX H: Schedule Of Interviews

No.	Participant	Date	Status
1.	Participant 1	19 November 2021	Completed
2.	Participant 2	23 November 2021	Completed
3.	Participant 3	10 December 2021	Completed
4.	Participant 4	17 January 2022	Completed
5.	Participant 5	08 April 2022	Completed
6.	Participant 6	08 April 2022	Completed
7.	Participant 7	08 April 2022	Completed
8.	Participant 8	08 April 2022	Completed
9.	Participant 9	11 April 2022	Completed
10.	Participant 10	12 April 2022	Completed
11.	Participant 11	12 April 2022	Completed
12.	Participant 12	05 May 2022	Completed
13.	Participant 13	05 May 2022	Completed
14.	Participant 14	05 May 2022	Completed
15	Participant 15	10 May 2022	Completed