THE RELATIONSHIP BETWEEN UNLAWFUL EXPENDITURE AND MUNICIPAL FINANCIAL PERFORMANCE IN A SOUTH AFRICAN CONTEXT

by

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11 October 2021

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ABSTRACT

South African municipalities are experiencing a deterioration in municipal financial performance in addition to proliferated unlawful expenditure. Good municipal financial performance is imperative for social development and economic growth in South African communities. Furthermore, adequate municipal financial performance is a good measure of the effectiveness of the administration of the public funds in the sphere of local government.

This research was conducted to determine the existence and extent of the relationship between unlawful expenditure and municipal financial performance in a South African context. The secondary objectives of the research were, first, to understand the components of unlawful expenditure in municipal financial performance; secondly, to determine the underlying causes of unlawful expenditure and poor municipal financial performance; thirdly to determine the impact of unlawful expenditure on poor municipal financial performance and lastly, to propose strategies to minimise unlawful expenditure.

To achieve the research objectives, a positivist paradigm was adopted, where a document analysis provided panel data to establish the correlation between unlawful expenditure and municipal financial performance. A non-probability, convenient sampling method was used, resulting in a sample of 121 municipalities. Secondary data from the audited annual reports of these municipalities were collated for the five financial periods between 2013/14 and 2017/18.

The study tested hypotheses on the relationship between unlawful expenditure and municipal financial performance variables. To understand the relationships (as opposed to predicting them), all variables were explained, regardless of their significance. A statistically significant negative relationships were found between unauthorised expenditure and cost coverage, current ratio, remuneration as a percentage of total expenditure and net operating surplus margin. Furthermore, a statistically significant positive relationship was found between irregular expenditure and net operating surplus and lastly, statistical significant negative relationship was found between fruitless and wasteful expenditure and outstanding service debtors to revenue and cost coverage. The findings of the study contribute to the limited literature

on municipal financial performance, to the South African public, to the Chapter 9 institutions of the Constitution of South Africa, 1996, and to those charged with governance by clarifying the relationship between unlawful expenditure and municipal financial performance, and its impact.

Based on research question and study findings, the study recommended that those charged with governance should focus on addressing the causes of poor cost coverage, inadequate current ratio and low net operating surplus margin. Furthermore, the study recommended that the tenets of sound governance theories such as resource-based theory, stakeholder theory and stewardship theory should be considered for individual or combined adoption, as part of strengthening financial administration. As a matter of courtesy, Chapter 9 institutions such as the AGSA, the Public Protector and other relevant law enforcement agencies, such as the SIU should consider the findings of this study when making recommendations in response to internal control deficiencies identified.

KEY WORDS

Municipal performance, unlawful expenditure, fruitless and wasteful expenditure, irregular expenditure, unauthorised expenditure, financial performance, performance measures.

LIST OF ACRONYMS AND ABBREVIATIONS

AGSA	Auditor-General of South Africa
APR	Annual Performance Report
ASB	Accounting Standard Board
AT	asset turnover ratio
BEE	Black Economic Empowerment
BUSA	Business Unity South Africa
COGTA	Department of Cooperative Governance and Traditional Affairs
CPA	Commonwealth Parliamentary Association
CR	current ratio
CSIR	Council for Scientific and Industrial Research
D/E	debt to equity ratio
DHET	Department of Higher Education and Training
EBIT	earnings before interest and tax
EC	Eastern Cape province of South Africa
FAMC	Farmer Mac
FFSC	Farm Financial Standards Council
FS	Free State province of South Africa
GAMAP	Generally Accepted Municipal Accounting Practice
GPA	Government Procurement Agreement
GRAP	Generally Recognised Accounting Practice
GT	Gauteng province of South Africa
IDP	Integrated Development Plan
ISCP	Integrated Sustainable Community Plans
KZN	KwaZulu-Natal province of South Africa
LED	Local Economic Development
LGU	Local Government Units
LIM	Limpopo province of South Africa
LGPMS	Local Governance Performance Management System
MFMA	Municipal Financial Management Act
MP	Mpumalanga province of South Africa
MSA	Municipal Structures Act
MSCOA	Municipal Standard Chart of Accounts
NC	Northern Cape province of South Africa
NW	North West province of South Africa

OR/OE	operating revenue to operating expense
OR/TR	operating revenue to total revenue
PFMA	Public Finance Management Act
PP	Public Protector
PR	profit margin ratio
ROA	return on asset
ROE	return on equity
SAG	South African government
SALGA	South African Local Government Association
SARS	South African Revenue Service
SCOPA	Standing Committee on Public Accounts
SDBIP	Service Delivery Budget Implementation Plan
SIU	Special Investigating Unit
SOE	state-owned entity
TA	total asset
WTO	World Trade Organisations
WSSU	Winston-Salem State University

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CHAPTER 1. STUDY ORIENTATION

1.1 BACKGROUND INFORMATION

Municipalities in South Africa were established in terms of the Constitution of the Republic of South Africa, 1996 (the Constitution) (South African Government [SAG] 1996). Before 1996, municipalities were called *local authorities* and did not have rights and powers to govern. All rights and powers of local authorities were granted by the Legislature of the time. Since 1996, local government is recognised as an independent sphere of government, with municipalities as its executive institution. Municipalities now have the rights and power to govern without undue interference by provincial and national government (Madumo 2015:154). As a result of this transformation, the Municipal Structures Act of 1998 (SAG 1998) and Municipal Finance Management Act of 2003 ([MFMA] SAG 2003) were adopted to ensure good governance by municipalities, thereby enforcing accountability (South African Local Government Association [SALGA] 2018:online).

There are 257 municipalities in South Africa, made up of eight metropolitan municipalities, 44 district municipalities and 205 local municipalities (SALGA 2018:online). These municipalities are mandated by the Constitution to provide basic services, such as water and sanitation, electricity, roads and transport, and waste removal. However, providing the legislated services requires resources, such as infrastructure and human capital, as well as sufficient finances (Pycroft 1999:391).

Municipalities receive funding from the provincial and national government in the form of grants (SAG 2018:online), which can be conditional or unconditional. Conditional grants are earmarked for specific national objectives. An unconditional grant, also called the *equitable share* (SAG 1998:5), is the amount of revenue received by institutions in all spheres of government as an entitlement to enable them to provide basic services and perform the functions allocated to them. However, their equitable share is not sufficient to enable the municipalities to be sustainable. Therefore, each municipality must generate its own revenue by levying taxes and selling the services it renders to its communities.

There are basic levels of services that are free, but services above what is deemed *basic* are not free, and legislation requires municipalities to levy rates and tariffs. In

theory, municipalities need to be able to sustain themselves. In other words, the community they serve needs to pay for the services it receives. This principle is a challenge in South Africa, especially in the smaller towns with a small tax base, where the indigent community may be too large for the rate-paying community to subsidise; and the challenge is amplified by a culture of non-payment of municipal services (Moganathan 2015:1; Mavhungu 2011:11; Peters 2011:2). As a result, smaller municipalities lean heavily on government grants to sustain themselves.

Considering the aforementioned, municipal financial performance becomes a critical element for municipal sustainability. Sixty per cent of local municipalities (small towns) in South Africa are in financial trouble (Claassen & Kocks 2016:3). Financially unstable municipalities are likely to render poor service delivery, resulting in the deterioration of standards of living and economic growth in the short to medium term (Claassen & Kocks 2016:5). To compound the problem, South African municipalities have incurred a spate of unlawful expenditure that increased at a rate of 228 per cent over the five years from 2014 to 2018 (Auditor-General South Africa [AGSA] 2018:9).

This study assumed that high levels of unlawful expenditure correlate with poor municipal financial performance. The study, therefore, sought to establish whether there were relationships between types of unlawful expenditure and municipal financial performance in South African municipalities and, perhaps more importantly, the extent of these relationships. It was envisaged that a quantitative approach would lead to an understanding of the effect of unlawful expenditure on municipal financial performance.

1.2 LITERATURE REVIEW IN SUPPORT OF RESEARCH PROBLEM

This section discusses the performance of all 257 municipalities across South Africa (278 before August 2016), and the unlawful expenditure incurred, as well as related literature on the relationship between unlawful expenditure and municipal financial performance.

1.2.1 Relevant legislation

South African municipal financial management requirements are legislated in the MFMA (SAG 2003).

1.2.2 Municipal financial performance

Financial performance is broadly defined as an act of performing a financial activity. It is the level at which financial objectives are accomplished and the process of measuring the stage of implementation of an entity's policies and procedures in monetary terms (Shodhganga 2018:online). Molobela (2016:262) defines *municipal financial performance* as a municipality's ability to render services to its citizens.

Municipal financial performance plays an integral part in improving the lives of South Africa's ordinary citizens by providing basic services and activating economic growth (Van der Waldt 2006:128). The municipality is the first point of call between an ordinary citizen and the state (Thornhill 2008:492). This close link between a municipality and its community is supported by the fact that the Municipal Structures Act of 1998 (SAG 1998) requires a municipality to develop an Integrated Development Plan (IDP) that involves consulting the community and must include a Local Economic Development (LED) strategy (Nxumalo & Naidoo 2018:2; Fuo 2013:266). An IDP is a five-year strategic document that defines the municipality's strategic direction. Furthermore, municipalities are required to develop a Service Delivery Budget Implementation Plan (SDBIP). An SDBIP is a plan that defines how the municipality is planning on delivering on its constitutional mandate of service delivery within a 12-month reporting cycle. The SDBIP facilitates the process of holding the municipal executive management, under the supervision of the municipal manager (the accounting officer), accountable to the public for their performance (City of Tshwane 2018:online).

For these processes to be executed successfully, financial stability is crucial. Claassen and Kocks (2016:2) defined financial stability for all municipalities as "The financial ability to deliver services, develop and maintain the infrastructure required by its residents without unplanned increases in rates and taxes or a reduction in the level of services, and the capacity to absorb financial shocks caused by natural, economic and other adversities without external financial assistance."

If, as mentioned earlier, 60 per cent of local municipalities were in financial trouble in 2016, at least the remaining municipalities have performed better. Claassen and Kocks (2018:4-5) mention the local municipalities of Mossel Bay and Swartland (Western Cape), Senqu (Eastern Cape) and Sol Plaatje (Northern Cape) as local municipalities that performed optimally. However, examples of local municipalities that performed

poorly were Madibeng (North West), Lekwa (Mpumalanga), Modimolle (Limpopo) and Matjhabeng (Free State). Municipal financial performances that were inconsistent in the five years from 2014 to 2018 were Setsoto (Free State), Kwa-Dukuza (Kwa-Zulu Natal) and Greater Letaba (Limpopo). Calder and Beckie (2013:1) added that the inconsistent municipal financial performance in South Africa is exacerbated by not having a strong, sustainable support structure to help municipalities meet the current needs of their communities while ensuring that sustainable development to cater for future generations is not compromised.

Since municipalities play a significant role in social and economic development (Koma 2010:112), different sustainability models are called for, such as those in developed countries like Canada. In Canada, communities are required to develop long-term Integrated Sustainable Community Plans (ISCP) to raise funds that can be used for replacing ageing infrastructure, and meeting social, cultural, environmental and economic sustainability objectives (Calder & Beckie 2013:1).

For South African municipalities to continue service delivery, more resources, such as human capital, finance and infrastructure, are needed to serve the growing population (Munzhedzi 2016:1; Mfene 2013:17; Mogale 2003:229), whatever the sustainability model being applied. What is certain is that no resources should be wasted and that good financial performance is needed, together with eradicating the proliferation of unlawful expenditure.

1.2.3 Municipal stability and trend performance review

Measuring financial performance is an integral part of measuring a municipality's sustainability. The City of Avondale (2014:online) in the United States defines *sustainability* as a systematic action that creates economically viable, socially equitable and ecologically integrated conditions that ensure present and future generations can survive and thrive. The worse the municipality performs, the less sustainable it is. Financial sustainability in South African municipalities is weak, which contributes to poor performance (Claassen & Kocks 2018:6).

There have been many perspectives on what causes poor performance. Some argue that a lack of accountability by those charged with leadership in a municipality is prevalent, and there are no consequence-management mechanisms to respond to

these inadequacies (AGSA 2019:38; Laubscher 2012:66). It is for this reason that stakeholders believe poor performance is caused by reckless management, an inability to execute responsibility and to lead with the due care and the level of professionalism desired for any entity destined for success.

Ramutsheli (2015:111) posited that poor municipal financial performance is caused by inadequate human resources, lack of requisite skills to achieve municipal objectives efficiently and effectively, and lack of leadership to create an ethical organisational culture. Claassen and Kocks (2018:6) had the similar opinion that the differentiating factors between sustainable municipalities and weaker municipalities are financial discipline, experience, skills and sound governance. Claassen and Kocks calculate a municipal financial sustainability index score as follows:

Operating performance	*xx*
Liability management	*xx*
Liquidity management	*xx*
Budget position	*xx*
Financial stability	***xx***
Affordability	*xx*
Infrastructure development	*xx*
Sustainability index score	*100*

Municipal financial performance is measured by evaluating the operating performance, liability management, budget practices and liquidity position of each municipality and then scoring them out of 100.

Claassen and Kocks (2018:2) found that only 22 of the top 100 municipalities reported a surplus, totalling R1 billion when combined. Table 1.1 shows the index scores and provinces of the ten best-performing municipalities in South Africa.

Table 1.1: Best-performing municipalities in 2017

No.	Municipal Name	Province	Index Score
1.	Mossel Bay Local Municipality	Western Cape	84
	Swartland Local Municipality		84
2.	Senqu Local Municipality	Eastern Cape	79
3.	Sol Plaatje Local Municipality	Northern Cape	78
4.	Steve Tshwete Local Municipality	Mpumalanga	77

No.	Municipal Name	Province	Index Score
5.	Greater Kokstad Local Municipality	Kwa-Zulu Natal	76
6.	Midvaal Local Municipality	Gauteng	68
7.	Fetakgomo Tubatse Local Municipality	Limpopo	61
8.	JB Marks Local Municipality	North West	57
9.	Metsimaholo Local Municipality	Free State	33

Source: Ratings Africa (2018)

The Minister of Cooperative Governance and Traditional Affairs (Dr Zweli Mkhize) at the time (2018) reported that 87 South African municipalities were financially distressed and dysfunctional (Herman 2018:online). Claassen and Kocks (2018:1) added that these municipalities required a financial bailout of R22 billion from the South African government. The top 10 poorly performing municipalities were reported by Parliament as unable to pay electricity bills totalling R9.7 billion to the South African electricity provider, Eskom (Ormajee 2018:1). Table 1.2 shows the index scores and provinces of the nine worst-performing municipalities in South Africa (Claassen & Kocks 2018:2).

Table 1.2: Worst performing municipalities in 2017

No.	Municipal Name	Province	Index Score
1	Madibeng Local Municipality	North West	6
2	Matjhabeng Local Municipality	Free State	9
	Modimolle Local Municipality	Limpopo	9
	Lekwa Local Municipality	Mpumalanga	9
3	Inxuba Yethemba Local Municipality	Eastern Cape	14
4	Emfuleni Local Municipality	Gauteng	17
5	Newcastle Local Municipality	Kwa-Zulu Natal	21
6	Gamagara Local Municipality	Northern Cape	24
7	Kannaland Local Municipality	Western Cape	25

Source: Ratings Africa (2018)

Claassen and Kocks (2018:2) found that 78 of the top 100 municipalities reported a year-end deficit totalling R15 billion when combined.

In the following section, prescribed performance measures to measure municipal financial performance are introduced.

1.2.4 Review of unlawful expenditure

Unlawful expenditure refers to unauthorised expenditure, irregular expenditure and fruitless and wasteful expenditure. All three expenditures are defined in Section 1 of the MFMA. *Unlawful expenditure* can be summarised as any expenditure that is incurred as a result of the contravention of legislation, such as the MFMA and the Municipal Structures Act (SAG 1999), contravention of supply chain management policy, exceeding the budget, spending not in accordance with the budget, expenditure incurred as a result of poor planning in the budgetary process, or expenditure that could have been avoided had necessary care been taken (again, poor planning), and wasted expenditure that renders no benefit (SAG 2003).

Municipalities have increasingly been incurring unlawful expenditure and their performance has been deteriorating. The Auditor-General of South Africa ([AGSA] 2018:3) reported a seven per cent decrease in the number of municipalities with clean audits. A *clean audit* is obtained when municipalities do not have audit findings from the audit process. In the report, the AGSA further revealed that municipalities with quality financial statements decreased by seven per cent from 68 per cent to 61 per cent. The AGSA defined *quality financial statements* as financial statements without material misstatements. The AGSA added that unlawful expenditure had been increasing during the previous five years, as indicated in Table 1.3. There was an increase of 51 per cent in unlawful expenditure over the five financial reporting periods, at an average increase of 10.6 per cent per annum.

Table 1.3: Municipal unlawful expenditure, 2013–2018

No	Financial reporting period	Unauthorised expenditure R'000,000	Irregular expenditure R'000,000	Fruitless and wasteful expenditure R'000,000	Total unlawful expenditure R'000,000
1.	2013/14	11,402	11,334	687	23,423
2.	2014/15	15,320	15,328	1,340	31,988
3.	2015/16	12,770	16,810	901	30,481
4.	2016/17	12,603	27,376	1,500	41,479
5.	2017/18	12,851	21,243	1,332	35,426
Total		**64,946**	**92,091**	**5,760**	**162,797**
Overall increase per category		**13%**	**87%**	**94%**	**51%**

Source: AGSA (2014/18)

1.3 PROBLEM STATEMENT

Because of the current challenges presented by the incurrence of unlawful expenditure by South African municipalities and disappointing municipal financial performance, establishing whether there are relationships between types of unlawful expenditure and municipal financial performance may focus improvement efforts on municipal financial performance.

Inadequate municipal financial performance and service delivery have become burning issues in South Africa (Odaro 2012:1). Since 2004, the country has experienced an increasing number of service delivery protests due to poor municipal financial performance (Alexander, Runciman & Maruping 2016:48). The increased protest action has resulted in closer scrutiny of municipal financial performance by the government authorities. In 2018, 87 out of 257 municipalities in South Africa (33%) were deemed dysfunctional and required urgent interventions (Herman 2018:online). In the same year, the AGSA reported to Parliament that irregular expenditure increased exponentially at an aggregate rate of 87 per cent in the last five years (AGSA 2018:9). The research problem for this study was, therefore:

Municipal financial performance in South Africa, so important for sustainable service delivery and economic growth, is deteriorating. Good municipal financial performance is imperative for the much-needed social upliftment of marginalised communities. The proliferation of unlawful expenditure may greatly impact municipal financial performance.

1.4 RESEARCH OBJECTIVES

The study was informed by the poor performance of municipalities in South Africa. As a result, its primary research objective was to determine, firstly, whether there were relationships between types of unlawful expenditure and municipal financial performance; and, secondly, the extent of these relationships. Establishing a relationship and its extent provided evidence to support the perception that poor municipal financial performance is connected to excessive unlawful expenditure and *vice versa* (Bezuidenhout 2016:21).

The following secondary research objectives were developed to address the challenge discussed above:

1. To understand the concepts of unlawful expenditure and municipal financial performance;
2. To determine the underlying causes of unlawful expenditure and poor municipal financial performance;
3. To determine the impact of unlawful expenditure on poor municipal financial performance; and
4. To propose strategies to minimise unlawful expenditure.

1.5 THESIS STATEMENT

Improving municipal financial performance by addressing the incurrence of unlawful expenditure may add to a prosperous South Africa, with a better quality of living, better economic growth and lower unemployment rate.

1.6 DELINEATION AND LIMITATIONS

The study was limited to municipalities in South Africa and did not include municipal entities and other state-owned entities (SOEs). Furthermore, secondary data was limited to the data obtained from annual reports and available literature. The municipal financial performance measures were also limited to those measuring financial viability, as explained in Section **Error! Reference source not found.**.

1.7 DEFINITIONS OF TERMS AND CONCEPTS

Municipal financial performance means the provision of a municipal service in a manner aimed at ensuring that the financing of that service from internal and external sources, including budgeted income, grants and subsidies for the service, is sufficient to cover the costs of the initial capital expenditure required for the service, operating the service and maintaining, repairing and replacing the physical assets used in the provision of the service (SAG 2000).

Unlawful expenditure refers to unauthorised expenditure and irregular expenditure, as well as fruitless and wasteful expenditure (SAG 2003).

Unauthorised expenditure in relation to a municipality means any expenditure incurred by a municipality other than in accordance with sections 11(3) or 15 of the MFMA, and includes overspending of the total amount appropriated for the municipality's approved budget, and overspending of the total amount appropriated for a vote in the approved budget (SAG 2003).

Fruitless and wasteful expenditure means expenditure that was made in vain and could have been avoided if reasonable care had been exercised (SAG 2003).

Irregular expenditure in relation to a municipality or municipal entity means: (a) expenditure incurred by a municipality or municipal entity that contravenes, or is not in accordance with, a requirement of the MFMA, and that has not been condoned in terms of Section 170 of the MFMA; (b) expenditure incurred by a municipality or municipal entity that contravenes, or is not in accordance with, a requirement of the Municipal Systems Act, and that has not been condoned in terms of that Act; (c) expenditure incurred by a municipality that contravenes, or is not in accordance with, a requirement of the Public Office-Bearers Act, 1998, (Act 20 of 1998); or (d) expenditure incurred by a municipality or municipal entity that contravenes, or is not in accordance with, a requirement of the supply chain management policy of the municipality or entity or any of the municipality's by-laws giving effect to such policy, and that has not been condoned in terms of such policy or by-law; but it excludes expenditure by the municipality that falls within the definition of "unauthorised expenditure" (SAG 2003).

1.8 UNDERLYING ASSUMPTIONS

- The audited annual reports used are accurate and reliable.
- Those in charge of governance are the accounting officer, the executive mayors, audit committees, municipal council, the Minister, and the Standing Committee on Public Accounts (SCOPA).
- The *municipal unlawful expenditure* is unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditure.

1.9 THEORETICAL FRAMING

The theoretical framework of this study combines the resource-based theory, the stakeholder theory and the stewardship theory. A combination of theories has been

used in the past by many researchers when assessing firm performance (Mbo 2017:6; Maleka 2016:11; Bezuidenhout 2016:53). Bezuidenhout (2016:53) asserted that there is no best theory in the public sector to measure firm performance, hence a combination of theories is suggested to underpin such a study.

1.9.1 Resource-based theory

Resource-based theory has been widely used since 1984 in measuring firm performance. This theory put forward organisational resources as key factors in organisational performance. Wernerfelt (1984:173) defined an organisational resource as a tangible or intangible asset, such as employment of skilled personnel, machinery (infrastructure assets), efficient procedures and capital. Resource-based theory suggests that an organisation should base its strategy on the capabilities and resources it possesses (Bezuidenhout 2016:57). This theory is, therefore, relevant in the study of municipal performance because IDPs are based on the available resources, such as employee skills, capital and infrastructure.

Mbo (2016:139) posited that good organisational performance results from a combination of high innovative resources, such as skilled management, and capital assets, such as infrastructure. Thus, good municipal performance depends on how effectively the municipality utilises its resources over time.

1.9.2 Stakeholder theory

Another theory that underpins this study is the stakeholder theory. This theory has been widely used since its origin in 1983; for example, by Maleka, Nyirenda and Fakoya (2017:12). Freeman, Harrison, Wicks, Parmar and Colle (1984:46) defined a stakeholder as “any group or individual that can affect or is affected by the achievement of a corporation’s purpose”. Dunham, Freeman and Liedtka (2006:25) defined a stakeholder as a “group that the firm needs in order to exist, specifically customers, suppliers, employees, financiers, and communities”.

Stakeholder theory is relevant to this study because the onus is on municipalities to be accountable to multiple stakeholders. Since the primary mandate of a municipality is to deliver services to its community, the primary stakeholder of the municipality is its community. This is confirmed by the fact that, when the municipal strategy (IDP) is

developed, the public must be consulted. Thus, municipal strategy and direction should be based on the needs and opinions of its community.

Parmar, Freeman, Harrison, Wicks, Colle and Purnell (2010:14) defined a secondary stakeholder as a group that has no special claim on the firm or to whom management has no special responsibility. In terms of this definition, those charged with governance are referred to as secondary stakeholders in this study.

1.9.3 Stewardship theory

Stewardship theory has been used by many researchers who studied the performance of SOEs (Mbo 2017:7; Bezuidenhout 2016:57; Jordaan, 2013:48). *Stewardship* has been defined as the personal responsibility for taking care of another person's property or financial affairs (Jordaan 2013:48). Jordaan (2013:48) provided a public administrative perspective of stewardship theory in that it is the public servant's responsibility to utilise, safeguard and develop organisational resources, such as its people, property, financial assets and financial affairs, in a manner that is effective, efficient and economical.

Unlike agency theory, where the interests of management (the agent) are promoted over those of its shareholders (the principal), stewardship theory puts the interests of the municipality over those of management. Jordaan (2013:49) viewed this theory as a wise administrative practice to achieve good governance. Thus, good governance normally serves as an indicator of good performance.

Bezuidenhout (2016:58) suggested that stewardship theory allows management (accounting officers) an independent role to perform without being monitored as they know the institution best. This role, therefore, allows management to be stewards of performance, and public institutions' performance can directly impact the individual performance of management (Jordaan 2013:49).

1.10 RESEARCH METHODOLOGY

This section outlines the research design, population, sample, data collection, data analysis and operational definition of variables adopted in the study.

1.10.1 Research design

From a positivist paradigm, the study applied a quantitative methodology that examined a sample of 121 municipalities over the five years between the financial years of 2013/14 and 2017/18. A document analysis extracted data for quantitative regression analysis. The documents analysed were the audited municipal annual reports, as well as information available from the municipal websites. The panel data obtained established a correlation between unlawful expenditure and municipal financial performance (Chapter 4, Research Methodology, provides all the details).

Similar methods have been used by researchers such as Maleka et al (2017). The method was appropriate because it was similar to the study conducted by Maleka et al (2017), who assessed the relationship between waste management expenditure and the waste reduction targets of selected JSE companies.

1.10.2 Population

Only the 226 South African municipalities (out of 257 existing municipalities) that were not affected by the re-demarcation in 2016 were considered as the population. Other municipalities were excluded due to the inconsistency of the data available for them in the five-year period covered in the study (Buallay, Hamdan & Zureigat 2017:8). Table 1.4 shows the numbers and categories of municipalities represented in the population:

Table 1.4 Population

No	Category	EC	FS	GP	KZN	LIM	MP	NC	NW	WC	Total
1.	Metropolitan municipalities	2	0	3	0	0	0	0	0	1	**6**
2.	District municipalities	5	4	2	10	4	2	5	4	5	**41**
3.	Local municipalities	26	18	5	34	14	16	25	17	24	**179**
Total		**33**	**22**	**10**	**44**	**18**	**18**	**30**	**21**	**30**	**226**

Source: Researcher's own compilation

1.10.3 Sample

The nature of the study required the use of statistical techniques to analyse the data, so the sample chosen had to reflect the technique used. Data were analysed by making use of Minitab V17 software. The study followed a non-probability convenient sampling method, where only municipalities with readily available annual reports from the

National Treasury database for the five-year period were selected. The sample size was 121 (54%) of the 226 municipalities (population). The 121 sample municipalities consisted of five metropolitan municipalities (83% of a population of six), 16 district municipalities (39% of a population of 41), and 100 local municipalities (56% of a population of 179). Refer to Table 1.5 below for the distribution per province. The table also shows the percentage of municipalities in the sample that submitted annual reports to the National Treasury: The percentage coverage suggests that other provinces such as Gauteng and Kwa-Zulu Natal are consistently submitting their annual reports to the National Treasury, while Mpumalanga and Limpopo show least consistency.

Table 1.5: Sample

No	Category	EC	FS	GP	KZN	LIM	MP	NC	NW	WC	Total
4.	Metropolitan municipalities	2	0	3	0	0*	0*	0*	0*	0	**5**
5.	District municipalities	1	1	2	6	1	1	0	1	3	**16**
6.	Local municipalities	12	10	4	31	2	3	14	10	14	**100**
Total sample		**15**	**11**	**9**	**37**	**3**	**4**	**14**	**11**	**17**	**121**
Total population		**33**	**22**	**10**	**44**	**18**	**18**	**20**	**21**	**30**	**226**
Population Coverage		46%	50%	90%	84%	17%	22%	47%	52%	57%	54%

**Provinces without metropolitan municipalities*

Source: Researcher's own compilation

1.10.4 Data collection

Secondary data were collected from the municipal annual reports available on the National Treasury website. The data collected were used to determine whether there was a relationship between unlawful expenditure and municipal financial performance in the 2013/14 to 2017/18 financial reporting periods. The annual reports were audited by the AGSA and the audit reports are included in the annual reports.

1.10.5 Data analysis

The study evaluated the relationships between types of unlawful expenditure and municipal financial performance in South Africa. Regression analysis and correlation analysis were applied to measure the variables in Sections 1.10.6 and 1.10.7 below.

Independent, dependent and operational variables are discussed in the next sections.

1.10.6 Independent variables (unlawful expenditure)

The data on unlawful expenditure were obtained from municipal annual reports and used as independent variables. The following variables represent unlawful expenditure (Bezuidenhout 2016:32):

- Unauthorised Expenditure *(X_1);*
- Irregular Expenditure *(X_2)*; and
- Fruitless and Wasteful Expenditure *(X_3)*.

1.10.7 Dependent variables (municipal financial performance)

This study did not adopt all the measures used by Claassen and Kocks (2018:6). As indicated in Section 1.2.3, the study conducted by these authors provided a ranking based on an index score awarded annually to all the municipalities in South Africa. The index score calculated by Claassen and Kocks (2018:6) considers measures such as infrastructure development, affordability and budget position, which were not adopted because data are not readily available. However, indicators covering liquidity, debt management and operations are considered because the data are readily available from municipal annual reports and is similar to those used by Claassen and Kocks (2018:6).

1.10.8 Debt coverage

This ratio measures the amount of short-term debt covered by operating revenue, excluding operational grants received.

> *"Total operating revenue – operating grant*
> *Debt service payments (interest = redemption) due within financial year"*

1.10.9 Outstanding service debtors to revenue

The ratio measures the rate of outstanding service debtors to revenue billed to service customers.

> *"Total outstanding service debtors*
> *Total annual revenue actually received for services"*

1.10.10 Cost coverage

This ratio indicates the total cash available each month to cover monthly fixed operating expenditure.

"All cash available at particular time + investments
Monthly fixed operating expenditure"

1.10.11 Collection rate

The ratio indicates the collection rate, i.e., level of payments. It measures increases or decreases in debtors relative to annual billed revenue. To determine the real collection rate, the amount of bad debts written off is taken into consideration (National Treasury 2014:4).

"(Debtors Closing Balance + Billed Revenue – Debtors Opening Balance – Bad debts)
Billed Revenue"

1.10.12 Current ratio

The ratio is used to assess the ability of the municipality or municipal entity to pay back its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables) (National Treasury 2014:7).

"Current assets
Current liabilities"

1.10.13 Remuneration as a percentage of total expenditure

The ratio measures the extent of Remuneration compared to Total Operating Expenditure (National Treasury 2014:16).

"Remuneration
Total operating expenditure"

1.10.14 Net operating surplus margin

The ratio assesses the extent to which the municipality generates operating surpluses (National Treasury 2014:10).

"(Operating Revenue – Operating Expenditure)

Operating Revenue"

Based on the above, the following municipal financial performance variables were used as dependent variables:

1. Debt coverage *(Y_1);*
2. Outstanding service debtors to revenue *(Y_2);*
3. Cost coverage *(Y_3);*
4. Collection rate *(Y_4);*
5. Current ratio *(Y_5);*
6. Remuneration as a percentage of total expenditure *(Y_6);* and
7. Net operating surplus margin *(Y_7).*

The first three variables above are prescribed in terms of the Municipal Systems Act (MSA) and the remaining four variables are prescribed in terms of the MFMA.

1.10.15 Hypotheses

As discussed in section 1.4 of the study, the perception in South Africa is that the is a connection between unlawful expenditure and poor municipal financial performance. Thus increasing unlawful expenditure has a negative effect to municipal financial performance and vice versa. The hypotheses below are therefore developed to respond to this perception in line with the problem statement as outlined in section 1.3 and study objective as outline in section 1.5 above. The following seven hypotheses were then developed:

H_1: There is a negative relationship between unlawful expenditure and debt coverage.

H_2: There is a positive relationship between unlawful expenditure and outstanding service debtors to revenue.

H_3: There is a negative relationship between unlawful expenditure and cost coverage.

H_4: There is a negative relationship between unlawful expenditure and the collection rate.

H_5: There is a negative relationship between unlawful expenditure and the current ratio.

H_6: There is a positive relationship between unlawful expenditure and remuneration as a percentage of total expenditure.

H_7: There is a negative relationship between unlawful expenditure and the net operating surplus margin.

1.10.16 Regression equation

The regression equations are as follows: $Y = \alpha + \beta x$

Debt coverage = *Unauthorised Expenditure + Irregular Expenditure + Fruitless &Wasteful Expenditure + e*

Outstanding service debtors to revenue = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Cost coverage = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Collection rate = *Unauthorised Expenditure + Irregular Expenditure + Fruitless &Wasteful Expenditure + e*

Current ratio = *Unauthorised Expenditure + Irregular Expenditure + Fruitless &Wasteful Expenditure + e*

Remuneration as a percentage of total expenditure = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Net operating surplus margin = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

where Y is the dependent variable, x is the independent variable, α is the intercept, and β is the slope.

These equations will be restated in accordance with the variables employed in the study.

1.10.17 Ethical considerations

The researcher considered the ethical responsibility to remain true and honest in work performed and to acknowledge the source where the work of others has been used. Research ethics clearance was obtained from the College of Accounting Sciences Research Ethics Review Committee, and the certificate can be viewed in Annexure A.

1.10.18 Methodological norms for quantitative research: Reliability and Validity

The researcher used audited information from the municipal annual reports, published scholarly work, and information from the selected municipal websites. Annual reports were sourced from the National Treasury database to enhance the reliability and validity of the research results. Variables for financial performance are proven measures for this purpose. Variables for unlawful expenditure are defined in legislation and reported on by the AGSA.

1.11 SIGNIFICANCE OF THE STUDY

As discussed in section 1.3, there has been a significant increase in poor municipal financial performance accompanied by a significant increase in unlawful expenditure, in particular irregular expenditure. The assumption is therefore that poor municipal financial performance is closely associated with unlawful expenditure. There is, however, no scientific proof whether such a relationship exist. Conducting a study of this nature was considered necessary as the issue of escalating unlawful expenditure and deteriorating municipal financial performance is of public interest.

In line with the problem statement and objective of the study, it is envisaged that the study will make the following contributions:

- It informs those charged with governance whether there are relationships between unlawful expenditure and municipal financial performance in a South African context and the extent of these relationships.
- It enables those charged with governance to use the information, if relationships exist and the extent thereof to strengthen the control environment by improving policies, procedures and implementing the study's recommendations.
- It adds to the literature on municipal financial performance.
- It can assist oversight bodies, such as the AGSA and the Public Protector, when recommending corrective measures to improve municipal financial performance.

1.12 CHAPTER OVERVIEW

Chapter 1: STUDY ORIENTATION

This chapter presents the research problem and research objectives, and introduces the methodology followed to reach the stated objectives.

Chapter 2: LITERATURE REVIEW: MUNICIPAL FINANCIAL PERFORMANCE

This chapter presents the available literature reviewed on municipal performance.

Chapter 3: LITERATURE REVIEW: UNLAWFUL EXPENDITURE

This chapter presents available literature on unlawful expenditure.

Chapter 4: RESEARCH METHODOLOGY

This chapter presents the research design, theoretical framing, population, sample, data collection, ethical considerations and scientific accountability measures.

Chapter 5: PRESENTATION AND ANALYSIS OF DATA GATHERED

This chapter presents the analysis and interpretation of the data collected for the study.

Chapter 6: SUMMARY, CONTRIBUTION, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the results from the study, and its contributions, recommendations and conclusions.

1.13 CHAPTER SUMMARY

This chapter presented the study's orientation on the literature review, problem statement, research objectives and hypotheses, theoretical framing and research methodology, as well as the significance of the study. It also presented the variables included in the statistical analysis to achieve the stated research objective and the contributions rendered by the results. The following chapter presents a review of literature on municipal financial performance.

CHAPTER 2. LITERATURE REVIEW: MUNICIPAL FINANCIAL PERFORMANCE

2.1 INTRODUCTION

This chapter discusses municipal financial performance in South Africa, in accordance with available literature. The purpose of the chapter is to contextualise municipal financial performance and justify the variables that were adopted in the statistical analysis.

2.2 RELEVANT LEGISLATION AND REPORTING FRAMEWORK

South African municipal finances are legislated by the Municipal Finance Management Act 56 of 2003 (the MFMA), which requires financial information to be reported in accordance with Generally Recognised Accounting Practice (GRAP). Municipal performance in South Africa is also regulated in terms of the Municipal Systems Act 32 of 2000 (the MSA).

2.2.1 Municipal Finance Management Act (the MFMA)

The aim of the MFMA is to ensure sound governance principles, sustainability, and standardisation, and to formalise the way public funds allocated to South African municipalities are utilised (SAG 2003). The National Treasury has consistently issued directives and regulations to supplement and complement adherence to the MFMA. The AGSA has aligned its audit methodology to the MFMA, directives and guidelines in order to monitor adherence to this Act and its supplementary regulations. Once the annual audits are conducted, the AGSA reports in the form of management reports to the accounting officers, as well as in audit reports that are made public. Where material non-compliances are found, the AGSA reports them in its audit reports.

Generally Recognised Accounting Practice (GRAP)

It is critical to highlight the basis on which the financial performance that is measured as part of this study was prepared and reported. It gives the reader a context for the nature of the performance that is measured (see Section 2.7) and analysed (see Chapter 5 of this study).

The principle of the double-entry system and accrual accounting was introduced and practised by the first Italian merchants, roughly between the twelfth and fourteenth

centuries. However, it was first formally documented by Luca Pacioli in the 1494 book, *Summa de Arithmetica* (Ovunda 2015:137). Although Pacioli's book does not cover accruals (Ovunda 2015:132), Italian merchants had already started developing the rudiments of cost accounting around 1400, by introducing accruals and deferred items (Ovunda 2015:135).

For South African municipalities, the accrual principle was introduced as one of the underlying principles contained in the *Framework for the Preparation and Presentation of Financial Statements* (hereafter the framework). The framework was approved by the Minister of Finance in 1998 as part of the old Generally Accepted Municipal Accounting Practice (GAMAP) (Libate 2019:41; Accounting Standards Board [ASB] 2004:4), which was to be applied at the time. However, the inauguration of GAMAP only took place in 2002 (Libate 2019:41). The framework has been recently updated and is now called the *Conceptual Framework for General Purpose Financial Reporting* (hereafter the conceptual framework). All development, changes or updates to the accounting standards for the public sector are now made as part of GRAP development, since there was a full migration from GAMAP to GRAP between 2004 and 2008.

The underlying assumption of the framework is that financial statements are prepared and presented on an accrual basis. The *accrual accounting principle* requires that financial transactions and other events be recorded as and when they occur, as opposed to when cash is paid or received. The framework further requires that the same accrual principle be applied when preparing and reporting financial statements. This implies that transactions and other events that have taken place during that financial reporting period will be presented and disclosed. Furthermore, all financial rights and obligations affecting the municipality, such as to pay or to deliver the service, cash and other resources that the municipality is expected to receive in the future, must be presented and disclosed (ASB 2004:12). Accrual accounting is therefore one of the main principles of the framework, which serves a frame for the preparation and presentation of financial information.

Most countries with higher-income economies, such as Canada, Greece, New Zealand, the United States and the United Kingdom, have adopted accrual accounting

in their municipalities (Cohen, Doumpos, Neophytou & Zopounidis 2011:3). Accrual accounting has become a public sector trend worldwide (Cohen et al 2011:24).

Accrual accounting is being adopted due to growing pressure to replace the traditional budget-based accounting (fund accounting) because it was difficult to measure municipal financial performance with the fund accounting model (Padovani & Scorsone 2011:1). Padovani and Scorsone (2011:1) added that moving to accrual accounting for municipalities not only improves the accuracy of information but also enhances the quality of information. Sevilla (2005:11) agreed that applying accrual accounting is critical to ensure sufficiency in reporting financial and other transactions that relate to the future. The decentralisation of decision-making from central government to municipalities has made the evaluation and measurement of their performance critical. The accounting change from fund accounting to accrual accounting came at the right time, as the assessment of municipal performance had become topical due to an increasing municipal responsibility of service delivery to the public (Cohen 2008:1).

In South Africa, municipalities were required to apply the accrual accounting principle for the first time around 1997-1998, when the GAMAP policies were developed. As previously mentioned, there was a migration to GRAP around 2004 (SAG 2004:1). This model allowed the South African government to switch from the traditional reporting model prescribed in the Exchequer Act of 1975 (Sevilla 2005:66). Today, municipalities in South Africa have fully adopted accrual accounting as the basis for financial reporting.

GRAP is a set of accounting standards issued by the Accounting Standards Board (ASB) as per Section 89 of the Public Finance Management Act, Act 1 of 1999 (hereafter the PFMA). GRAP is applicable to Parliament, the provincial legislatures, municipalities, municipal entities, public entities, government departments, constitutional institutions, commissions, companies, corporations and funds (Deloitte 2012:2). GRAP is, therefore, the accounting reporting framework that is used to prepare and report annual financial statements for the South African public sector.

Financial reporting is the manner of disseminating relevant financial information to the municipality stakeholders. GRAP requires that financial information be communicated in an understandable manner to enhance the stakeholders' confidence in decision-making. Furthermore, such financial information should be reported based on the

sound accounting principles prescribed in the GRAP standards (Mazibuko 2013:102). Mazibuko (2013:103) added that accounting standards provide guidance for preparing financial statements, by explaining the accounting for transactions, such as initial recognition, subsequent measurement, presentation, and disclosure. The *White Paper on Local Government* (SAG 1998:125) agrees that accounting standards bring about consistency in accounting for and presenting financial information.

2.3 MUNICIPAL FINANCIAL PERFORMANCE DEFINITIONS

2.3.1 Performance

Performance is generally defined as the action of performing a task or function. Selvam, Gayathri, Vinayagamoorthi and Kasilingam (2016:3) defined firm performance as the satisfaction of stakeholders. Santos and Brito (2012:4) stated that one should consider two other important aspects when attempting to define performance: the time frame and the reference point. Santos and Brito (2012:4) further stated that “it is possible to differentiate between past and future performance and that past superior performance does not guarantee that it will remain superior in the future. Another issue related to time is the duration of the interval (short, medium or long term) considered”.

It must be noted that neither the MFMA nor the MSA defines performance.

2.3.2 Financial performance

Financial performance is measured to determine the stage of implementing an entity’s policies and procedures in monetary terms (Shodhganga 2018:online). Bhasin (2020:online) added that financial performance is generally used to measure a firm's overall financial health over time.

2.3.3 Municipal financial performance

The term *financial performance* is broadly used to refer to the extent or degree to which financial objectives of the entity are being, or have been, accomplished (Verma 2019:online). The MSA does not define financial performance; however, it defines *financial sustainability* as follows: “in relation to the provision of a municipal service, means the provision of a municipal service in a manner aimed at ensuring that the financing of that service from internal and external sources, including budgeted

income, grants and subsidies for the service, is sufficient to cover the costs of the initial capital expenditure required for the service, operating the service and maintaining, repairing and replacing the physical assets used in the provision of the service" (SAG 2000).

Claassen and Kocks (2016:2) defined financial stability for all municipalities as "the financial ability to deliver services, develop and maintain the infrastructure required by its residents without unplanned increases in rates and taxes or a reduction in the level of services, and the capacity to absorb financial shocks caused by natural, economic and other adversities without external financial assistance". Molobela (2016:262) concurred because he defined municipal financial performance as the ability of the municipality to render services to its citizens. Molobela (2016:262) explained that, when a municipality can generate revenue using its own resources, this amounts to good financial performance.

Municipal financial performance is therefore determined or measured by comparing financial statements, which include Statements of Financial Performance, Position, Cash Flow, and disclosure notes. It is an MFMA requirement that a municipality be sustainable, financially viable and credible, and that budgets prepared are realistic and consistent with the requirements of the Act. In essence, municipal financial performance concurs with the Verma (2019:online) definition above that it is the extent to which the financial objectives are being met.

In addition to measuring financial performance, municipal performance is measured by the amount of service delivery to the public. In most cases but not always, performance measures would include quality, volume, outcome and efficiency when providing goods and services to the public (Bracegirdle 2004:3).

The Municipal Planning and Performance Management Regulation of 2001 defines outcome and output indicators. In terms of the regulation, an *outcome indicator* is "an indicator that assesses the impact or the quality of an output on achieving a particular objective" while an *output indicator* is an indicator that "measures the results of activities, processes and strategies of a program of a municipality" (SAG 2001). Based on these definitions, it would appear that prescribed indicators that measure financial viability, such as outstanding debtors to revenue, cost coverage and debt coverage, all

lean towards measuring the quality or impact of sound financial governance employed by management during a financial period (SAG 2001).

However, it must be noted that these indicators can be interpreted as output indicators by a mere calculation, without contextualising the meaning; i.e., whether the output is good or bad. Once the results are read in the context of what they represent, when compared to the industry norms or prescribed targets, the indicator result becomes an outcome. One therefore must tread carefully when analysing and interpreting these financial performance indicators.

2.4 PERFORMANCE MEASURES

Bracegirdle (2004:6) explained that the objectives of using performance measurement are (a) to provide accountability between citizens and government and also the internal accountability between council members and departmental heads; (b) to enhance performance by improving the programmes, policies, plans and processes used in the provision of services or the cost of the services, quantity, quality; and lastly, (c) to help identify expenses by taking a results-based budgeting approach, which connects resource allocation to specific and measurable results that reflect agreed priorities.

2.4.1 Global municipal financial performance measures

Different measures are being used all over the world to measure performance (Heras 2012:76). Municipalities rely on a combination of assessment methods to measure performance. These methods can differ from one municipality to another and may be external, internal, user or peer assessment. In the United Kingdom, the Commonwealth Parliamentary Association (CPA) relies on self-assessment inspections by external inspectors and councils, whereas, in the Philippines, assessments by Local Government Units (LGU) and citizens are integrated by the Local Governance Performance Management System (LGPMS) (Bracegirdle 2004:6).

In Italy, the following financial performance indicators are prescribed by the Ministry of the Interior to measure municipal financial health (Padovani, Rossi & Orelli 2010:11); the ratios are used by the Court of Audit to identify all municipalities in financial distress:

- *"Long- term debt / current revenues";*
- *"Past expenditures not covered by appropriations / current revenues";*

- *"Treasury overdraft not reimbursed";*
- *"Annual total deficit / total current revenues";*
- *"Credits related to annual local revenues / annual local revenues";*
- *"Debts related to current expenditure / annual current expenditures";*
- *"Enforcing judgements amount / current expenditures";*
- *"Personnel expenditures / current revenues";* and
- *"Personnel expenditures / current revenues".*

Similarly, in Australia, the following key performance indicators, as a minimum, are used to measure municipal financial health (Dollery & Crase 2006:13):

- *"Net financial liabilities as % of total capital employed";*
- *"Net debt as % of total revenue";*
- *"Net interest expense as % of total revenue";*
- *"For commercial activities only: EBIT as % of non-financial assets";*
- *"For general government activities: Operating surplus as % of own-source revenue";*
- *"Net borrowing as % of capital expenditure on new or enhanced assets";*
- *"Infrastructure backlog ($M) as % of total infrastructure assets (estimated at fair value)" and*
- *"Annual renewals deficiency as % of renewals capital expenditure".*

In Greece, Cohen (2008:8-10) divided municipal financial performance into four categories, namely profitability ratios, liquidity ratios, capital structure ratios and performance ratios.

Cohen's (2008:8) profitability ratios include:

- *"Return on Asset (ROA)";*
- *"Return on Equity (ROE)" and*
- *"Profit Margin Ratio (PR)".*

Liquidity ratios include the current ratio (CR), which is an indicator of whether the municipality can pay its short-term debts when they are due during the ordinary course of business (Cohen 2008:8). Cohen (2008:8) added that this indicator is critical in assessing the municipality's ability to measure the sustainability of its financial position.

Capital structure ratios include the Debt to Equity Ratio (D/E) and the Total Asset (TA) ratio. Cohen (2008:9) explained that capital structure ratios are important indicators of how the municipality finances its assets in the long run. Molobela (2016:262) agreed that municipal performance is measured by the municipality's ability to generate revenue by using its assets.

When measuring performance, Cohen (2008:9) included three ratios, namely:

- *"Asset turnover ratio (AT)";*
- *"Operating Revenue to Total Revenue (OR/TR)"; and*
- *"Operating Revenue to Operating Expense (OR/OE)".*

In the United States of America, the following performance measures, referred to as *Brown's 10-point test*, are used when measuring municipal financial performance (McDonald III 2017:9). These ratios were developed by Brown in the early 1990s to test the financial condition of smaller cities (Brown 1993:1):

- *"Total Revenues per Capita";*
- *"Property Tax or Own Source Tax Revenues/Total Revenues Percentage";*
- *"Intergovernmental Revenues/Total Revenues Percentage";*
- *"Total Expenditures per Capita";*
- *"General Fund Balance/General Fund Revenues Percentage";*
- *"Operating Surplus or Deficit/Operating Revenues Percentage";*
- *"Enterprise Funds Working Capital Coverage Percentage";*
- *"Debt Service/Operating Revenues Percentage";*
- *"Long Term Debt/Assess Value Percentage";*
- *"Assets/Liabilities Percentage"; and*
- *"Postemployment Benefit".*

Brown (1993:1) explained that the 10-point test model was developed specifically for cities with a population of less than 100,000 to provide a quick and effective financial assessment and also to improve the availability of comparative city financial data (Brown 1993:1). Crosby and Robbins (2013:1) argued that Brown's 10-point tester is too simple and warned that heavy reliance on performance ratios might provide misleading information; they suggested that certain measures should be removed

because they have limitations and new measures, which go beyond general funds, should be found to replace them.

2.4.2 Municipal financial performance measures in South Africa

The National Treasury issued Circular 71 on uniform financial ratios and norms (National Treasury 2014), in line with the legislative requirements of Section 2 of the MFMA and Section 216 of the Constitution. The National Treasury is required to set standards and norms that are unique and uniform in order to ensure consistency, sound governance and the sustainability of state resources and taxpayers' money. The circular provides for 32 ratios that municipalities must report on in terms of the MFMA Section 71.

Currently, there is a variety of financial indicators to assess the financial performance of different institutions. There are more than 200 ratios available to use when assessing and comparing the financial health and performance of municipalities. Municipalities use these performance measures for different reasons, ranging from assessing their own performance or setting benchmarks for improvement purposes, to measuring themselves against these benchmarks over time. The disadvantage of using this variety of municipal performance measures was that there was no consistency or uniformity in the application and interpretation of the same information. This often, if not always, resulted in the incorrect diagnosis of real causes or challenges, which in turn amounted to incorrect or inadequate responses and recommendations (National Treasury 2014:1).

The circular emphasised that the ratios should not be used or analysed in isolation. Ratios of a similar nature, or that are related, should always be analysed together as this provides a better picture of the municipal financial performance. The circular added that analysing in this fashion not only brings about consistency, but also allows a platform for municipalities to identify areas that require improvement and provides useful information to the users, such as the public and policy makers, for decision-making purposes (National Treasury 2014:1).

The 32 indicators are listed below in **Error! Reference source not found.**.

Table 2.1 Municipal financial performance ratios and norms

Ratio		Formula	Norm/ range
1. FINANCIAL POSITION			
A. Asset Management/Utilisation			
1. ,	"Capital Expenditure to Total Expenditure"	"Total Capital Expenditure / Total Expenditure (Total Operating expenditure + Capital expenditure) × 100"	10%–20%
2. ,	"Impairment of Property, Plant and Equipment, Investment Property and Intangible assets (Carrying Value)"	"Property, Plant and Equipment + Investment Property + Intangible Assets Impairment / (Total Property, Plant and Equipment + Investment Property + Intangible Assets) × 100"	0%
3. ,	"Repairs and Maintenance as a % of Property, Plant and Equipment and Investment Property (Carrying Value)"	"Total Repairs and Maintenance Expenditure / Property, Plant and Equipment and Investment Property (Carrying value) x 100"	8%
B. Debtors Management			
4. ,	"Collection Rate"	"(Gross Debtors Closing Balance + Billed Revenue - Gross Debtors Opening Balance - Bad Debts Written Off) / Billed Revenue x 100"	95%
5. ,	"Bad Debts Written-off as % of Provision for Bad Debt"	"Bad Debts Written-off / Provision for Bad Debts x 100"	100%
6. ,	"Net Debtors Days"	"((Gross Debtors - Bad debt Provision) / Actual Billed Revenue)) × 365"	30 days
C. Liquidity Management			
7. ,	"Cash / Cost Coverage Ratio (*excluding* Unspent Conditional Grants)"	"((Cash and Cash Equivalents - Unspent Conditional Grants - Overdraft) + Short Term Investment) / Monthly Fixed Operational Expenditure *excluding* (Depreciation, Amortisation, Provision for Bad Debts, Impairment and Loss on Disposal of Assets)"	1–3 Months
8. ,	"Current Ratio"	"Current Assets / Current Liabilities"	1.5–2:1
D. Liability Management			
9. ,	"Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure"	"Capital Cost (Interest Paid and Redemption) / Total Operating Expenditure x 100	6%–8%
10.	"Debt (Total Borrowings) / Revenue"	"(Overdraft + Current Finance Lease Obligation + Non-current Finance Lease Obligation + Short-term Borrowings + Long-term Borrowings) / (Total Operating Revenue - Operational Conditional Grants) x 100"	45%

Ratio		Formula	Norm/ range
E. Sustainability			
,	“Level of Cash-backed Reserves (Net Assets - Accumulated Surplus)”	“(Cash and Cash Equivalents - Bank Overdraft + Short-term Investment + Long-term Investment - Unspent Grants) / (Net Assets - Accumulated Surplus - Non-controlling Interest Share Premium - Share Capital - Fair Value Adjustment - Revaluation Reserve) x 100”	100%
2. FINANCIAL PERFORMANCE			
A. Efficiency			
12.	“Net Operating Surplus Margin”	“(Total Operating Revenue - Total Operating Expenditure) / Total Operating Revenue”	= or > 0%
13.	“Net Surplus / Deficit Electricity”	“Total Electricity Revenue *less* Total Electricity Expenditure / Total Electricity Revenue × 100”	0%–15%
14.	“Net Surplus / Deficit Water”	“Total Water Revenue *less* Total Water Expenditure / Total Water Revenue × 100”	= or > 0%
15.	“Net Surplus / Deficit Refuse”	“Total Refuse Revenue *less* Total Refuse Expenditure / Total Refuse Revenue × 100”	= or > 0%
16.	“Net Surplus / Deficit Sanitation and Waste Water”	“Total Sanitation and Waste Water Revenue *less* Total Sanitation and Waste Water Expenditure / Total Sanitation and Waste Water Revenue × 100”	= or > 0%
B. Distribution Losses			
17.	“Electricity Distribution Losses (Percentage)”	“(number of Electricity Units Purchased and/or Generated - number of Units Sold) / number of Electricity Units Purchased and/or Generated) × 100”	7%–10%
18.	“Water Distribution Losses (Percentage)”	“(number of Kilolitres’ Water Purchased or Purified - number of Kilolitres’ Water Sold) / Number of Kilolitres’ Water Purchased or Purified × 100”	15%–30%
C. Revenue Management			
19.	“Growth in Number of Active Consumer Accounts”	“(Period under review's number of Active Debtor Accounts - previous period's number of Active Debtor Accounts) / previous number of Active Debtor Accounts x 100”	None
20.	“Revenue Growth (%)”	“(Period under review's Total Revenue - previous period's Total Revenue) / previous period's Total Revenue) x 100”	CPI

Ratio		Formula	Norm/ range
21.	"Revenue Growth (%) - *excluding* capital grants"	"(Period under review's Total Revenue *excluding* Capital Grants - previous period's Total Revenue *excluding* Capital Grants) / previous period's Total Revenue *excluding* Capital Grants) x 100"	CPI
D. Expenditure Management			
22.	"Creditors Payment Period (Trade Creditors)"	"Trade Creditors Outstanding / Credit Purchases (Operating and Capital) × 365"	30 days
23.	"Irregular, Fruitless and Wasteful and Unauthorised Expenditure / Total Operating Expenditure"	"(Irregular, Fruitless and Wasteful and Unauthorised Expenditure) / Total Operating Expenditure x 100"	0%
24.	"Remuneration as % of Total Operating Expenditure"	"Remuneration (Employee-related Costs and Councillors' Remuneration) / Total Operating Expenditure x 100"	25%–40%
25.	"Contracted Services % of Total Operating Expenditure"	"Contracted Services / Total Operating Expenditure x 100"	2%–5%
E. Grant Dependency			
,	"Own-funded Capital Expenditure (Internally Generated Funds + Borrowings) to Total Capital Expenditure"	"Own-funded Capital Expenditure (Internally Generated Funds + Borrowings) / Total Capital Expenditure x 100"	None
27.	"Own-funded Capital Expenditure (Internally Generated Funds) to Total Capital Expenditure"	"Own funded Capital Expenditure (Internally Generated Funds) / Total Capital Expenditure x 100"	None
28.	"Own-source Revenue to Total Operating Revenue (*including* Agency Revenue)"	"Own-source Revenue (Total Revenue - Government Grants and Subsidies - Public Contributions and Donations) / Total Operating Revenue (*including* Agency Services) x 100"	None
3. BUDGET IMPLEMENTATION			
29.	"Capital Expenditure Budget Implementation Indicator"	"Actual Capital Expenditure / Budget Capital Expenditure x 100"	95%–100%
30.	"Operating Expenditure Budget Implementation Indicator"	"Actual Operating Expenditure / Budgeted Operating Expenditure x 100"	95%–100%
31.	"Operating Revenue Budget Implementation Indicator"	"Actual Operating Revenue / Budget Operating Revenue x 100"	95%–100%
32.	"Service Charges and Property Rates Revenue Budget Implementation Indicator"	"Actual Service Charges and Property Rates Revenue / Budget Service Charges and Property Rates Revenue x 100"	95%–100%

Source: MFMA Circular 71 (National Treasury 2014)

The indicators above were used by many researchers, such as Hanh, Ting, Kweh and Hoanh (2018:467) and Bezuidenhout (2016:32), who performed similar studies on firm performance in the public sector.

2.4.3 Financial performance measures adopted

All the indicators adopted in this study measure financial viability. *Financial viability* is generally defined as the municipality's ability to generate sufficient revenue to meet operating expenditure, operational debt and, where applicable, to allow growth while maintaining service levels (Moloto & Lethoko 2018:2). Similarly, Kanyane (2011:936) asserted that a municipality is considered financially viable if it can its operational debts without having to depend on grants.

The financial performance measures listed in **Error! Reference source not found.** are prescribed in terms of the Municipal Planning and Performance Management Regulations (SAG 2001:10) and the MFMA Circular 71 of 2014 (National Treasury 2014:1). All of them are used as a group of indicators to measure municipal financial performance for the purposes of this study.

Not all the measures used by Claassen and Kocks (2018:6) were adopted because their study was intended to provide a ranking based on index scores awarded to all municipalities in South Africa on an annual basis. However, the study has gone further to consider international financial performance measures that are specific to the financial performance of a municipality (Padovani, Rossi & Orelli 2010:11; Cohen 2008:8-10). Notwithstanding the international alignment, all indicators used in this study are amongst National Treasury's prescribed indicators in terms of Municipal Planning and Performance Management Regulation of 2001 and the MFMA Circular 71 of 2014: Municipal Financial Performance Ratios and Norms.

Table 2.2: Municipal financial performance indicators prescribed in terms of the MSA

No	Financial indicator	*Basis of calculation*
(a)	"Debt coverage"	*"Total operating revenue – operating grant* *Debt service payments (interest = redemption) due within financial year"*
(b)	"Outstanding service debtors to revenue"	*"Total outstanding service debtors* *Total annual revenue actually received for services"*
(c)	"Cost coverage"	*"All cash available at particular time + investments* *Monthly fixed operating expenditure"*

Source: MSA: Municipal Planning and Performance Management Regulation 2001

Table 2.3: Municipal financial performance indicators prescribed in terms of the MFMA

No	Financial measure	Basis of calculation
(d)	"Collection rate"	*"(Debtors Closing Balance + Billed Revenue - Debtors Opening Balance - Bad debts)* *Billed Revenue"*
(e)	"Current ratio"	*"Current assets* *Current liabilities"*
(f)	"Remuneration as a % of total expenditure"	*"Remuneration* *Total operating expenditure"*
(g)	"Net operating surplus margin"	*"(Operating Revenue - Operating Expenditure)* *Operating Revenue"*

Source: MFMA Circular No. 71

The performance measures adopted above are further discussed in the sub-sections below.

2.4.3.1 Debt coverage

The debt coverage ratio was developed by Farmer Mac (FAMC) as the total debt service ratio and a similar measure was adopted by a United States company called the Farm Financial Standards Council (FFSC) (Ryan 1998:5). The debt coverage ratio measures the frequency (times) with which debt payments can be covered by operating revenue (excluding operating grants). Ryan (1998:5) explained that a ratio not less than 1.25:1 is considered good. However, Puelz and Lee (1992:1) said a ratio of 1.5:1 is highly desirable. Most analyst use this indicator to get a sense of the firm's

ability to service its debt obligation (Findlay III & Williams 1975:58). This ratio somewhat measures municipal health, when it comes to generating its own funds without having to depend on the revenue received from grants, such as the equitable share.

The debt ratio compares municipal assets to municipal liabilities, whereas debt coverage compares current service debt to service revenue. The debt coverage, therefore, focuses on the shorter term (within 12 months), while debt ratio focuses on the longer term, i.e., five years. Debt coverage is a popular ratio used to measure poor performance and financial distress. As it has already been established in this study that approximately 33 per cent of the municipalities in South Africa are performing poorly and thereby financially distressed, this ratio is therefore critical in establishing municipal performance (Herman 2018:online). The ratio is also used in Italy to measure the financial distress of municipalities. Even though a different term is used, the ratio calculation is the same, namely prior expenses that are not accommodated by appropriations/current revenues (Padovani, Rossi & Orelli 2010:11).

2.4.3.2 Outstanding service debtors to revenue

South African municipalities are required in terms of the MFMA to collect municipal service debt (Manyaka 2014:1). The outstanding service debtors to revenue ratio compares the amount outstanding from the community for water, electricity, waste removal, sanitation, and any other service rendered by the municipality, with how much money the municipality has received for these services. It is determined by dividing the total outstanding debtors by the total annual revenue. A lower score is considered a better result, as it indicates a low rate of non-paying customers (National Treasury 2018:8).

The challenge with the outstanding service debt to revenue ratio is that it only considers the outstanding debtors at the end of the financial reporting period over revenue received during the year. The accuracy of this ratio may not be a true reflection of the revenue collection rate as the actual revenue received may include revenue from previous periods. Moreover, the outstanding debtors balance does not consider the bad debt written off during the financial year.

A culture of non-payment has caused a massive increase in municipal debtors (Lubbe & Rossouw 2005:1). Lubbe and Rossouw (2005:1) described the situation as serious enough to collapse a municipality, citing a weak control environment as the main factor contributing to a poor collection rate. Jacobs (2019:8) stated that a high level of non-payment normally serves as an early warning indicator of financial distress that may be attributable to a weaker revenue collection system. Jacobs (2019:12) added that the consequence of a low collection rate is municipal unsustainability and suggested that implementing an indigent system, managing and improving the efficiency and effectiveness of the meter-reading and the billing system, increasing support to debt collection, customer care and credit control, and training revenue personnel will help alleviate the problem of uncollected debts.

Lubbe and Rossouw (2008:1) associated uncollected debts with political, ethical and social dilemmas that contribute to the continued conflict with the accounting standard on revenue recognition. Recognising revenue when it is not probable that it will be collected results in a huge impairment of debtors' records at a later stage.

Pieters (2015:57) recommended educating taxpayers, issuing garnishee orders and implementing a judicial system, such as municipal courts dedicated to uncollected debts, in order to reduce debt to a level that is acceptable.

2.4.3.3 Cost coverage

The cost coverage ratio explains how many months of expenditure can be accommodated with the cash and cash equivalents available to the municipality, excluding utilisation of grants. It is calculated by dividing all available cash at a particular time, plus all investments, by the monthly fixed operating expenditure (SAG 2001:10).

Holzer, Fry, Charbonneau, Shick and Burnash (2009:3) brought a different perspective: that sharing the costs of municipal infrastructure development, such as e-government and technology, makes service possible that would otherwise have been too expensive for one municipality to afford.

2.4.3.4 Collection rate

The collection ratio measures the actual amount of revenue billed that has not been collected at the end of the financial reporting period. The ratio appears to be a more accurate measure of the revenue outstanding from the service revenue than the outstanding service debtors to revenue ratio prescribed in terms of the MSA. The collection ratio considers other factors, such as bad debts, revenue billed in the current year only, and the opening and closing balance of outstanding debtors for the financial period. In terms of the collection rate, the National Treasury states that the collection rate should ideally be 95 per cent and above. Most municipalities are struggling to achieve this rate and it is almost impossible for municipalities in the rural areas, where the culture of not paying for municipal services is rife. Citizens from underprivileged or remote municipal areas in South Africa are struggling to pay for municipal services.

Most municipalities in South Africa are unable to collect service debt from consumers. This has impacted their financial sustainability to such an extent that it is now becoming almost inevitable that they will not be able to balance their books (AGSA 2018:10). During the 2019/2020 financial year, more than 20 per cent of municipalities in South Africa reported a deficit in their statement of financial performance (AGSA 2021:132). This may be an early warning that municipalities in South Africa are not sustainable in the long run.

2.4.3.5 Current ratio

The current or liquidity ratio measures the ability of a municipality to use its current assets to settle its current liabilities; in other words, the extent to which current assets exceed current liabilities (Mosalakae 2007:123). The liquidity ratio is an important indicator in projecting the municipality's ability to sustain itself. A higher ratio is an indication that a municipality is sustainable in the foreseeable future (Bezuidenhout 2016:145). The accepted norm or range for this indicator is 1,5-2:1 (National Treasury 2014:8). A ratio below one suggests that the municipality will not be able to settle all its current liability when it is due. When a municipality experiences a liquidity problem, it may be forced to dispose some of its long-term assets in order to meet its short-term liability requirement (National Treasury 2014:8).

2.4.3.6 Remuneration as a percentage of total expenditure

The ratio of remuneration as a percentage of total expenditure measures the extent of Remuneration against Total Operating Expenditure. “Remuneration means any amount of income which is paid or is payable to any person by way of any salary, leave pay, wage, overtime pay, bonus, gratuity, commission, fee, emolument, pension, superannuation allowance, retiring allowance or stipend, whether in cash or otherwise and whether or not in respect of services rendered.” (SARS 2016:online). The accepted range for this indicator is 25%-40%. Anything above 40 per cent is considered excessive.

Exceeding the accepted range for this performance measure may suggest that the municipality is spending money on items that are not essential for the service delivery cause (National Treasury 2014:17). The National Treasury has introduced cost-cutting measures to mitigate the risk of unnecessary expenditure. Remuneration is by far the largest expenditure item on municipalities’ statements of financial performance. As at 2016, the aggregate remuneration expenditure for municipalities in South Africa was reported at 26 per cent, although this was a slight decrease of one per cent from the prior year. The second highest expenditure, which is electricity, was reported at 22 per cent, which is four per cent below remuneration expenditure. The report also noted that expenditure by municipalities in rural areas on operations is, at 30 per cent, much more than others (SAG 2016: online).

2.4.3.7 Net operating surplus margin

The net operating surplus margin ratio measures the extent to which the municipality generates surpluses (National Treasury 2014:10). The ratio is calculated by dividing the operating surplus or deficit by total revenue (Kleynhans & Coetzee 2019:6). McDonald III (2017:6) stated that this ratio is easy to calculate and that the information required for analysis is also readily available from the annual report of any local government. McDonald III (2017:6) also stated that the ratio allows the municipality to identify its shortcomings in comparison with others and to render an interpretation of that position as one of its financial conditions. However, McDonald III (2017:6) warned that there is no literature to support any claim that this ratio is the correct one to use when assessing performance.

Ideally, the municipality should break even as a minimum because its primary mandate in terms of the Constitution is to deliver services to the community, as opposed to the ideal in the business sector, which is to make a profit in order to maximise shareholders' wealth. Municipalities should at least recover operating costs for services delivered, and any amount in excess can contribute to capital expenditure (O'Neill 2016:16). Any surplus equal to or greater than zero is desirable (National Treasury 2014:10).

2.5 RESOURCE-BASED THEORY

The Resource-based theory has been widely used in research on the public sector by researchers such as Bezuidenhout (2016:57), Bryson, Ackermann and Eden *(*2007:702), Mbo (2017:119) and Zhao and Fan (2018:1). As discussed in Section 1.9 of this study, resource-based theory underpins municipal financial performance. Grant (1991:116) posited that "resources and capabilities provide the basic direction for a firm's strategy and that resources and capabilities are the primary source of profit for the firm''.

Although there is no legal requirement that municipalities should budget for surpluses (National Treasury 2011:7), municipalities are expected to generate surpluses in order to fund capital expenditure, such as for replacing ageing infrastructure that is much needed for service delivery (AGSA 2021:123; AGSA 2017:54; National Treasury 2011:8). Resources are therefore essential for a municipality to generate surpluses in order to ensure financial viability while maintaining the required level of service delivery.

Grant (2005:28) and Halawi, Aronson and McCarthy (2005:78) categorised resources into three groups, namely tangible, intangible and human resources. *Tangible resources* "include financial resources that determine a firm's resilience and capacity for investment and physical resources that reflect the firm's production potential". *Intangible resources* "include technology related intangibles and reputation" (Zhao & Fan 2018:2). *Human resources* are "productive services that organisational members offer to the firm in terms of skills, knowledge, and decision-making ability".

Bryson et al (2007:702) added that “an important key to success for public organisations is identifying and building strategic capacities to produce the greatest public value for key stakeholders at a reasonable cost. Without continued attention to these capacities, public and non-profit organisations will find it difficult to achieve their goals, create real public value, respond effectively to changes in their environments, or justify their continued existence”.

Municipalities in South Africa develop IDPs through a public consultation process to identify the community needs. The basis on which the needs are addressed depends on the municipal resources available, i.e., capital grants, financial reserves, human resource capacity and available infrastructure. The IDP is an essential document for the municipality because it drives the service delivery.

A budget is developed based on the need identified by the community in the IDP. Both documents are married in the form of an SDBIP. The IDP and budget implemented through the SDBIP culminate in the municipal financial performance presented in the Annual Performance Report (APR).

Figure 2.1 shows how the resource-based theory is applied by South African municipalities.

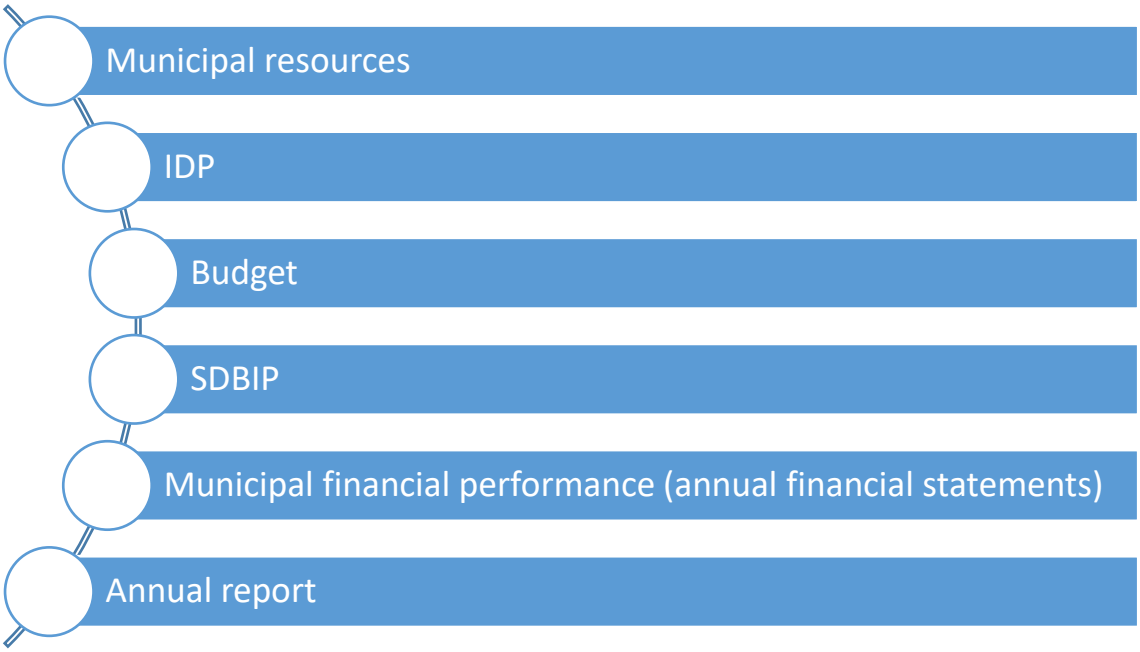

Figure 2.1 Applicability of Resource-based theory for South African municipalities

Source: Researcher's own compilation

2.6 MUNICIPAL VIABILITY AND PERFORMANCE TRENDS

As stated in the research problem in Section 1.3, municipal financial performance is critically important for the sustainability of service delivery and economic growth in South Africa. However, the growing concern for years has been that municipal financial performance is deteriorating. Furthermore, Section 1.10 stated that the study covers the financial periods from 2013/2014 to 2017/2018. During this period, a significant number of South African municipalities faced financial health risks that caused concern for their sustainability, which has a direct impact on the South African economy, as well as on service delivery to their communities.

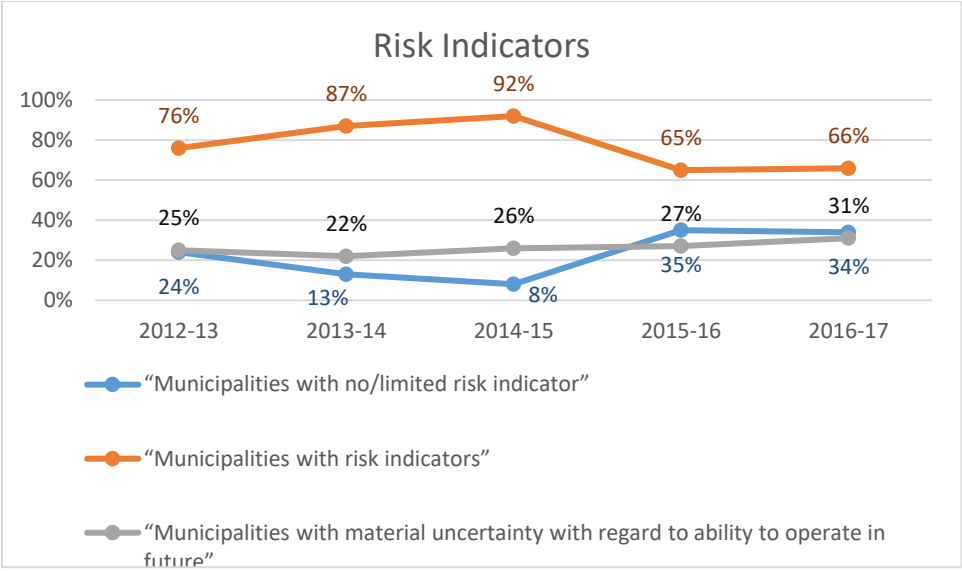

Figure 2.2: Municipalities with concerning financial health risk indicators

Source: AGSA general reports (2014 to 2018)

The AGSA used the three indicators shown in Figure 2.2 to assess municipalities with a concerning financial health risk. The percentage of municipalities with risk indicators decreased by almost 10 per cent in 2018 from 2017, suggesting that the financial position of some municipalities improved in the last two years covered in this study. However, over the five years covered by this study, on average, municipalities are worse off when the 24 per cent in 2017/2018 is compared to the 13 per cent of the 2013/2014 financial year. Furthermore, the percentage of municipalities with going-concern problems increased from 22 per cent in 2013/2014 to 39 per cent in 2017/2018. These figures suggest that more municipalities are uncertain whether they will be able to operate in the foreseeable future.

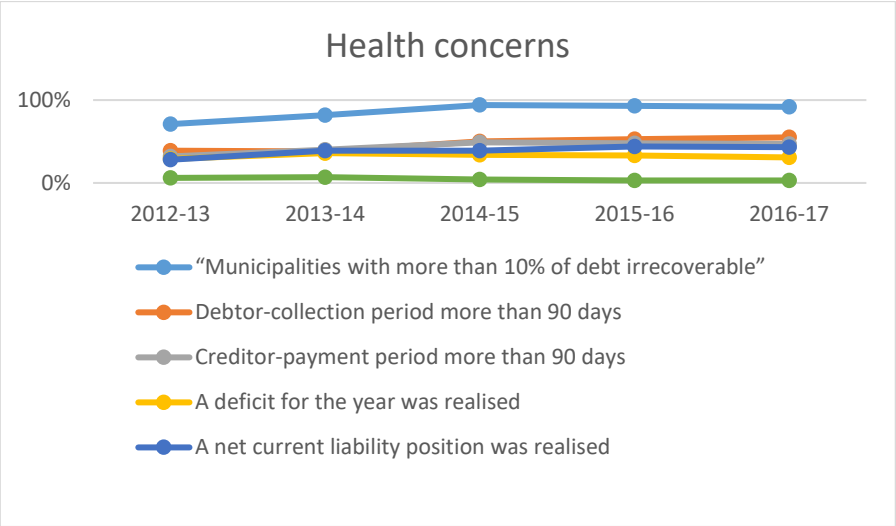

Figure 2.3: Municipalities with financial health concerns

Source: AGSA general reports (2014 to 2018)

As indicated in Figure 2.3, the AGSA identified the concerns about the financial health of South African municipalities. Figure 2.3 suggests that there was an increase in financial health concerns, except for the number of municipalities in overdraft, which decreased by 100 per cent over the five-year period. All other indicators suggest that the financial state of municipalities is deteriorating, such as the nine per cent increase in municipalities with irrecoverable debt greater than 10 per cent. There was also a 17 per cent increase in municipalities that were unable to collect debt within 90 days, while municipalities that were unable to pay creditors within 90 days increased by seven per cent. Municipalities with a deficit in their statement of financial performance decreased by two per cent, while municipalities with a net liability situation remained the same at 29 per cent.

Overall, indicators suggest that the financial state of municipalities in South Africa is worsening because more municipalities are struggling to fund their operating activities. Furthermore, the National Treasury reported in its State of Local Government and Financial Management Report for 2017/18 that 125 (49%) municipalities in South Africa were experiencing some form of financial distress, based on a financial health assessment conducted (National Treasury 2018:44).

2.7 CAUSES OF POOR MUNICIPAL FINANCIAL PERFORMANCE

The purpose of this study is not to define the causes of poor performance. However, it is important when contextualising financial performance in South African municipalities to reflect on the causes of poor financial performance established in the available literature.

Ramutsheli and Janse van Rensburg (2015:111) posited that poor municipal financial performance is caused by inadequate human resources, lack of requisite skills to achieve municipal objectives in a manner that is efficient and effective, and lack of leadership to create an ethical organisational culture. Claassen and Kocks (2018:6) substantially agreed with this sentiment when they asserted that the factors differentiating between sustainable municipalities and weaker municipalities are financial discipline, experience, skills and sound governance.

A consensus from the literature suggests that, apart from poor financial performance, the causes of generally poor performance by South African municipalities are:

- inadequate human resources or a lack of requisite skills or experience
- lack of financial discipline
- lack of sound governance and leadership
- lack of ethical culture
- insufficient municipal infrastructure.

In the sub-sections below, the study expands briefly on each of the key causes of general poor performance identified above.

2.7.1 Inadequate human resources or a lack of requisite skills or experience

As stated in Section 2.5 in terms of the resource-based theory, people are considered resources for the municipality (Zhao & Fan 2018:2). A lack of human resources with relevant financial experience is therefore likely to result in financial mismanagement and, ultimately, poor performance. In line with this theory, some South African municipalities have been managed well and, as a result, they have performed extremely well. An example is Mossel Bay Local Municipality in the Western Cape, which achieved the highest index score in the 2017 financial year, as presented in Chapter 1 (Claassen & Kocks 2018:4-5).

Although some municipalities excelled, Koma (2010:6) argued that senior managers in South African municipalities generally are not delivering on their performance objectives and, as a result, they are not adding value to their municipalities.

Koma (2010:6) also said that lack of training in the areas of policy development and implementation to support the strategy, financial management and project management among others, is contributing to the poor performance of municipalities in South Africa.

A lack of skills is another cause for concern as it has a direct negative impact on service delivery, which results in poor performance (Van Baalen, Schutte & Leipzig 2015:4; Kanyane 2014:7; Mpehle 2012:21). Powell (2012:16) added that the community expectation of adequate service delivery despite limited resources had not made the situation easier. Instability and vacancies in critical positions negatively impacted disciplined improvements and systematic processes (AGSA 2018:10).

The lack of requisite skills also results in a lack of supervision by oversight bodies, such as municipal councils (including the mayor), and in the inadequate implementation and sustainability of financial and performance management systems by management (AGSA 2018:10; Draai & Oshoniyi 2013:869). Oshoniyi (2012:7) added that the stringent provisions of South Africa's Immigration Act, which are meant to protect the employment opportunities of the citizens of the country, make it difficult for the South African government, especially municipalities, to recruit skilled foreigners, due to the loss of the important and scarce skills required to operate upper-middle-income economies, such as South Africa's. The country's loss of important skills has several causes, such as socio-economic factors and emigration to developing countries (Oshoniyi 2012:7).

2.7.2 Lack of financial discipline

Zhao and Fan (2018:2) defined financial resources as a tangible resource that determines the municipal resilience and capacity for investment. The definition suggests that, when financial resources are not well managed, municipalities will not be able to reach their maximum potential. The same reason identified above for the lack of requisite skills' leading to incompetence is identified here as a cause of poor financial discipline (Koma 2010:6).

The non-implementation of financial policies and processes, and failure to sustain them, amount to financial system failures (AGSA 2018:29). It suggests that the mismanagement of financial resources is caused by the human resources (management) that are either not suitably qualified or not adequately trained to manage financial resources. As part of responding to this problem, the AGSA recommended that key performance indicators on the implementation of policies and procedures should be incorporated into individual's contract agreements in order to ensure that municipal officials remain accountable to municipal results (AGSA 2021:77)

Furthermore, the AGSA stated that the quality of financial statements and performance reports submitted for auditing has consistently been poor because most municipalities do not have internal skills for financial reporting (AGSA 2021:8; AGSA 2018:29). As a result, most municipalities utilise consultants to prepare their financial statements.

The AGSA explained that few newly qualified chartered accountants are attracted to municipalities for employment, due to political infighting at council level, as these inferences weaken oversight responsibilities, thereby resulting in poor consequence management (AGSA 2018:10). Moreover, as Mpehle (2012:112) indicated six years earlier, there is a shortage of chartered accountants in South Africa; he reported that a limited number of accountancy students (only 11%) graduate from South African universities.

2.7.3 Lack of sound governance and leadership

According to Zhao and Fan (2018:2), reputation is an intangible resource for the municipality. The resource of reputation is essential for the successful delivery and continuity of basic services to the community. Lack of sound governance and leadership may have a negative impact on the municipality's reputation in its community, which in turn may adversely affect the municipal collection rates.

Furthermore, a lack of sound governance and leadership may be an indication of a lack of adequate human resources who have the requisite financial management experience. The AGSA stated in his general report for the 2016-17 financial year that 59 per cent of key positions were vacant, causing instability in municipal financial management (AGSA 2018:22). Similarly, South Africa's National Treasury reported

that 32 per cent of municipal managers and 31 per cent of chief financial officers (CFOs) were acting in the position during 2017 (National Treasury 2018:29). National Treasury (2018:28) stated that municipal managers in an acting capacity manifested an inability to make basic managerial decisions, such as ensuring overall financial sustainability.

Political interference in the administration by councillors is another cause of weak oversight. Inconsistent action, or a lack of action, when necessary, has created a culture of “no consequences”, which is mainly attributable to the lack of adequate performance management systems and processes that track management performance (AGSA 2018:10). It leaves those in charge of governance with no evidence of poor performance. Without an adequate performance management system in place, councils cannot hold managers accountable for poor performance.

2.7.4 Lack of ethical culture

A municipality that practices good ethical culture is likely to have a good reputation with its stakeholders. Reputation is an essential intangible resource for the municipality (Zhao & Fan 2018:2). Bad ethical culture may have a negative impact on the municipal’s ability to achieve its maximum potential, such as generating sufficient financial resources for its own sustainability. Blatant disregard for controls and compliance with relevant laws and regulations is evident in some municipalities. This culture has promoted an environment that makes it easier to commit fraud (AGSA 2018:10). The perception has been that South African municipalities are not performing well due to a lack of ethical culture. This perception has prompted increased protest action by communities against poor service delivery, corruption and lack of financial control (Mpehle 2012:19; Tshishonga & Mafema 2012:49; Chuenyane 2009:6).

2.7.5 Insufficient municipal infrastructure

In terms of the resource-based theory, municipal infrastructure constitutes tangible resources that are needed for the municipality to fulfil its service delivery potential (Zhao & Fan 2018:2). The AGSA indicated that there is slow progress in the development and maintenance of infrastructure due to underspending on the Municipal Infrastructure Grant (MIG), delays in project completion, inadequate monitoring of capital projects, and poor-quality workmanship (AGSA 2018:10). South Africa has a

fair amount of adequate municipal infrastructure; however, the Council for Scientific and Industrial Research ([CSIR] 2007:18) reported an increasing proportion of ageing infrastructure that requires major maintenance. The CSIR (2007:18) also pointed to a shortfall in management policies and practices for many municipalities, although there were a few municipalities with adequate systems and processes in place. Most municipalities in remote areas are not coping with the maintenance of infrastructure, particularly sophisticated infrastructure, such as wastewater treatment works and water reticulation systems.

2.8 CHAPTER SUMMARY

This chapter defined the statutes and reporting frameworks that municipalities are required to comply or conform with regarding financial management, performance and reporting, namely the MFMA, the MSA and the standards of GRAP. Performance, financial performance and municipal financial performance were also defined in response to the problem statement for this study.

Based on the definitions covered in Section 2.3, municipalities are required to sustain themselves financially in order to maintain the required level of service delivery. Therefore, municipalities should develop revenue enhancement strategies that will bring about sufficient revenue sources to fund both operational and capital expenditure. This will enable municipalities to continue providing services sustainably. Furthermore, municipalities are required in terms of the reporting framework to prepare and report their financial performance in a manner that is understandable by the public. The fundamental principle of this financial reporting requirement is the accrual basis of accounting.

The financial health of South African municipalities was discussed in line with the research objective and hypothesis. Evidence from the available literature suggests that municipal financial viability, sustainability and going-concern status is under threat. **Error! Reference source not found.** and Figure 2.2 show a concerning increase in the number of municipalities in South Africa whose financial health is deteriorating. Also concerning is the increasing number of municipalities that are uncertain whether they will be able to continue operating in the foreseeable future, as indicated in Figure 2.2 and Figure 2.3. Most municipalities are exposed to financial health risks ranging

from inability to collect debt, inability to pay creditors, liabilities exceeding assets and reporting deficits, and a minority are in an overdraft position.

The underpinning theoretical framework (resource-based theory) relevant for measuring and reporting municipal financial performance was integrated into the discussions on the causes of poor municipal financial performance, namely the lack of skills, of financial discipline, of sound governance, and of ethical culture, and lastly the insufficient municipal infrastructure.

The various municipal financial performance measures currently used globally were discussed, and included liquidity, solvency and capital structure ratios. For the purpose of responding to the research objective, municipal financial performance measures adopted in this study are those prescribed in terms of the MSA and MFMA. Seven performance measures were discussed in Section **Error! Reference source not found.** of the study.

The next chapter discusses the context of unlawful expenditure in South African municipalities as a justification for including unlawful expenditure variables in the data analysis of this study.

CHAPTER 3. LITERATURE REVIEW: UNLAWFUL EXPENDITURE

3.1 INTRODUCTION

This chapter discusses the unlawful expenditure in South African municipalities, in accordance with available literature. The objective of the chapter is to contextualise unlawful expenditure in South African municipalities as justification for the variables included in the statistical analysis discussed in Chapter 5 (Presentation and Analysis of Data Gathered) and Chapter 6 (Conclusion and Recommendations) of this study.

3.2 RELEVANT LEGISLATION

Unlawful expenditure for South African municipalities is legislated in terms of Section 1 of the Municipal Financial Management Act (hereafter the MFMA).

3.3 UNLAWFUL EXPENDITURE DEFINITION

The MFMA defines neither *unlawful* nor *expenditure*. *Unlawful* is generally defined as an act of non-conformance to a recognised law or regulation. Chang and Wong (2013:online) defined government spending as “money spent by the public sector on the acquisition of goods and provision of services such as education, healthcare, social protection, and defence. In national income accounting, when the government acquires goods and services for current use, to directly satisfy the individual or collective needs and requirements of the community, it is classified as government final consumption spending. When the government acquires goods and services for future use, it is classified as government investment. This includes public consumption and public investment, and transfer payments consisting of income transfers”.

Furthermore, the MFMA does not distinguish between *expense* and *expenditure*. The ASB also does not explicitly define *expenditure*. However, the ASB (2012:9) defines an *expense* as “a decrease in economic benefits or service potential during the reporting period in the form of an outflow or consumption of an asset or incurrence of liability that ultimately results in a decrease in net assets, other than those relating to distributions to owners”. The ASB’s definition suggests that the terms *expenditure* and *expense* can be used interchangeably.

The three types of unlawful expenditure in the MFMA are defined in the next sections.

3.3.1 Unauthorised expenditure definition

In Chapter 1, *unauthorised expenditure* was defined as “any expenditure incurred by a municipality other than in accordance with sections 15 or 11(3) of the MFMA, and includes overspending of the total amount appropriated in the municipality’s approved budget; or overspending of the total amount appropriated for a vote (programme) in the approved budget” (SAG 2003:11). The AGSA (2021:123; 2015:199) defined *unauthorised expenditure* as “Expenditure that is in excess of the amount budgeted or allocated by government to the auditee, or that was not incurred in accordance with the purpose for which it was intended”.

3.3.2 Irregular expenditure definition

Irregular expenditure has already been defined in Chapter 1 as “expenditure incurred by a municipality or municipal entity in contravention of, or that is not in accordance with, a requirement of the MFMA, and which has not been condoned in terms of Section 170 of the MFMA; expenditure incurred by a municipality or municipal entity in contravention of, or not in accordance with, a requirement of the Municipal Systems Act, and which has not been condoned in terms of that Act; expenditure incurred by a municipality in contravention of, or that is not in accordance with, a requirement of the Public Office-Bearers Act, 1998 (Act No. 20 of 1998); or expenditure incurred by a municipality or municipal entity in contravention of, or that is not in accordance with, a requirement of the supply chain management policy of the municipality or entity or any of the municipality’s by-laws giving effect to such policy, and which has not been condoned in terms of such policy or by-law, but excludes expenditure by a municipality which falls within the definition of ‘unauthorised expenditure’” (SAG 2003:8). The AGSA (2021:40; 2014:48) defines *irregular expenditure* as “expenditure that was not incurred in the manner prescribed by legislation”.

3.3.3 Fruitless and wasteful expenditure definition

Fruitless and wasteful expenditure is expenditure that was made in vain and could have been avoided had reasonable care been exercised (SAG 2003:8). This includes penalties and interest on the late payment of creditors or statutory obligations, as well as payments for services not utilised or goods not received (AGSA 2021:89; 2014:196).

Expenditure *in vain* is defined as a transaction, event or condition that was undertaken without value or substance and did not yield any desired results or outcome. *Reasonable care* is not defined in the MFMA and, as a result, judgement must be applied in defining the term (Nkhi & Gomez 2019:4). However, le Roux (2018:online) defined *reasonable care* as "applying due diligence (careful application, attentiveness, caution) to ensure that the probability of a transaction, event or condition not being achieved as planned is being managed to an acceptable level".

3.4 STAKEHOLDER THEORY AND STEWARDSHIP THEORY

Two theories underpin the concepts discussed in this chapter. Both theories, namely, the stakeholder theory and the stewardship theory, are considered relevant good-governance theories for South African municipalities. They are fundamental in addressing the governance principles required when dealing with an escalating rate of unlawful expenditure.

Stakeholder theory is considered relevant in addressing unlawful expenditure because it is the primary stakeholders (the public) who pay the taxes, buy municipality services and contribute to the development of the municipal strategic goals, key performance indicators and targets. Therefore, the relationship between the municipality and the public makes the stakeholder theory relevant as far as unlawful expenditure is concerned.

On the other hand, the stewardship theory is relevant because it is the municipal managers (the stewards) who commit unlawful expenditure with the public funds they are entrusted with by the public (the stakeholder) to deliver the municipal services. Dzomira (2017:204) proposed that "management perpetrates an act of financial misdemeanour as they continue to errantly make irregular expenditures, unauthorised expenditures and, fruitless and wasteful expenditures". Figures 3.1 and 3.2 below depict the relationship between unlawful expenditure, the municipality and the two theories being discussed.

3.4.1 Stakeholder theory

This theory promotes the idea that managers (the municipal manager and his or her executive team) act in the best interest of their stakeholders. Ideally, managers are placed in a position of trust with the expectation that they will execute their

responsibility in the best interests of the stakeholder. In Chapter 1, it has already been established that the reason municipalities exist is because of the constitutional mandate to deliver basic service to their community. Fares, Chung & Abbasi (2021:1) define stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives". Parmar et al (2010:14) explained that, when a firm has a special responsibility to a stakeholder, that stakeholder is a primary stakeholder and all other stakeholders become secondary. Gomes (2004:4) added that a key stakeholder is defined by its power and ability to influence critical matters, such as planning, where strategic objectives and performance criterion are defined. In this regard, the municipality has a special responsibility to the community emanating from the Constitution to deliver municipal services. The community is consulted (through the IDP and SDBIP public participation processes) during the planning stage, during which the nature and extent of the level of performance expected from the municipality by its community is discussed and agreed upon. Those charged with governance, such as councillors, mayors and municipal managers, share an equal responsibility for this mandate of delivering services to their communities.

Unlawful expenditure should be avoided, simply because it is unlawful. This is evident from the fact that, even in municipal planning processes such as budget preparations, a zero-tolerance approach is applied where municipalities do not anticipate incurring unlawful expenditure. When municipalities incur unlawful expenditure, it signifies that something has been done incorrectly, i.e., non-compliance with laws and regulations, either due to a deviation from an approved plan or an act of misconduct that was not planned. It is at this point that the relationship between the municipality and its primary stakeholder (the community) appears to be broken. From a public point of view, the municipality as represented by management is no longer acting in the best interest of the stakeholder.

The AGSA (2014:48) posited that unlawful expenditure does not necessarily indicate that municipal resources have been misappropriated or that fraudulent activity has taken place, as some unlawful expenditures are incurred in good faith. Goods or services may have been delivered to stakeholders; in other words, value-for-money was achieved and the municipality has not incurred any financial loss. Nevertheless, such expenditure would still represent non-compliance if unlawful expenditure were incurred.

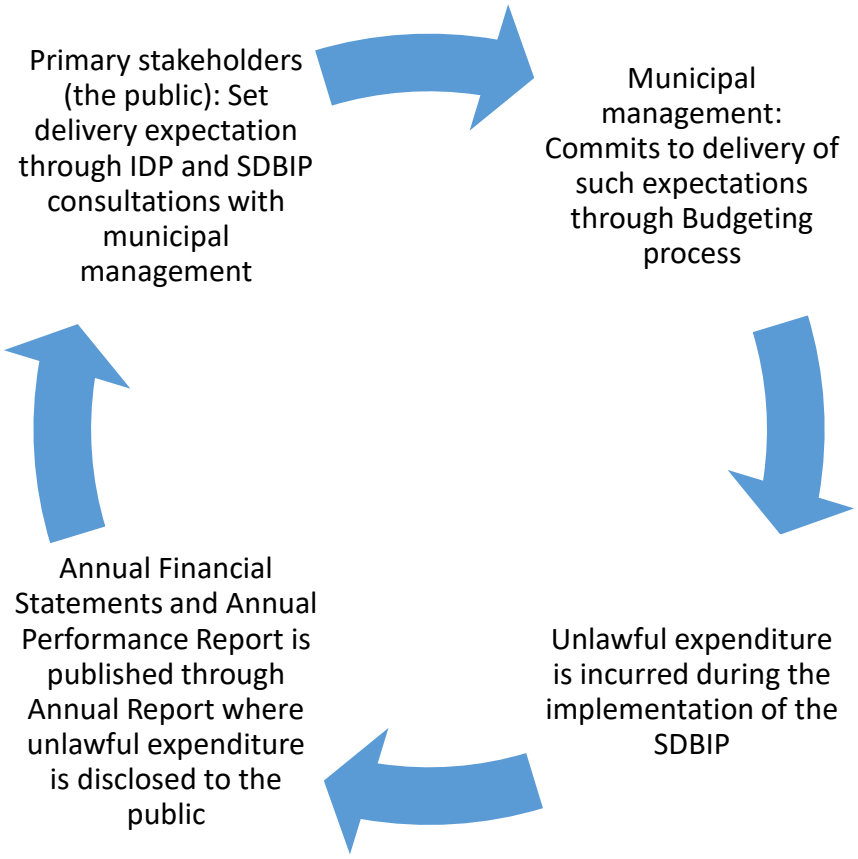

Figure 3.1: **Conceptual link between unlawful expenditure and the primary stakeholder (the community)**

Source: Researcher's own compilation

3.4.2 Stewardship theory

The stewardship theory has inspired the activities of most organisations whose objective it is to protect, preserve and maintain natural, social and economic assets for the benefit of stakeholders and communities (Contrafatto 2014:177). This theory assigns management the role of stewards of performance. It allows management to act independently without interference from politicians and the community it serves. It creates an opportunity for managers to execute the desired level of performance by developing policies and procedures in order to govern performance. Torfing and Bentzen (2020:15) added that stewardship theory model offers great alternative to agency theory as a trust based model in particular in the public sector where great motivation is required for public sector employees to cope with the ever increasing public expectations.

However, in South African municipalities, this practice does not seem to be effective, due to a lack of design or to non-implementation of policies and procedures, and interference from politicians, among other things, which create a direct link to this theory. The causes or factors contributing to unlawful expenditure are discussed further in Section 3.6.

In Section 1.9.3 of this study, it was established that the stewardship theory posits that, where stewards execute their mandate in a manner that is effective, efficient and economical, good governance is most likely achieved (Jordaan 2013:48). Subramanian (2018:97) found that affording management independence to adopt values they believe will benefit the organisation, and to incorporate those values into legislated values, results in good governance. The opposite is also true that, when the stewards fail to execute their mandate in a manner that is effective, efficient and economical, misuse of municipal resources will likely occur. Misuse of municipal resources, therefore, amounts to unlawful expenditure.

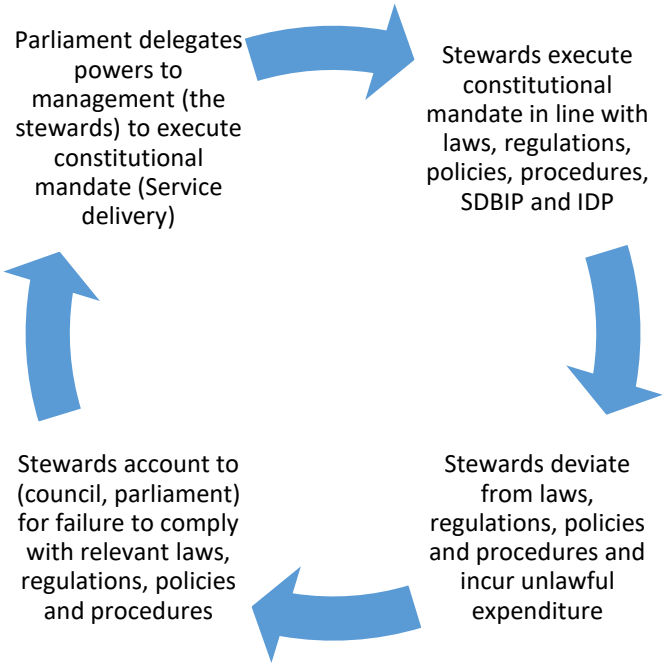

Figure 3.2: **Conceptual link between unlawful expenditure and stewards (management)**

Source: Researcher's own compilation

3.5 REVIEW OF RECENT UNLAWFUL EXPENDITURE FINDINGS

The AGSA (2018:3) reported that material non-compliance with legislation in the implementation of consequence management had increased from 54 per cent to 60 per cent, citing slow or no response, instability due to vacant positions and lack of management competencies, and inadequate consequence management. The AGSA indicated that 215 (90%) municipalities had incurred irregular expenditure, 204 (85%) municipalities had incurred fruitless and wasteful expenditure, and 161 (67%) municipalities had incurred unauthorised expenditure (AGSA 2018:32).

Based on the audit findings above, it is evident that the stewards had failed to act in the best interests of the stakeholders. Furthermore, the findings suggest the administrative leadership in South African municipalities is unable to manage municipal resources effectively, efficiently and economically, with resultant unlawful expenditure.

3.5.1 Unauthorised expenditure

Unauthorised expenditure is regulated in various sections of the MFMA. The MFMA provides guidance on prevention, detection and corrective mechanisms that the accounting officers (municipal managers) should implement when addressing the risk of unauthorised expenditure. National Treasury (2013:7-9) provides further guidance on the process to be followed in terms of Circular 68. The AGSA (2019:50) indicated that 155 municipalities out of 257 had incurred unauthorised expenditure, citing lack of monitoring, poor preparation of budgets, and inadequate controls surrounding financial management systems. The figure represents 67 per cent of municipalities in South Africa. As presented in Table 3.1, the average number and percentage of municipalities incurring unauthorised expenditure were 176 and 69 per cent, respectively. Furthermore, an average of 98 per cent of unauthorised expenditure relates to overspending on the budget or the main sections within the budget.

Table 3.1: Unauthorised expenditure

Financial Year	Number of Municipalities	%	Category
2013–2014	190	71%	"Overspending of the budget or main sections within the budget 95%". "Other (not specified) 5%".
2014–2015	194	71%	"Overspending of the budget or main sections within the budget 97%". "Other (not specified) 3%".
2015–2016	181	69%	"Overspending of the budget or main sections within the budget 99%". "Other (not specified) 1%".
2016–2017	161	67%	"Overspending of the budget or main sections within the budget 99.5%". "Other (not specified) 0.5%".
2017–2018	155	67%	"Overspending of the budget or main sections within the budget 99.97%". "Other (not specified) 0.3%".
Average	**176**	**69%**	**"Average overspending of the budget or main section within the budget 98%"** **"Average Other 2%".**

Source: AGSA MFMA General Reports 2014/18

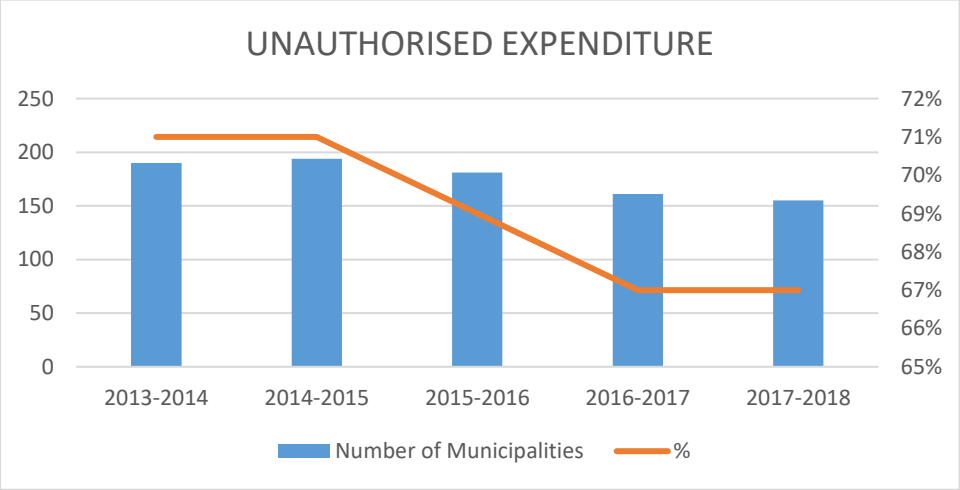

Figure 3.3: Unauthorised expenditure

Source: AGSA MFMA General Reports 2014–2018

3.5.2 Irregular expenditure

The MFMA provides guidance on the steps that accounting officers (municipal managers) should implement regarding prevention, detection and recovering irregular expenditure. Further guidance is provided in terms of Circular 68 issued by the National

Treasury (National Treasury 2013:9-14). Only 38 of the 257 municipalities in South Africa did not incur irregular expenditure during the 2017/18 financial reporting period (AGSA 2019:50). This represents only six per cent of the municipalities in South Africa. Some reasons for higher irregular expenditure are the deteriorating accountability in local government, failure to follow controls such as policies and procedures, and lack of monitoring by those in charge of oversight, such as councils and mayors, including those heading the administration, such as municipal managers (AGSA 2019:50).

Rena and Mothupi (2018:1) and Nzimande and Padayachee (2017:1) found that irregular expenditure mainly emanates from transgressions that occur during the procurement of goods and services. The AGSA (2014:49) stated that 98 per cent of irregular expenditure in South African municipalities is caused by non-compliance with supply chain management regulations, mainly by not following competitive bidding procedures, not applying preferential procurement, not declaring conflicts of interest, and not providing evidence that tax matters were cleared by the South African Revenue Service (SARS). Nzimande and Padayachee (2017:1) specifically stated that “The study results revealed that the municipality does make efforts to draw procurement plans which are not formally implemented. Failure to formally implement the procurement plans can lead to non-compliance, and unauthorised, irregular, wasteful expenditure”.

The AGSA (2019:online) stated that irregular expenditure for the 2017/18 financial year amounted to R25 billion. As presented in Table 3.2, the average number and percentage of municipalities incurring irregular expenditure over the five-year period between the 2013/14 and 2017/18 financial years were 244 and 86 per cent, respectively.

Table 3.2: Irregular expenditure

Financial Year	Number of Municipalities	%	Category
2013/14	264	81%	"Procurement without a competitive bidding or quotation process 39%". "Non-compliance with procurement process requirements 53%". "Non-compliance with legislation on contract management 9%".
2014/15	240	88%	"Procurement without a competitive bidding or quotation process 24%" "Non-compliance with procurement process requirements 70%". "Non-compliance with legislation relating to contract management 6%".
2015/16	236	90%	"Procurement without a competitive bidding or quotation process 42%". "Non-compliance with procurement process requirements 52%". "Non-compliance with legislation relating to contract management 6%".
2016/17	215	90%	"Procurement without a competitive bidding or quotation process 30%" "Non-compliance with procurement process requirements 64%". "Non-compliance with legislation relating to contract management 6%".
2017/18	219	94%	Procurement without a competitive bidding or quotation process 25%" "Non-compliance with procurement process requirements 69%". "Non-compliance with legislation relating to contract management 6%".
Average	**235**	**89%**	**Average procurement without competitive bidding 32%** **Average non-compliance 68%**

Source: AGSA MFMA General Reports 2014–2018

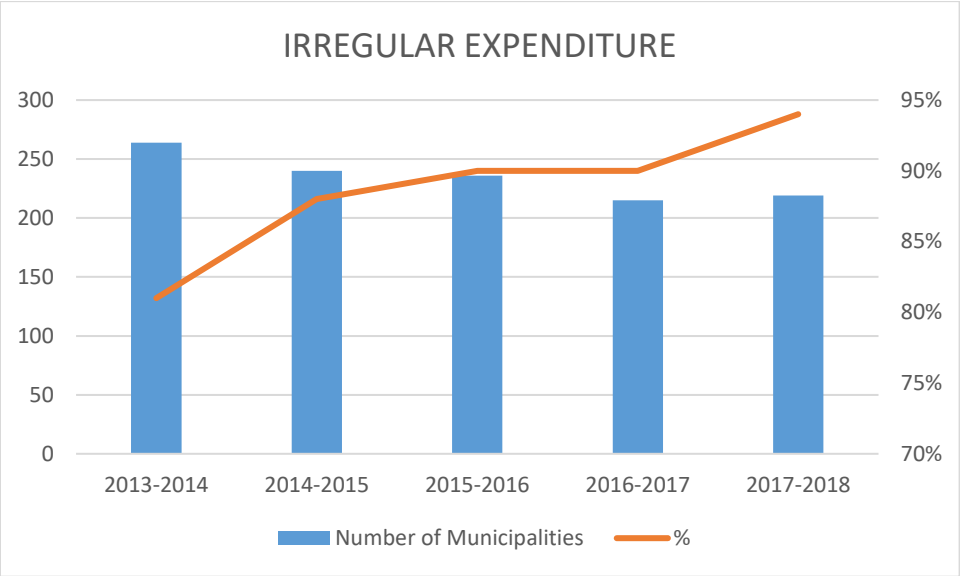

Figure 3.4: Irregular expenditure

Source: AGSA MFMA General Reports 2014/18

3.5.3 Fruitless and wasteful expenditure

The MFMA requires administrative management, under the supervision of the accounting officers (municipal managers), to take all reasonable steps to prevent fruitless and wasteful expenditure. Municipalities should have processes in place to detect fruitless and wasteful expenditure and disclose such expenditure in the annual financial statements. Processes are normally in the form of policies and procedures. National Treasury (2013:14-16) states that the process to be followed in terms of Circular 68 is similar to that for irregular expenditure. Fruitless and wasteful expenditure is reported when it is identified, irrespective of the financial year such expenditure was incurred. Furthermore, the MFMA requires the municipal councils and municipal managers to take the necessary steps to investigate fruitless and wasteful expenditure and determine whether there are any officials liable for such expenditure. The municipality must further ensure that such monies are recovered from those officials, provided liability is proven (AGSA 2018:89).

As presented in Table 3.3, the average number and percentage of municipalities incurring fruitless and wasteful expenditure over the five-year period between the 2013/14 and 2017/18 financial years were 219 and 83 per cent, respectively. AGSA (2018:108-110) indicated that fruitless and wasteful expenditure had increased by eight per cent in the five financial years between 2013/14 and 2017/18.

Furthermore, the AGSA illustrated that an average of 22 per cent of the total fruitless and wasteful expenditure identified (over the five-year period mentioned above) was only identified through audit processes as opposed to municipal processes (AGSA 2018:108). This is an indication that municipal processes to identify fruitless and wasteful expenditure are not robust. Overall, the indication is that the control environment is weakening at municipalities in all aspects, from prevention to detection and recovery, which in turn culminates in an increase in this type of unlawful expenditure.

Table 3.3: **Fruitless and wasteful expenditure**

Financial Year	Number of Municipalities	%	Category
2013–2014	250	77%	"Interest on overdue accounts and late payments 80%".
			"Penalties 5%".
			"Litigation and claims 1%".
			"Other (e.g., missed flights and non-refundable deposits for cancelled events and accommodation) 14%".
2014–2015	227	83%	"Interest on overdue accounts and late payments as well as penalties 62%".
			"Litigation and claims 4%".
			"Other (e.g., non-refundable deposits for cancelled events and accommodation) 33%".
2015–2016	218	83%	"Interest and penalties on overdue accounts and late payments 90%".
			"Litigation and claims 3%".
			"Other (e.g., cancellation fees for accommodation and unsuccessful implementation of software) 7%".
2016–2017	204	85%	"Interest and penalties on overdue accounts and late payments 74%".
			"Other (e.g., cancellation fees for accommodation and unsuccessful implementation of software) 26%".
2017–2018	195	85%	Interest and penalties on overdue accounts and late payments 86%".
			"Other (e.g., cancellation fees for accommodation and unsuccessful implementation of software) 14%".
Average	**219**	**83%**	**Average interest and penalties 79%**
			Average Other 21%

Source: AGSA MFMA General Reports 2014–2018

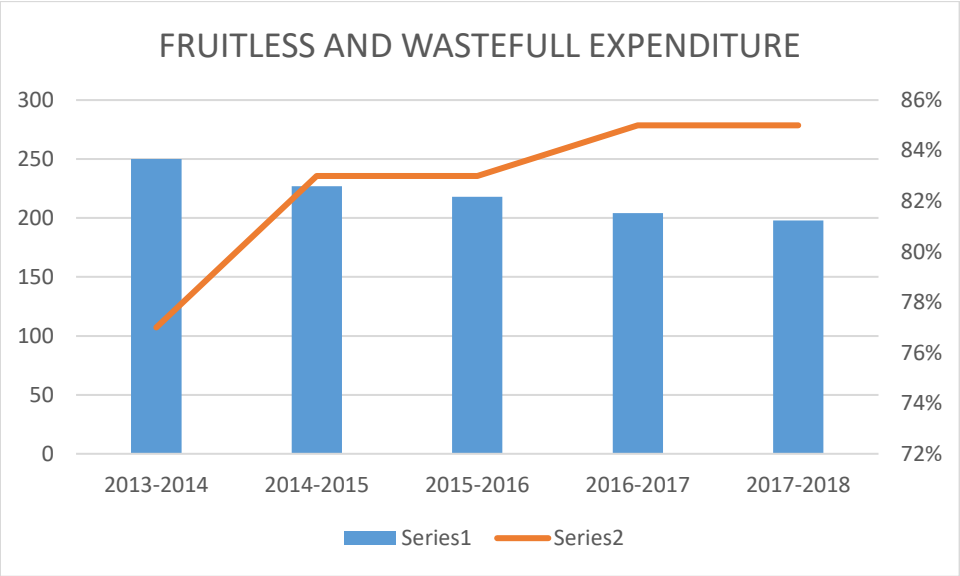

Figure 3.5: Fruitless and wasteful expenditure

Source: AGSA MFMA General Reports 2014/18

3.6 CAUSES OF UNLAWFUL EXPENDITURE

The aim of this study, as explained in Section 1.4, was to establish whether there is a relationship between unlawful expenditure and poor municipal financial performance and the extent thereof. Identifying the causes of unlawful expenditure was expected to assist with recommendations when responding to the research objective and hypothesis should a significant relationship be found between unlawful expenditure and poor municipal financial performance. Furthermore, the study also intended to establish the prevalence of some or all of the causes listed below in environments with poor municipal financial performance:

- financial management process
- recruitment process
- policies and procedures
- procurement process
- debt collection
- budgeting
- spending outside budget
- internal controls
- politics.

3.6.1 Financial management process

The stakeholder theory promotes the idea that the administrative leadership, under the supervision of the municipal manager, acts in the best interests of its stakeholders (Parmar et al 2010:14). In line with the stakeholder theory, the stewardship theory explains that the administrative leadership role must be independent to act in the best interests of its stakeholders by taking care of the municipal resources (Jordaan 2013:48). The stewardship theory, therefore, complements the stakeholder theory in the sense that management can design policies and procedures that will best suit the municipality and protect the interests of the stakeholders, e.g., by safeguarding municipal financial resources.

However, most South African municipalities are faced with a challenge in complying with the current financial management system (CoGTA 2009:54). Poorly developed financial management systems have resulted in graft, fraud, poor management of resources, corruption, nepotism, incompetence, general neglect of the basic principles of management, and poor leadership.

Poorly developed financial management systems emanate from bad governance (Mantzaris 2014:2). The Public Service Commission (PSC) (2019:2) found evidence that, once corruption has manifested in a financial management system, it hinders domestic and foreign investments, strengthens an underground economy, reduces economic growth, restricts trade, distorts expenditure composition and size and, lastly, renders the weakening financial management system more visible. Corruption costs South Africa approximately R30 billion plus 76,000 jobs annually. Furthermore, corruption not only causes financial harm; it also causes socio-political damage (PSC 2019:2). There is a strong connection between the levels of corruption, poverty and income inequality (PSC 2019:2).

Moloto and Lethoko (2018:2) posited that good governance is dependent on factors such as financial skills and competent finance personnel. Fourie and Poggenpoel (2017:6) found that, generally, the lack of capacity, skills and internal controls within the finance departments caused most of the municipal financial management system failures. Poor management of resources may result in either unauthorised expenditure or fruitless expenditure when there is overspending of the budget, or when there is no value for money in the procurement of goods and services.

The AGSA (2018:21) stated that poor financial management capabilities in local government resulted in material misstatements' remaining undetected. The AGSA (2018:21) further stated that 78 per cent of municipalities have financial management systems that are not credible. An average of 16 per cent of unlawful expenditure (21% unauthorised, 21% irregular and 7% fruitless and wasteful) is detected through audit processes and not by financial management systems. This indicates that financial management processes are not suitably developed to detect unlawful expenditure as and when it occurs. Without an audit process, municipalities disclosures of unlawful expenditure would be incomplete. This brings into question the credibility of the information that is reported to the public.

The AGSA (2018:22) reported that, for the 2016/17 financial reporting period, 41 (22%) of municipalities in South Africa were qualified on the completeness of their unlawful (irregular) expenditure disclosures. The AGSA (2018:22) further stated that, in the same year (2016/17), R1.2 billion tenders awarded could not be audited due to missing documents and that it could not be verified whether there was unlawful (irregular) expenditure or not. When documentation is not available or is misplaced, it indicates that there are deficiencies in the municipal record management system.

Vacancies in critical posts, instability and lack of leadership commitment slow down systematic and disciplined improvements (National Treasury 2018:30-46). While it is acknowledged that South African municipalities have undergone major reforms to their financial management systems, there is no doubt that they still have a long way to go. Internationally, South Africa is recognised for some exceptional financial management legislation. The AGSA (2018:60-84) stated that training of supply chain management officials, councillors and the relevant finance officials responsible for financial reporting will provide an environment that enables proper application of transcripts, and the prevention and detection of unlawful expenditure when necessary. The introduction of the Municipal Standard Chart of Accounts (MSCOA) system should also assist in building financial management processes that are reliable and enhancing billing accuracies and account reconciliations (National Treasury 2018:46).

3.6.2 Recruitment process

The AGSA (2018:90) stated that human resource management is effective if the municipality is adequately capacitated with skilled and competent staff and their

performance is monitored properly. The AGSA (2018:90) further declared that appointments in key positions and the competency of key officials have direct effects on compliance with laws and regulations. Mamogale (2014:17) stated that appointments of personnel in key positions had been badly compromised because appointments were made based on political affiliation rather than qualification credentials, and this directly caused the financial performance of institutions to decline. Ramutsheli and Janse van Rensburg (2015:3) and Mashumi (2013:632) agreed with this view and specified that most appointments in critical positions were made to ensure that the interests of a political party were protected, as opposed to appointments based on the competency of the candidate.

As shown in Table 3.2 above, a significant proportion of irregular expenditure is incurred due to non-compliance with supply chain management requirements and contract management legislative requirements. This is exacerbated by the lack of training of these officials. When officials are not trained regularly on the job or updated on latest legislative developments or requirements, they are prone to make mistakes or not to comply with the latest legislative requirements, which ultimately leads to unlawful expenditure.

In South Africa, youth with financial qualifications are reluctant to join the public sector, particularly the local government sector. This reluctance is mainly due to the political environment, where infighting at council level is common (CoGTA 2009:66). As a result, there is a high staff turnover in financial departments within the public sector. However, the problem of high staff turnover in the public sector is not unique to South Africa but spread across the international public sector (DHET 2019:103; Mpehle 2012:222; Oshoniyi 2012:31). The main challenge is ineffective retention policies: New employees either leave the public sector quickly or are promoted to higher positions.

When positions are vacant, it creates an unsustainable environment. On the other hand, when employees are promoted to a higher position before they master their current position, their skills and experience are challenged at the higher level (Sing 2012:383). Fourie and Poggenpoel (2017:6) agreed that the appointment of personnel into positions for which they have either limited or no experience increases the rate of transgressions in the South African public sector.

In Chapter 2, it was established that a skills shortage is a challenge in the public sector (Sheoraj 2007:307). In line with the stewardship theory, the findings above suggest that the lack of adequately skilled, experienced and suitably qualified administrative leadership (the steward) result in unlawful expenditure.

3.6.3 Policies and procedures

It is the responsibility of management (the steward) to design policies and procedures to manage the municipal employees and safeguard municipal resources effectively, efficiently and economically. In line with this view, Campbell (1998:7) stated that policies and procedures are essential to any organisation. This is because they define a set of parameters within which managers and their subordinates must perform their work and can clearly understand their individual and collective roles and responsibilities. *Policies* address small details, such as what is considered acceptable behaviour by employees. *Procedures* are equally important because they address the sequence of steps to be followed consistently, such as in consequence management of any policy violations. However, these policies and procedures are rendered meaningless if managers, those in charge of governance, fail to communicate them and if employees fail to adhere to them.

It is the responsibility of the steward to ensure that the policies and procedures developed are communicated to the affected employees for successful implementation. Furthermore, to ensure successful implementation of policies and procedures, the development process should involve those who will be responsible for its implementation (Dlova & Nzewi 2014:17). Incorporating policies and procedures into decision-making provides an opportunity for management and its subordinates to make decisions consistently (Sanelli 2018:online).

Municipalities have the power to design their supply chain management policies and procedures. This practice is in line with the stewardship theory, which suggests that management should be given independence to manage as they know the municipality best (Bezuidenhout 2016:58). However, there is no ‘one best way’ when it comes to designing public policies (Ansell, Sørensen & Torfing 2017:474). South African municipalities are therefore required to develop supply chain management policies that are fair, transparent, equitable, competitive and cost effective, and in line with the

Constitution and the MFMA (Van Zyl 2006:45). National Treasury provides guidelines on the content of a supply chain management policy for all spheres of government.

However, compliance with policies and procedures is a problem in South Africa (Ambe & Badenhorst-Weiss 2012:9). The inefficiencies in the municipal financial management systems have resulted in the AGSA's consistently reporting that the main cause of unlawful expenditure is failure to comply with laws and regulations, as well as policies and procedures (National Treasury 2018:46). As shown in Table 3.2 above, non-competitive bidding processes, failure to obtain three quotations, and non-compliance with procurement process requirements contributed an average of 94 per cent to unlawful (irregular) expenditure over the five-year period (2013/17) covered in this study (AGSA 2014/18). This is evidence that municipalities are either failing to design supply chain management policies and procedures that are transparent, equitable, fair, cost effective and competitive or the policies developed are not appropriately implemented. Hudson, Hunter and Peckham (2019:2) ascertained that policies fail because they are too ambitious, implemented in a poorly controlled environment, inadequately communicated by their policymakers, or there are vagaries in the political cycle. Changes in political leadership and reshuffling of ministers, municipal managers and mayors can have a negative impact on the successful implementation of supply chain management policies and procedures (Ilott, Randall, Bleasdale & Norris 2016:9). FitzGerald, O'Malley and Ó Broin (2019:10) argued that a policy is successful if it achieves the goal for which it was set.

3.6.4 Procurement process

The stewards are given the role of developing and maintaining a procurement plan. Failing to purchase goods and services in accordance with the procurement plan and supply chain management policies and procedures may result in non-compliance, and irregular, unauthorised and wasteful expenditure (Nzimande & Padayachee 2017:1).

Ambe and Badenhorst-Weiss (2012:10) averred that irregularities in the South African public sector are as a result of deficiencies in the procurement processes. Such deficiencies include the lack of knowledge, capacity and skills, poor planning, misalignment of essential needs to the budget, unethical behaviour, decentralisation of supply chain management, and an ineffective Black Economic Empowerment (BEE) policy framework. Nzimande and Padayachee (2017:14) agreed that lack of knowledge

and capacity are contributors to procurement failures but said that a lack of strategic focus and organisational commitment are also contributors. This is supported by other researchers.

Fourie and Poggenpoel (2017:6) said unfair tender procurement processes and internal control deficiencies in expenditure management cause unlawful expenditure. Pooe, Mafini and Makhubele (2015:71) concurred that failure to adhere with supply chain management policies is one of the causes and added that lack of effective training, capacity and transparency also cause procurement failures in South African municipalities.

Ohashi (2009:278) posited that, when the public procurement processes are transparent, a significant amount of public funds can be saved, thereby reducing fruitless and wasteful expenditure as defined in the MFMA. Transparency is not only an issue for South African municipalities but also for the public sector as a whole and extends to the rest of the World Trade Organisations (WTOs). However, Ohashi (2009:268) warned that only 30 (21%) countries participating in the WTO have ratified the transparent tendering process in terms of the Government Procurement Agreement (GPA). Kinsey (2004:159) added that transparency is critical in achieving multilateralism. It promotes legitimate criteria in the process of procuring goods and services. In other words, it reduces the possibility of corruption (Heald 2012:31).

The significant number of corruption issues reported by the public over the years is mainly due to bribes, power abuse and supply chain management corruption. These issues have consistently featured as top public concerns ever since the PSC was established in January 2012. This is corroborated by the Corruption Watch (2018:online) statement that “local government corruption reports account for 25 per cent of the total number of complaints it received in 2018”. Fourie and Poggenpoel (2017:6) explained that the challenges faced in the South African public sector are due to inability to make a clear distinction between causes and symptoms when attempting to address deficiencies. Addressing symptoms as opposed to causes does not address the problem. This is the reason the AGSA has found recurring findings with the same causes in every year covered by this study. Fourie and Poggenpoel (2017:6) suggested that the cause of procurement process failures in the public sector is the inability to manage funds effectively.

3.6.5 Debt collection

Municipal debt is a financial resource for the municipality. It is the responsibility of management (the steward) to collect municipal service debt. Service debt collection is the process of collecting outstanding debts from municipal customers for the unpaid services rendered. The municipality must collect revenue from the services rendered in the form of duties, levies, rates, service charges, surcharges and taxes. Municipal services rendered include services such as the supply of electricity, water and refuse collection.

The poor municipal debt collection rate does not necessarily result in unlawful expenditure. However, it may amount to non-compliance if the average collection period is beyond 30 days in terms of the MFMA. Municipalities with sufficient reserves to pay its creditors when they fall due will not have a problem of settling creditors within 30 days as required in the MFMA. However, a municipality that does not have sufficient reserves (working capital) will not be able to pay its creditors within 30 days if the debtors' collection rate is poor. The poor collection rate will therefore have a negative effect on municipality's ability to pay its creditors within 30 days as required in the MFMA. Consequently, municipalities incur unlawful (fruitless and wasteful) expenditure when payments are made after 30 days of receiving an invoice.

As shown in Figure 3.5 above, the average fruitless and wasteful expenditure over the five-year period covered in this study amounted to 79 per cent (AGSA 2017; 2016; 2015; 2014; 2013). Table 3.3 above shows that the average fruitless and wasteful expenditure emanates from penalties on overdue accounts and interest. This alone amounts to 77 per cent of the total fruitless and wasteful expenditure. The AGSA (2018:5) indicated that 31 per cent of municipalities in South Africa reported in their annual financial reports that they were in financial distress, with a likelihood of concern in the foreseeable future as a result of poor debt collection from serviced customers.

Business Unity South Africa (BUSA) stated that municipal debts are due to irregular billing, incorrect billing, unhappiness with service, high tariffs, and the perception that "other customers don't pay" (National Treasury 2018:48). Mazibuko (2013:4) posited that communities are unwilling to pay municipal bills because of the inaccurate and incorrect billing systems used by municipalities. Consequently, municipal debt has escalated beyond control. Pieters (2015:23) added that municipalities with a high un-

collectability rate are mainly those municipalities with a large proportion of indigent households receiving free basic services. Unemployment, high municipal rates and high electricity costs also contribute to high uncollectable municipal consumer debtors (Khumalo & Ncube 2016:17; Kumar 2013:1). Kleynhans and Coetzee (2019:15) agreed that municipal population size, density and its worth, levels of employment and literacy, revenue base and age profile such as the unemployed, the younger (below 18) and the elderly (above 60) are directly linked to the municipality's ability to collect revenue from customers.

3.6.6 Budgeting

Budget preparation is the responsibility of management (the steward). Although municipal budgeting is highly regulated in various sections of the MFMA, regulations and circulars, it is worth noting that *budgeting* is not specifically defined in the MFMA. Nicolae and Anca (2010:919) defined a budget as "a management instrument used by any entity, financially ensuring the dimension of the objectives, revenues, expenses and results at the management centres level and finally evaluating the economic efficiency through comparing the results with those budgeted for". Benge (2017:online), ODI (2004:2) and Wildavsky (1975:1) defined budget differently as "a projected financial operating plan, an instrument for pursuing efficiency. In general, a budget accounts for expected revenues and allocates resources to particular expenditures". The complexity of the budget varies from municipality to municipality, depending on the municipal size, its operating activities and the complexity of transactions. The budget is important because it serves as a link between the IDP and the achievement of municipal goals. Without a responsible budget, council will not be able to implement its strategy as defined in its IDP, and it is likely to have poor financial performance coupled with unlawful expenditure by the end of the fiscal year. A budget that is poorly planned is likely to result in misappropriation of resources and abuse of funds (Eisenstein 2019:online).

Budget approval is the responsibility of the municipal council; therefore, it is a responsibility of the council to ensure that all the various sections of the MFMA are complied with prior to approval of the budget. The MFMA requires that, when planning, municipalities must set budgets that are realistic, project revenues for each source, and estimate revenues and expenditures by vote (National Treasury 2003:19). Most

South African municipalities have budgets that are poorly prepared and inadequately controlled and monitored, and these contribute significantly to the occurrence of unlawful (unauthorised) expenditure (AGSA 2020:8; 2018:15; National Treasury 2018:18). National Treasury (2018:16) states that “If a credible long or medium-term financial strategy is not in place, and there is weakness in internal controls, it will be difficult to compile effective operational budgets or to spend in line with available financial resources. In cases where either of these failures occurs in the context of limited cash resources and poor rates of revenue collection, the financial risk is greatly magnified”.

Municipalities continue to struggle with the critical concept of budgeting, such as budgeting for surpluses in order to avoid cash and liquidity problems (National Treasury 2018:16). National Treasury (2018:54) added that lack of financial discipline resulted in municipalities’ not spending in accordance with budgets, culminating in unlawful (unauthorised) expenditure.

3.6.7 Spending not in accordance with the budget

Overspending on budgets results in unlawful (unauthorised) expenditure in terms of the definition. Spending according to the budget is the responsibility of the steward. The AGSA (2018:24) stated that overspending on budgets occurs as a result of budgets that are poorly prepared, lack of adequate controls to monitor spending, and lack of oversight by those in charge of governance. As stated in Section 3.6.6 above, budget preparation is the responsibility of the steward. National Treasury (2018:54) added that “weakening fiscal discipline, lax budgeting and financial management practices are also reasons for overspending on operational budgets”.

Overspending on budgets can be incurred, not only because the municipality has spent money that it did not have but also because it did not properly include non-cash items in its budget (AGSA 2021:132; 2018:25). National Treasury (2013:4) stated that most municipalities have shared their concerns over non-cash items that are causing total expenditure to exceed the total budget resulting in unauthorised expenditure. National Treasury (2013:4) further stated that, under-provision for non-cash items in the budget amounts to material misstatement of surplus or deficit and ascribed this to poor planning and other events.

As shown in Table 3.1 above, an average of 97 per cent of unauthorised expenditure incurred over the five-year period between 2013/14 to 2017/018 covered in this study emanates from overspending on budgets. The percentage of municipalities that incurred unauthorised expenditure due to failure to budget for non-cash items was more than 50 per cent, as reported by the AGSA in the general report for 2017/18 financial reporting period that was tabled in 2018 (AGSA 2018:72). The largest contributor to this is the high rate of non-cash items arising from impairment of consumer debtors, depreciation of long-term assets, grants, transfers, and the impairment of ageing infrastructure that municipalities are failing to budget for (National Treasury 2013:4).

Over the years since 2004, the National Treasury has issued a series of circulars providing more guidance on the preparation of budgets, as a result of a reform that advocated for the accrual principle.

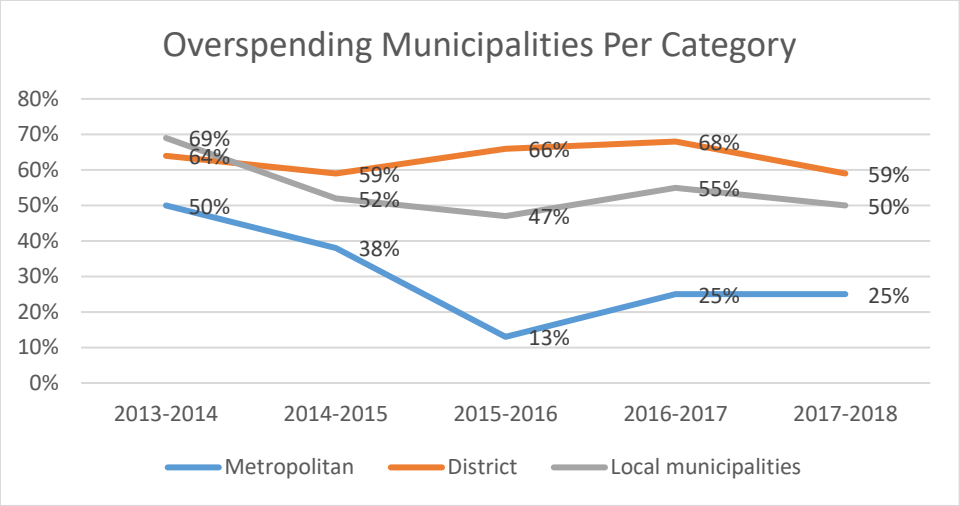

Figure 3.6: **Overspending municipalities**

Source: National Treasury 2013/14–2017/18

The average for metropolitan municipalities that overspent on their budgets over the five-year period between the 2013/14 and 2017/18 financial years was 30 per cent. Metropolitan municipalities incurred the smallest proportion of unauthorised expenditure when compared with other municipal categories. The average for district municipalities that overspent on their budgets over the five-year period between the 2013/14 and 2017/18 financial years was 63 per cent. This represents the highest proportion amongst the three municipal categories. The average for local municipalities

that overspent on their budgets over the five-year period between the 2013/14 and 2017/18 financial years was 54 per cent. This ratio is nine per cent lower than that of district municipalities and 24 per cent higher than that of metropolitan municipalities.

3.6.8 Internal controls

Internal control is “any action taken by management (the steward), the board (council), and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved” (IIA 2020:1; Cascarino 2007:357; Pickett 2005:16). The aim of internal control is to ensure that municipal operations and financial management systems function in a manner that is effective, economical, and efficient while maintaining compliance with relevant laws, regulations and other relevant prescripts (Benedek, Szenténé & Béres 2014:297). It is the responsibility of council to exercise oversight to ensure that a sound internal control environment exists. Equally, it is the responsibility of management (accounting officers) to ensure that the control environment is sound by setting the ethical tone at the top and leading by example for employees to follow (Mofolo 2015:896). The lack of consequence management by councils promotes poor performance and unethical behaviour, which contribute to senior managers’ lack of commitment to improve compliance and performance (Ramutsheli & Janse van Rensburg 2015:3). The poor systems of internal control leave the financial management system vulnerable to abuse, perpetrate rate of fraud and corruption (CoGTA 2009:54).

Irregular expenditure is increasing due to instability, disregard for laws and regulations, and poor internal control environments (AGSA 2018:60). A solid internal control system is critical for municipalities to achieve their goals, establish a balanced financial management system and enhance integrity in public administration (Benedek et al 2014:307). In response to the weakening internal control environment at municipalities, those charged with governance should insist (a) that management design and implement the internal control mechanisms that are necessary to respond timeously to weaknesses identified; and (b) that these are monitored on a regular basis (Munzhedzi 2016:6). Mofolo (2015:900) stated that achieving the desired level of control environment that will result in the institution achieving its goals, requires a combination of skilled personnel who are suitably qualified, experienced and disciplined, good

leadership that fulfils its oversight role with the correct tone, correct performance systems in place, and adequate policies and procedures.

3.6.9 Politics

In recent years, there has been a significant increase in the number of reports of fraud and corruption at municipalities. Most of these reports point to inappropriate interference exercised by political office-bearers (De Visser 2010:10). Political infighting at council and council members interfering with the management role in administering the municipalities weakens oversight (AGSA 2018:10). Mfuru, Sarwatt and Kanire (2018:1) added that political interference in administration results in power abuse, maladministration, unethical behaviour, lack of commitment and, ultimately, poor service delivery. Chang and Wong (2002:2) agreed that political interference has a negative effect on performance, not only in the public sector but also in the private sector. Chang and Wong (2002:2) added that politicians use their political power to control the institutions in order to achieve political or personal goals. De Visser (2010:10) posited that regional party structures are primarily mandated to ensure that recruitment and deployment of political officers are suitably qualified personnel that will provide strategic guidance to the administrative leadership. However, these regional structures tend to shift their focus to staff appointment and tenders instead. The literature above suggests that, when politicians interfere with the steward role in managing the municipality, unlawful expenditure occurs due to controls being overridden and power being abused. Political interference is therefore in direct conflict with the stewardship theory.

There is a logical correlation between the community, taxes collected from the community, and public expenditure. Monte and Papagni (2001:1) submitted that the provision of public goods and services is mostly funded by taxes collected from the community and, when fraud is taking place during this process, the efficiency of public expenditure decreases.

The public perception in South Africa has been that unlawful municipal expenditure is incurred as a result of fraud and corruption (City of Tshwane 2016:online). Monte and Papagni (2001:1) found a significant negative correlation between fraud and economic growth. This suggests that municipal economic development is affected by the unlawful expenditure when it is caused by fraud. However, the AGSA (2014:48) partially

disagreed with the sentiment that unlawful expenditure results in wastage or is caused by fraud, stating that “such expenditure does not necessarily mean that money had been wasted or that fraud had been committed. However, it is a measure of an auditee’s ability to comply with legislation relating to expenditure and procurement management”.

There seems to be a consistent pattern of behaviour by the administrative and political leadership that disregards procurement processes and results in irregular expenditure (AGSA 2018:63). The lack of consequence management for transgressors of relevant laws and regulations has created an environment that is open to wastage, misappropriation and the abuse of state funds (AGSA 2018:63). Wastage of municipal resources results in fruitless and wasteful expenditure in terms of the MFMA. Lack of consequence management increases the risk of non-compliance and, ultimately, exposes the municipality’s unlawful expenditure.

3.6.10 Chapter summary

Unlawful expenditure has three components: (a) unauthorised expenditure, (b) irregular expenditure, and (c) fruitless and wasteful expenditure. Unlawful expenditure was generally increasing at municipalities over the five-year period covered in the study (2013/14 to 2017/18). The average numbers of municipalities incurring unlawful expenditure over the study period was high, with irregular expenditure sitting at 86 per cent, fruitless and wasteful expenditure at 79 per cent, and unauthorised expenditure at 66 per cent. This means that most South African municipalities are incurring unlawful expenditure. The literature suggests that the increasing rate of unlawful expenditure is attributable to various factors such as weaknesses in the financial management process, weaknesses in the recruitment processes, weak policies and procedures or lack of implementation thereof, weaknesses in purchasing (procurement) processes, poor municipal debt collection rate, poor budgeting processes, overspending of municipal budgets, weak internal controls and, lastly, political interference.

In Chapter 2, it was suggested that inadequate human resources or a lack of the requisite skills and experience, a lack of financial discipline, a lack of sound governance, and a lack of ethical culture are the causes of poor municipal financial performance. If there are no skills shortages, recruitments processes are sound, financial management processes are in place and functioning correctly, those charged

with governance are exercising oversight appropriately and lead by example in setting the ethical culture at the top, financial performance may improve and unlawful expenditure may substantially decrease.

A consistent pattern in the causes of poor municipal financial performance and unlawful expenditure was observed over the period of the study. The AGSA found that municipalities were constantly failing to address the causes discussed in this chapter.

The behaviour espoused by the stakeholder theory and the stewardship theory seem not to be upheld in South African municipalities. This is evident from the high number of municipalities incurring unlawful expenditure, as discussed in the literature findings in Section 3.5. Behaviour in accordance with the stakeholder and stewardship theories at South African municipalities would eliminate or substantially reduce unlawful expenditure. Dzomira (2017:207) suggested that the South African public sector financial management system for planning and budgeting should be centralised, since the administrative leadership for all sectors continues to wilfully and negligently commit unlawful expenditure.

The next chapter discusses the methodology employed in the study and covers the research design, population, sample, data collection, data analysis and operational definition of the variables adopted.

CHAPTER 4. RESEARCH METHODOLOGY

4.1 INTRODUCTION

The last two chapters discussed in detail literature reviews of municipal financial performance (Chapter 2) and unlawful expenditure (Chapter 3). The study sought to determine whether relationships exist, and the extent thereof, between the types of unlawful expenditure and the financial performance of South African municipalities. It was necessary to apply the most appropriate research methodology to meet this research objective. This section outlines the research design, population, sample, data collection, data analysis and operational definition of the variables adopted in the study.

4.2 RESEARCH DESIGN

Research design is a plan followed by a researcher when addressing the research objective (Saunders, Lewis & Thornhill 2012:159). Akhtar (2016:68) defines research design as “the conceptual blueprint within which research is conducted”.

4.2.1 Research paradigms

Saunders et al (2009:124) defined research philosophy as “a system of beliefs and assumptions about the development of knowledge”. They classified research philosophy into pragmatism, positivism, realism and interpretivism (Saunders et al 2009:124). Pragmatism is not associated with any research method or technique as it is determined by the research problem. Positivism is associated with quantitative research methods (Ganda 2016:146). Interpretivism is associated with qualitative research methods, while realism is based on the principles of positivist and interpretivist paradigms (Žukauskas, Vveinhardt & Andriukaitienė 2018:123).

4.2.2 Positivist paradigm

Due to the quantitative nature of the study, the positivist philosophy was adopted (Bezuidenhout 2016:135). Saunders et al (2009:136) described positivism as a highly structured philosophy that is normally associated with research work that involves larger samples, measurement and typically quantitative methods of analysis. Crotty (1998:8–9) defined the positivist paradigm as “a methodological philosophy in

quantitative research where the researcher applies the methods of natural sciences to discover the study of social science". This philosophy is also called the scientific paradigm (Mack 2010:6). Park, Konge and Artino (2020:695) explained that "positivism relies on the hypothetico-deductive method to verify a priori hypotheses that are often stated quantitatively, where functional relationships can be derived between causal and explanatory factors (independent variables) and outcomes (dependent variables)". Pham (2018:2) added that the positivist paradigm assists researchers to clearly understand the behaviour of variables through empirical tests and sampling methods.

Bezuidenhout (2016:135) asserted that a research paradigm can be either deductive or inductive in nature. A deductive model was considered appropriate for this study due to the positivist philosophy adopted. The deductive model is further discussed below.

4.2.3 Deductive model

A positivist paradigm is typically deductive in nature (Saunders et al 2009:136). A deductive model requires the researcher to develop and test a theory and hypotheses. Park et al (2020:694) suggested that this model follows the methodical circle depicted in Figure 4.1 below:

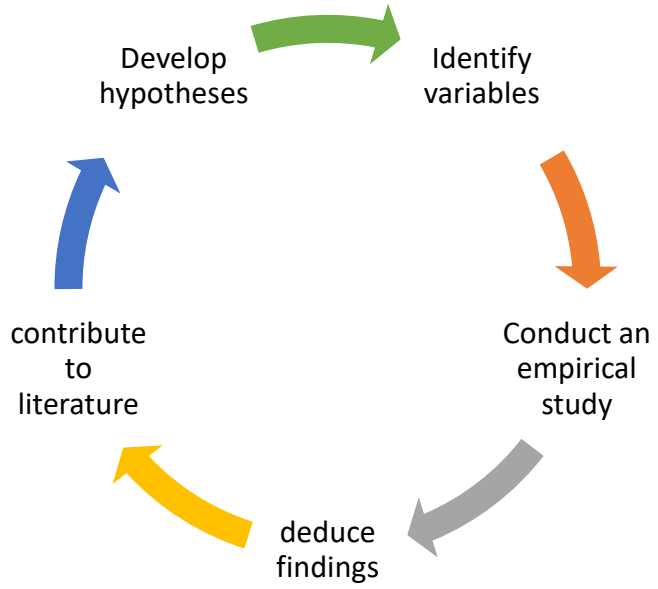

Figure 4.1: Deductive model

Source: Park, Konge & Artino 2020

4.2.4 Research methods

A wide range of research methods has been applied over time by different researchers (Mbo 2017:3). Ncemane (2019:77) said a research methodology is appropriate if it is developed on the premise that principles relevant to the philosophical worldview are reflected (research paradigm) and by distinguishing between qualitative and quantitative research. Adopting an appropriate research methodology not only assists the researcher in answering the research question but also usefully enables the reader to replicate, analyse and interpret the results of the study if the need arises (Nyirenda 2014:44).

There are three research methods, namely quantitative, qualitative and mixed (Mbo 2017:3; Creswell 2014:32; Creswell 2009:121). All three research methods are further defined and discussed below.

4.2.4.1 Quantitative research method

Creswell (2014:32) defined quantitative research as “an approach for testing objective theories by examining the relationship among variables”. Furthermore, Creswell (2014:32) stated that “these variables, in turn, can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures”. Aliaga and Gunderson (2000:64) defined quantitative research as “explaining phenomena by collecting numerical data that are analysed using mathematically based methods”. Putting it slightly differently, Riffe, Lacy and Fico (2014:3) defined quantitative research as “the systematic assignment of communication content to categories according to rules, and the analysis of relationships involving categories using statistical methods”. In addition, Kerlinger (1964:544) defined quantitative research as “a method of studying and analysing communication in a systematic, objective, and quantitative manner for the purpose of measuring variables”.

4.2.4.2 Qualitative research method

Hamilton and Finley (2020:1) defined qualitative research as “a category of research approaches that produce findings without reliance on quantitative measurement or statistical analysis”. On the other hand, Creswell (2014:32) described qualitative research as “an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem”. Schonfeld and Dreyer (2008:1) stated

that “Qualitative research methods are most appropriate in situations in which little is known about a phenomenon or when attempts are being made to generate new theories or revise pre-existing theories. Qualitative research is inductive rather than deductive and is used to describe phenomena in detail, without answering questions of causality or demonstrating clear relationships among variables”. Researchers such as Ncemane (2019:78) used this method when assessing shared value created by a business model. Ncemane (2019:78) explained that this method provides guidance on how to theorise and generalise from data, as opposed to assessing the framework the data provides.

4.2.4.3 Mixed research method

Mixed methods research is defined as “a methodology for collecting, analysing and integrating quantitative and qualitative data in one study or longitudinal program of inquest” (Buslera 2013:6). Creswell (2014:33) described mixed methods research as “an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone”. In other words, mixed method is a combination of the quantitative and qualitative methods. This method has been used by many researchers, such as Nyirenda (2014) and Maleka (2017).

4.2.5 Adopted research method (The quantitative method)

Of the three different research methods defined above, quantitative research was considered the most appropriate method to adopt, in order to achieve this study’s research objective. Quantitative research was considered the most relevant method because the study relied on secondary data. Secondary data was extracted from the publicly available data in audited annual financial statements, the available literature on municipal performance and unlawful expenditure, and relevant information from municipal websites.

The study sought to establish a statistical relationship and the extent thereof between unlawful expenditure and municipal financial performance in South African

municipalities. Bezuidenhout (2016:136) stated that “quantitative research expresses the relationship between variables using descriptive and inferential statistics”.

The quantitative research method has been widely used by researchers conducting similar work to establish relationships between two or more variables on firm performance, such as Bezuidenhout (2016), de Wet (2012), Ganda (2016), Maleka (2017), Modau (2013), Ngwenya and Khumalo (2012), Resnick (2013), Shaw (2008) and Theku (2014).

4.2.6 Types of quantitative methods

There are four quantitative research methods, namely descriptive, correlational, causal-comparative/quasi-experimental, and experimental research (WSSU 2020:online). Researchers such as Tustin, Ligthelm, Martins and Van Wyk (2004:82) and Struwig and Stead (2013:6) differed slightly with WSSU (2020) as they divided quantitative research designs into three categories, namely descriptive, exploratory and causal research. The only difference was that they did not distinguish between causal-comparative and true experimental research. The diagram below depicts the four different types of quantitative research:

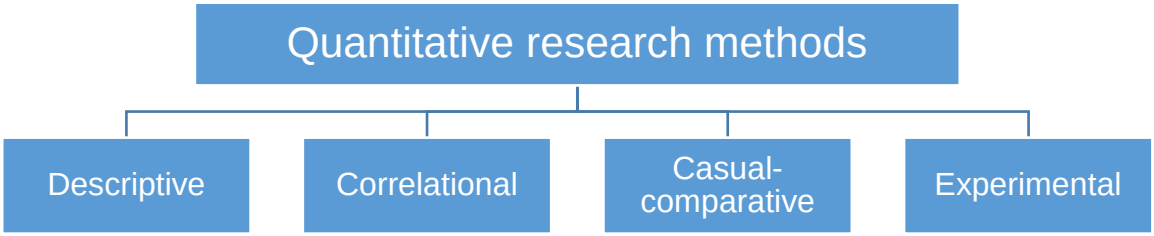

Figure 4.2: Types of quantitative research

Source: WSSU (2020)

Descriptive quantitative research “seeks to describe the current status of an identified variable. These research projects are designed to provide systematic information about a phenomenon. The researcher does not usually begin with a hypothesis but is likely to develop one after collecting data. The analysis and synthesis of the data provide the test of the hypothesis. Systematic collection of information requires careful selection of the units studied and careful measurement of each variable” (WSSU 2020:online).

Correlational quantitative research “attempts to determine the extent of a relationship between two or more variables using statistical data. In this type of design, relationships between and among several facts, are sought and interpreted. This type of research will recognise trends and patterns in data, but it does not go so far in its analysis to prove causes for these observed patterns. Cause and effect are not the basis of this type of observational research. The data, relationships, and distributions of variables are studied only. Variables are not manipulated; they are only identified and are studied as they occur in a natural setting” (WSSU 2020:online). In Chapters 2 and 3 of this study, it was explained that the causes of both variables (dependent and independent) already identified from available literature were brought into context to help the reader understand the origins of poor performance and increasing unlawful expenditure.

Causal-comparative research “attempts to establish cause-effect relationships among the variables. These types of design are very similar to true experiments, but with some key differences. An independent variable is identified but not manipulated by the experimenter, and the effects of the independent variable on the dependent variable are measured. The researcher does not randomly assign groups and must use ones that are naturally formed or pre-existing groups. Identified control groups exposed to the treatment variable are studied and compared to groups who are not” (WSSU 2020:online).

Experimental research, often called true experimentation, “uses the scientific method to establish the cause-effect relationship among a group of variables that make up a study. The true experiment is often thought of as a laboratory study, but this is not always the case; a laboratory setting has nothing to do with it. A true experiment is any study where an effort is made to identify and impose control over all other variables except one. An independent variable is manipulated to determine the effects on the dependent variables. Subjects are randomly assigned to experimental treatments rather than identified in naturally occurring groups” (WSSU 2020:online). Hossain, Gabr, and Barlaz (2003:1153) used this method when assessing the relationship of compressibility parameters to municipal solid waste decomposition.

Based on the above definitions, descriptive quantitative, causal-comparative and experimental research were not considered suitable for this study. Therefore, the

correlational research method was adopted as the most appropriate method to use when establishing whether there is a correlation between municipal financial performance and unlawful expenditure. This method has been used by many researchers, of whom Maleka (2017:42) is one. Maleka (2017:42) explained that “The use of the quantitative approach (regression analysis) enabled the researcher to test for a possible link between two variables”. Similarly, in this study, the aim was to establish whether there is a link between a combination of prescribed municipal financial performance ratios, as explained in Chapter 2 of this study.

4.3 POPULATION

Population is defined as “an aggregate or totality of all the objects, subjects or members that conform to a set of specifications” (Mbokane & Ehlers 2006:45; Polit & Hungler 1999:37). Banerjee and Chaudhury (2010:61) defined population as “an entire group about which some information is required to be ascertained. A statistical population need not consist only of people”. The population for this study was the 257 municipalities in South Africa (there were 278 before 3 August 2016).

South African municipalities are classified into three categories, namely metropolitan municipalities (category A), local municipalities (category B) and district municipalities (category C). A metropolitan municipality is defined as “a municipality that has an exclusive legislative authority and municipal executive in its area”. A local municipality is “a municipality that shares municipal executive and legislative authority in its area with a category C municipality within whose area it falls”. Lastly, a district municipality is “a municipality that has the legislative authority and municipal executive in an area that includes more than one municipality” (SALGA 2020:online).

Metropolitan municipalities govern the largest metropolitan areas, and the rest of the country is divided into district municipalities. All district municipalities are responsible for local municipalities that fall under it in terms of the demarcation. Between 2011 and 2016, the Municipal Demarcation Board undertook a re-demarcation assessment that resulted in changes to demarcations for certain municipalities. As a result of the boundary reforms, the number of municipalities in South Africa changed from 278 to 257 effectively from 3 August 2016.

Currently there are 205 local municipalities, 44 district municipalities and eight metropolitan municipalities (SALGA 2020:online; MDB 2018:42). The population was the 226 municipalities that were not affected by the re-demarcation.

4.4 SAMPLE

This study followed a non-probability convenience sampling method. The method is also referred to the researching subjects of the population that are easily accessible to the researcher (Etikan, Musa & Alkassim 2016:2). *Convenience sampling* means that the data is collected with no probability structure in mind (Jha 2017:online). Skowronek and Duerr (2009:412) described convenience sampling as cost-effective and as a solution to the problem of the availability of data. Probability sampling techniques were considered inappropriate for this study due to the nature of the data required and their availability.

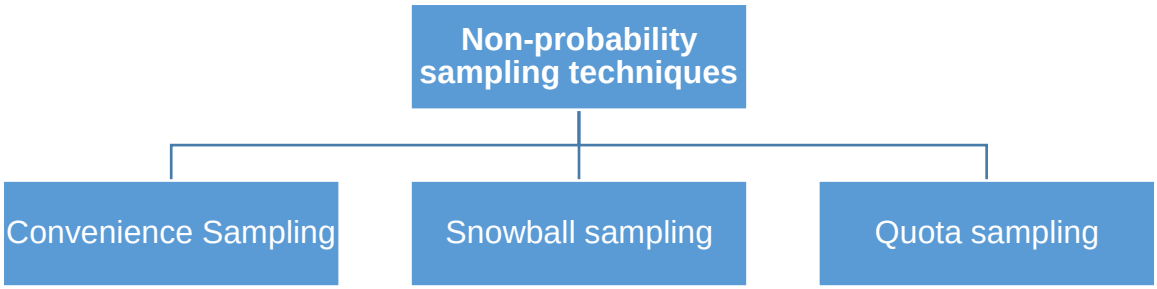

Figure 4.3: Non-Probability Sampling Techniques

Source: Jha 2017

For the purposes of this study, the researcher intended to analyse the entire population of 226 municipalities. However, it was discovered that only 121 municipalities had submitted annual reports in a readable format to the National Treasury for the five-year period covered in the study. These 121 municipalities were the sample. In other words, all municipalities that had submitted annual reports for the five-year period were selected for analysis. The study sample constituted 54 per cent of the population. It constitutes five metropolitan municipalities, 16 district municipalities and 100 local municipalities, and fairly represents all the provinces, as communicated in Section 1.10.3.

The convenience technique is the most applicable and widely used technique in quantitative research (Mbokane & Ehlers 2006:45; Elfil & Negida 2017:online) It

requires the researcher to enrol the sample items (municipalities) in accordance with the availability of data and accessibility (Elfil & Negida 2017:online). The technique is considered convenient, quick and inexpensive. Elfil and Negida (2017:online) added that it is called *convenience sampling* because the researcher has to select the sample items according to whether they are approximately and conveniently accessible.

The nature of the study required the use of statistical techniques to analyse the data, hence the sample chosen had to reflect the method to be used. Data were analysed using Minitab V17 software. The sample size was 121 (54%) out of 257 (278 before August 2016) municipalities in South Africa (Buallay, Hamdan & Zureigat 2017:8).

Table 4.1 below lists the 30 municipalities that merged to form 14 new municipalities. All municipalities before and after the merger were excluded from the sample because they were all affected by the merger.

Table 4.1: Municipalities that were merged

Nº1	Name	Code	Province	Nº2	Fate
1	Camdeboo Local Municipality	EC101	Eastern Cape	1	Merged to create Dr Beyers Naudé Local Municipality
2	Ikwezi Local Municipality	EC103	Eastern Cape		
3	Baviaans Local Municipality	EC107	Eastern Cape		
4	Nkonkobe Local Municipality	EC127	Eastern Cape	2	Merged to create Raymond Mhlaba Local Municipality
5	Nxuba Local Municipality	EC128	Eastern Cape		
6	Tsolwana Local Municipality	EC132	Eastern Cape	3	Merged to create Enoch Mgijima Local Municipality
7	Inkwanca Local Municipality	EC133	Eastern Cape		
8	Lukhanji Local Municipality	EC134	Eastern Cape		
9	Maletswai Local Municipality	EC143	Eastern Cape	4	Merged to create Walter Sisulu Local Municipality
10	Gariep Local Municipality	EC144	Eastern Cape		
11	Randfontein Local Municipality	GT482	Gauteng	5	Merged to create Rand West City Local Municipality
12	Westonaria Local Municipality	GT483	Gauteng		
13	Ezinqoleni Local Municipality	KZN215	KwaZulu-Natal	6	Merged to create Ray Nkonyeni Local Municipality
14	Hibiscus Coast Local Municipality	KZN216	KwaZulu-Natal		
15	Emnambithi/Ladysmith Local Municipality	KZN232	KwaZulu-Natal	7	Merged to create Alfred Duma Local Municipality
16	Indaka Local Municipality	KZN233	KwaZulu-Natal		
17	Umtshezi Local Municipality	KZN234	KwaZulu-Natal	8	

Nº1	Name	Code	Province	Nº2	Fate
18	Imbabazane Local Municipality	KZN236	KwaZulu-Natal		Merged to create Inkosi Langalibalele Local Municipality
19	Big 5 False Bay Local Municipality	KZN273	KwaZulu-Natal	9	Merged to create Big Five Hlabisa Local Municipality
20	Hlabisa Local Municipality	KZN274	KwaZulu-Natal		
21	Ingwe Local Municipality	KZN431	KwaZulu-Natal	10	Merged to create Dr Nkosazana Dlamini-Zuma Local Municipality
22	Kwa Sani Local Municipality	KZN432	KwaZulu-Natal		
23	Mookgopong Local Municipality	LIM364	Limpopo	11	Merged to create Modimolle/Mookgopong Local Municipality
24	Modimolle Local Municipality	LIM365	Limpopo		
25	Fetakgomo Local Municipality	LIM474	Limpopo	12	Merged to create Fetakgomo/Greater Tubatse Local Municipality
26	Greater Tubatse Local Municipality	LIM475	Limpopo		
27	Ventersdorp Local Municipality	NW401	North West	13	Merged to create Ventersdorp/Tlokwe Local Municipality
28	Tlokwe Local Municipality	NW402	North West		
29	Mier Local Municipality	NC081	Northern Cape	14	Merged to create Dawid Kruiper Local Municipality
30	Khara Hais Local Municipality	NC083	Northern Cape		

Source: Wikipedia

The following seven municipalities were annexed by other municipalities, as shown in Table 4.2 below. All the municipalities listed below were also excluded from the sample because they were all affected by the boundary redetermination.

Table 4.2: Municipalities that were taken over

Nº1	Name	Code	Province	Nº2	Annexed by
1	Naledi Local Municipality	FS164	Free State	1	Mangaung Metropolitan Municipality
2	Vulamehlo Local Municipality	KZN211	KwaZulu-Natal	2	eThekwini Metropolitan Municipality
				3	Umdoni Local Municipality
3	Ntambanana Local Municipality	KZN283	KwaZulu-Natal	4	Mthonjaneni Local Municipality,
				5	uMfolozi Local Municipality
				6	uMhlathuze Local Municipalities
4	Mutale Local Municipality	LIM342	Limpopo	7	Musina Local Municipality
				8	Thulamela Local Municipalities

Nº1	Name	Code	Province	Nº2	Annexed by
5	Umjindi Local Municipality	MP323	Mpumalanga	9	Mbombela Local Municipality
6	Bohlabela District Municipality	CBDC4	Mpumalanga/ Limpopo	10	Ehlanzeni Local Municipality
				11	Mopani District Municipalities
7	Aganang Local Municipality	LIM352	Limpopo	12	Blouberg Local Municipality
				13	Molemole Local Municipality
				14	Polokwane Local Municipalities

Source: Wikipedia

4.5 DATA COLLECTION

Data collected consisted of secondary data from the audited municipal annual financial statements available from the National Treasury website. The data collected were used to determine whether there was a relationship between unlawful expenditure and municipal financial performance for the 2013/14 to 2017/18 financial reporting periods.

4.6 DATA ANALYSIS

The data used in the study were longitudinal data, which combine cross-sectional and time series data (Galane 2019:87). The study evaluated the relationship between types of unlawful expenditure and municipal financial performance in South African municipalities over a five-year period between the 2013/14 and 2017/18 annual financial reporting periods. Published scholarly work and information available from the municipal websites were also used. Regression analysis and correlation analysis were performed when measuring the variables discussed in Section 1.10.

4.7 OPERATIONAL DEFINITION OF VARIABLES

This study evaluated the possible relationship between increasing unlawful expenditure and deteriorating municipal financial performance and the extent of the relationship, if there is any. The section below discusses the dependent and independent variables adopted in order to answer the research question.

4.7.1 Independent variables (unlawful expenditure)

As explained in Section 1.10, the independent variables were all three elements of unlawful expenditure, namely, ‘unauthorised expenditure’, ‘irregular expenditure’ and ‘fruitless and wasteful expenditure’.

4.7.2 Dependent variables (municipal financial performance)

Seven dependent variables were used to measure municipal financial performance, as discussed in Chapter 2. All the variables identified in this study are prescribed in terms of the MSA and the MFMA. The indicators were also benchmarked with those used internationally when measuring municipal financial performance by other researchers, such as Brown (1993), Cohen (2008), Dollery and Crase (2006), and Padovani, Rossi and Orelli (2010).

4.7.3 The municipal financial performance measures prescribed in the MSA and MFMA

The following three performance measures are prescribed in the MSA: ‘debt coverage’, ‘outstanding service debtors to revenue’ and ‘cost coverage’. The following four performance measures are prescribed in the MFMA: ‘collection rate’, ‘current ratio’, ‘remuneration as a percentage of total expenditure’ and ‘net operating surplus margin’. The performance measures from the MFMA were adopted as a group from the 32 indicators prescribed in Circular 71 of 2014 (National Treasury 2014:1).

4.8 REGRESSION EQUATION

Song, Baek, Hong and Jang (2005:97) defined *linear regression* as “a statistical method to model the relationship between two variables by fitting a linear equation to observed data. One variable is an explanatory variable, and the other a dependent variable. The linear regression method can be used for forecasting under the assumption of continuing the correlation between the variables in the future”.

Simple linear regression was considered suitable for this study because of the continuous nature of the variables. *Continuous variables* are variables that assume large numbers of values, making it impossible to identify them all, much less list them (Lutabingwa & Auriacombe 2007:534). Linear regression has been widely used by

many researchers when assessing the relationship between variables such as Kleynhans and Coetzee (2019), Maleka (2017), Mbo (2017), Connolly (2016), Xu and Jin (2016), Lakhan (2014), Nyirenda (2014), Song et al (2005).

The regression equations are as follows:

Debt coverage = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Outstanding service debtors to revenue = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Cost coverage = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Collection rate = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Current ratio = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Remuneration as a percentage of total expenditure = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Net operating surplus margin = *Unauthorised Expenditure + Irregular Expenditure + Fruitless & Wasteful Expenditure + e*

Y_{1-7} represents the dependent variable, where:

(Y_1) is “debt coverage”

(Y_2) is “Outstanding service debtors to revenue”

(Y_3) is “Cost coverage”

(Y_4) is “Collection rate”

(Y_5) is “Current ratio”

(Y_6) is “Remuneration as a % of total expenditure” and

(Y_7) is “Net operating surplus margin”.

x represents the independent variable, where:

“unauthorised expenditure” is (x_1),

“irregular expenditure” is (x_2) and

“fruitless and wasteful expenditure” is (x_3)

α represents the intercept, and

β represents the slope.

4.9 ETHICAL CONSIDERATIONS

The data extracted from annual reports were reviewed as a mitigating factor to reduce the risk of errors to a tolerable minimal level (Bezuidenhout 2016:175).

An ethical clearance certificate to collect data from the public domain was obtained from the University of South Africa's College of Accounting Science Research Ethics Review Committee (see Annexure A).

4.10 RELIABILITY AND VALIDITY

Taber (2018:1274) defined *reliability* as "an extent to which an instrument can be expected to give the same measured outcome when measurements are repeated". Taber (2018:1274) defined *validity* as "an extent to which an instrument measures what it claims to measure, rather than something else".

In this study, Minitab V17 software was used to run regression equations.

The municipal annual reports are public documents, therefore, data used were secondary in nature. The annual reports used were obtained from the National Treasury's website. Data were extracted from the annual financial statements contained in the annual reports. The annual financial statements were audited by the AGSA. Audited annual financial statements were consulted to ensure the data used are credible.

Published scholarly work and information from the selected municipal websites were also used in this study.

The municipal performance measures used are those that are prescribed by the MSA and MFMA.

The variables for unlawful expenditure are defined in the MFMA.

Unlawful expenditure reported by the municipalities as part of the disclosure notes in the annual financial statements were also audited by the AGSA.

4.11 CHAPTER SUMMARY

This chapter discussed the research methodology followed in line with the research objective hypothesis, as discussed in Section 1.4. In determining the appropriate

research methodology, all three research methods were defined, namely the quantitative research method, the qualitative research method and the mixed research method. Based on the nature of the study, which was to establish whether there is a relationship between unlawful expenditure and municipal financial performance variables, the quantitative method was considered most appropriate to address the research question. Correlational research was the type of quantitative method adopted because it is the most suitable method when establishing whether there is a correlation between two or more variables. A positive research paradigm that is deductive in nature due to the quantitative approach chosen was also adopted because this model is suitable for a study where a research question is developed from a hypothesis.

All municipalities in South Africa were considered as the population for this study. This was done to ensure that a true picture is obtained of the relationship that may exist (and the extent thereof) between the rising unlawful expenditure and poor municipal financial performance in the South African context. All three categories of municipality were also defined, namely metropolitans, districts and locals.

The sample was drawn from the population after adopting a non-probability sampling technique for this study. A convenience sampling technique was considered the most suitable for the nature of the data collected and analysed because it is convenient, quick and inexpensive. All municipalities that were merged or annexed were excluded from the sample in order to ensure consistency in the data analysed.

Operational definitions of research variables (dependent and independent), ethical considerations, reliability and validity of data were also covered in this chapter.

The next chapter presents the analysis of the data gathered and its results.

CHAPTER 5. PRESENTATION AND ANALYSIS OF DATA GATHERED

5.1 INTRODUCTION

The previous chapter outlined the research design, population, sample, data collection, data analysis and operational definition of variables adopted in the study. It was necessary to select the appropriate research methodology to ensure that the research question was addressed.

This chapter discusses the statistical analysis and results in line with the research objective and hypotheses.

5.2 PANEL DATA

Panel data is described as a set of data, constructed from cross-sections and time series, which are also referred to as *longitudinal data* (Galane 2019:109; Maleka 2017:50; Chisasa 2014:62). A set of secondary data was obtained from the annual reports of 121 municipalities in South Africa for a period covering the five financial years, between 2013 and 2018.

5.3 STATISTICAL CHARACTERISTICS OF DATA ANALYSIS

The section below covers the statistical characteristics of the secondary data analysed for the 121 South African municipalities for the period between 2013 to 2018, as indicated in Tables 5.1 to 5.5. The table columns display the mean, standard deviation, minimum, median, maximum, skewness and kurtosis. The Mean columns present the average of the data within a financial year from the sampled municipalities (Sykes, Gani & Vally 2016:277). The Standard Deviation columns present the variation of the data collected (Sykes, Gani & Vally 2016:277); a value closer to the mean suggests that data is less variable. The Minimum, Median and Maximum columns present the lowest, middle and highest values of the data collected within the financial year. The Skewness columns present the asymmetry or distortion of the set of data per financial year. The Kurtosis columns define whether the tail of the data distribution contains extreme values; in other words, it refers to how scores are concentrated in the centre of the distribution (Sykes, Gani & Vally 2016:278).

Table 5.1: Statistical characteristics of 2013/14 data

Variables	Mean	Standard Deviation	Median	Minimum	Maximum	Skewness	Kurtosis
Unauthorised expenditure	R94,410,720	R227,077,810	R16,541,390	R0	R1,429,795,371	4.18	19.04
Irregular expenditure	R104,748,706	R253,254,580	R20,648,292	R0	R1,814,537,200	4.46	23.31
Fruitless and wasteful expenditure	R8,819,486	R37,633,874	R266,771	R0	R338,580,996	7.15	57.35
Debt coverage	200 times	726 times	47 times	0.84 times	6,711 times	7.52	63.86
Net operating surplus margin	5%	17%	6%	-48%	44%	-0.38	0.55
Outstanding service debtors to revenue	42%	120%	12%	-3%	987%	6.22	43.29
Cost coverage	0.5 months	0.8 months	0.2 months	0 months	5.9 months	4.12	24.18
Collection rate	102%	16%	100%	31%	194%	0.70	12.61
Current ratio	1.99	2.54	1.29	0.12	19.67	4.15	23.08
Remuneration as a percentage of total expenditure	33%	10%	31%	15%	59%	0.82	0.25

Source: Researcher's own compilation (Minitab V17 statistical software)

There is statistical evidence that a high variation of 'Unauthorised expenditure, 'Irregular expenditure', 'Fruitless and wasteful expenditure', and 'Debt coverage' was reported in 2013/14, based on the mean and the standard deviation, and this evidence is strongly supported by their maximum and minimum indicators. All variables are highly skewed since skewness exceeds 1, except for 'Net operating surplus margin', which is negatively skewed and fairly symmetrical. In other words, the number of municipalities with a negative profit margin was fairly similar to the

number with a positive profit margin. In the 2013/14 table, the kurtosis is greater than 3 (kurtosis > 3) across all the variables and is called *leptokurtic*, except for 'remuneration', which is platykurtic (kurtosis < 3). This means that, compared to a normal distribution, 'Unauthorised expenditure', 'Irregular expenditure', 'Fruitless and wasteful expenditure', 'Net operating surplus margin' and 'Debt coverage' data are heavy-tailed or have a profusion of outliers. Hence, the variables were standardised to cater for outliers.

Table 5.2: Statistical characteristics of 2014/15 data

Variables	Mean	Standard Deviation	Median	Minimum	Maximum	Skewness	Kurtosis
Unauthorised expenditure	R134,442,811	R351,667,149	R21,264,256	R0	R2,726,476,000	5.24	32.20
Irregular expenditure	R174,033,568	R457,226,271	R26,192,072	R0	R3,300,020,000	4.54	24.08
Fruitless expenditure	R18,408,798	R77,925,856	R649,077	R0	R551,177,643	5.77	34.05
Debt coverage	213 times	485 times	55 times	0.35 times	2,870 times	3.73	14.50
Net operating surplus margin	7%	23%	8%	-46%	100%	0.78	3.37
Outstanding service debtors to revenue	37%	106%	13%	0%	969%	7.14	58.12
Cost coverage	0.5 months	0.7 months	0.2 months	0 months	5.5 months	3.76	20.13
Collection rate	102%	15%	101%	60%	177%	2.20	11.53
Current ratio	1.91	2.16	1.47	0.09	15.48	3.78	19.02
Remuneration as a percentage of total expenditure	33%	9%	31%	11%	72%	1.12	2.40

Source: Researcher's own compilation (Minitab V17 statistical software)

There is statistical evidence that a high variation of ‘Unauthorised expenditure’, ‘Irregular expenditure’, ‘Fruitless and wasteful expenditure’, and ‘Debt coverage’ was reported in 2014/15, based on the mean and standard deviation, and this is strongly supported by their maximum and minimum indicators. All variables are highly skewed since skewness exceeds 1, except for ‘Net operating surplus margin’ and ‘Collection rate’, which are moderately skewed and fairly symmetrical, respectively. In the 2014/15 table, the kurtosis is greater than 3 (kurtosis > 3) across all the variables and is leptokurtic, except for ‘Remuneration as a percentage of total expenditure’, which is platykurtic (kurtosis < 3). Compared to a normal distribution, this means that ‘Unauthorised expenditure’, ‘Irregular expenditure’, ‘Fruitless and wasteful expenditure’, ‘Fruitless and wasteful expenditure’, ‘Net operating surplus margin’ and ‘Debt coverage’ data are heavy-tailed or have a profusion of outliers. Hence, the variables were standardised to cater for outliers.

Table 5.3: Statistical characteristics of 2015/16 data

Variable	Mean	Standard Deviation	Median	Minimum	Maximum	Skewness	Kurtosis
Unauthorised expenditure	R181,804,406	R464,916,054	R19,380,908	R0	R3,417,609,000	4.67	25.82
Irregular expenditure	R228,418,139	R612,213,348	R26,425,633	R0	R4,059,000,000	4.39	21.28
Fruitless expenditure	R17,739,668	R63,956,659	R776,395	R0	R506,399,525	5.86	38.62
Debt coverage	383 times	1,747 times	60 times	1 time	17,202 times	8.92	84.85
Net operating surplus margin	10%	22%	9%	-56%	100%	0.86	4.32
Outstanding service debtors to revenue	31%	67%	11%	0%	482%	4.91	27.34
Cost coverage	0.4 months	0.6 months	0.2 months	0 months	3.5 months	2.64	8.52
Collection rate	100%	11%	101%	37%	135%	-1.88	13.62
Current ratio	2.06	2.38	1.44	0.11	13.62	2.77	9.53
Remuneration as a percentage of total expenditure	33%	9%	32%	15%	56%	0.47	0.00

Source: Researcher's own compilation (Minitab V17 statistical software)

There is statistical evidence that a high variation of 'Unauthorised expenditure', 'Irregular expenditure', 'Fruitless and wasteful expenditure', and 'Debt coverage' was reported in 2015/16, based on the mean and standard deviation, and this is strongly supported by their maximum and minimum indicators. All variables are highly skewed since skewness exceeds 1, except for 'Net operating surplus margin' and 'Remuneration as a percentage of total expenditure', which are moderately skewed; and 'Collection rate', which is negatively skewed. In the 2015/16 table,

the kurtosis is greater than 3 (kurtosis > 3) across all the variables and is leptokurtic, except for 'remuneration as a percentage of total expenditure' at 0.35, which is platykurtic (kurtosis < 3). Compared to a normal distribution, this means that 'Unauthorised expenditure', 'Irregular expenditure', 'Fruitless and wasteful expenditure', 'Net operating surplus margin' and 'Debt coverage' data are heavy-tailed or have a profusion of outliers. Hence the variables were standardised to cater for outliers.

Table 5.4: Statistical characteristics of 2016/17 data

Variables	Mean	Standard Deviation	Median	Minimum	Maximum	Skewness	Kurtosis
Unauthorised expenditure	R224,919,952	R541,907,524	R17,779,003	R0	R4,256,190,000	5.45	36.00
Irregular expenditure	R358,843,263	R1,294,744,509	R41,003,785	R0	R11,512,547,733	7.20	59.39
Fruitless expenditure	R24,756,453	R80,180,143	R966,632	R0	R621,389,843	5.50	35.37
Debt coverage	269 times	1,144 times	59 times	0.4 times	10,934 times	8.78	81.81
Net operating surplus margin	3%	18%	4%	-68%	42%	-0.70	2.23
Outstanding service debtors to revenue	38%	90%	12%	-13%	718%	5.48	36.37
Cost coverage	0.3 months	0.6 months	0.1 months	0 months	3.2 months	3.06	10.97
Collection rate	101%	14%	100%	44%	171%	1.48	14.02
Current ratio	1.91	2.41	1.09	0.08	16.09	3.20	13.42
Remuneration as a percentage of total expenditure	36%	28%	33%	15%	296%	8.30	76.50

Source: Researcher's own compilation (Minitab V17 statistical software)

There is statistical evidence that a high variation of ‘Unauthorised expenditure’, ‘Irregular expenditure’, ‘Fruitless and wasteful expenditure’ and ‘Debt coverage’ was reported in 2016/17, based on the mean and standard deviation, and this is strongly supported by their maximum and minimum indicators. All variables are highly skewed since skewness exceeds 1, except for ‘net operating surplus margin’, which is negatively skewed. In the 2016/17 table, the kurtosis is greater than 3 (kurtosis > 3) across all the variables and is called leptokurtic, except for ‘Net operating surplus margin’, which is platykurtic (kurtosis <3). Compared to a normal distribution, this means that ‘Unauthorised expenditure’, ‘Irregular expenditure’, ‘Fruitless and wasteful expenditure’, ‘Net operating surplus margin’ and ‘Debt coverage’ data are heavy-tailed or have a profusion of outliers. Hence the variables were standardised to cater for outliers.

Table 5.5: Statistical characteristics of 2017/18 data

Variables	Mean	Standard Deviation	Median	Minimum	Maximum	Skewness	Kurtosis
Unauthorised expenditure	R267,256,729	R606,585,576	R35,545,761	R0	R4,556,831,000	5.11	32.74
Irregular expenditure	R351,125,618	R970,492,251	R48,719,396	R0	R5,079,713,071	4.01	16.02
Fruitless expenditure	R19,379,157	R46,932,598,	R2,131,447	R0	R240,421,000	3.41	11.58
Debt coverage	722 times	3,275 times	58 times	-1.6 times	25,742 times	6.51	46.07
Net operating surplus margin	-5%	89%	7%	-768%	100%	-8.16	70.52
Outstanding service debtors to revenue	31%	58%	12%	-42%	324%	3.72	15.77
Cost coverage	0.3 months	0.5 months	0.1 months	0 months	2.5 months	2.64	7.14
Collection rate	101%	15%	100%	57%	181%	2.40	15.44
Current ratio	2.13	2.99	1.18	0.12	15.44	3.10	10.20
Remuneration as a percentage of total expenditure	34%	9%	33%	16%	56%	0.41	-0.10

Source: Researcher's own compilation (Minitab V17 statistical software)

There is statistical evidence that a high variation of 'Unauthorised expenditure', 'Irregular expenditure', 'Fruitless and wasteful expenditure' and 'Debt coverage' was reported in 2017/2018, based on the mean and standard deviation, and this is strongly supported by their maximum and minimum indicators. All variables are highly skewed since skewness exceeds 1, except for 'Net operating surplus margin' (-8,16), which is negatively skewed and fairly symmetrical. In other words, the number of municipalities with a negative profit

margin was fairly similar to the number with a positive profit margin. In the 2017/2018 table, the kurtosis is greater than 3 (kurtosis > 3) across all the variables and is called leptokurtic except for ‘remuneration’, which is platykurtic (kurtosis <3). Compared to a normal distribution, this means that ‘Unauthorised expenditure’, ‘Irregular expenditure’, ‘Fruitless and wasteful expenditure’ and ‘Debt coverage’ data are heavy-tailed or profusion of outliers. Hence the variables were standardised to cater for outliers.

5.4 MULTIPLE REGRESSION RESULTS

This section covers the multiple regression results of the secondary data analysed for the 121 South African municipalities for the period from 2013/14 to 2017/18.

Table 5.6: Multiple regression results for 2013/14

Variables	Multiple Regression Coefficients						
	Debt Coverage	Net Operating Surplus Margin	Outstanding Service Debt to Revenue	Cost Coverage	Collection Rate	Current Ratio	Remuneration as a % of Total Expenditure
Constant	-0.019	0.029	0.335***	0.491***	1.017	1.994***	0.321***
Unauthorised expenditure	0.795***	-0.061*	-0.040	-0.103	0.008	-0.214	-0.016
Irregular expenditure	-0.293***	0.007	-0.011	-0.075	-0.032*	-0.294	-0.021**
Fruitless and wasteful expenditure	0.208***	0.015	-0.026	0.025	0.002	-0.026	0.004
R-square	73.9%	4.2%	0.4%	3.1%	3.2%	3.2%	9.6%
F-stat	103***	1.58	0.16	1.15	1.19	1.21	3.87**
Count	119	119	119	119	119	119	119
Unused	6	6	6	6	6	6	6

*Key: *** 1%, ** 5% and * 10% significance level*

Source: Researcher's own compilation (Minitab V17 statistical software)

The debt coverage model indicates that unauthorised expenditure and irregular expenditures do have negative effects on debt coverage, and both are statistically significant at the one per cent level. However, fruitless and wasteful expenditure does have a positive effect on debt coverage and is statistically significant at a one per cent level. The R-square statistic indicates that 73.9 per cent of the variation in debt coverage can be explained by unauthorised expenditure, irregular expenditure and fruitless and wasteful expenditures; however, the explanation for the remaining 26.1 per cent of the variation in debt coverage is unknown. Considering the F-statistic, we can conclude that the debt coverage regression model is statistically significant at the 10 per cent level.

The net-profit model indicates that irregular expenditures and fruitless and wasteful expenditure do have positive effects on the net operating surplus margin, and both are not statistically significant at the 10 per cent level. However, unauthorised expenditure does have a negative effect on the net operating surplus margin and is statistically significant at the 10 per cent level. The R-square statistic indicates that only 4.2 per cent of the variation in net profit can be explained by unauthorised, irregular and fruitless expenditures, but the explanation for the remaining 95.8 per cent of the variation in net profit is unknown. Considering the F-statistic, we can conclude that the net-profit regression model is not statistically significant at the 10 per cent level.

The outstanding service debtors to revenue model indicates that unauthorised expenditure, irregular expenditures, and fruitless and wasteful expenditure do have negative effects on outstanding debt and are not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.4 per cent of the variation in outstanding debt can be explained by unauthorised expenditure, irregular expenditures and fruitless and wasteful expenditure, and the explanation for the remaining 99.6 per cent of the variation in outstanding debt is unknown. Considering the F-statistic, we can conclude that the outstanding debt regression model is not statistically significant at the10 per cent level.

The cost coverage model indicates that unauthorised expenditure and irregular expenditures do have positive effects on cost coverage, and both are not statistically significant at the 10 per cent level. However, fruitless and wasteful expenditure has a negative effect on cost coverage and is not statistically significant at the 10 per cent

level. The R-square statistic indicates that only 3.1 per cent of the variation in cost coverage can be explained by unauthorised, irregular and fruitless expenditures, and the remaining 96.9 per cent of the variation in cost coverage is unknown. Considering the F-statistic, we can conclude that the cost coverage regression model is not statistically significant at the 10 per cent level.

The collection rate model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have positive effects on the collection rate, and both are not statistically significant at the 10 per cent level. However, irregular expenditure does have a negative effect on the collection rate and is statistically significant at the 10 per cent level. The R-square statistic indicates that only 3.2 per cent of the variation in the collection rate can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 96.8 per cent of the variation in the collection rate is unknown. Considering the F-statistic, we can conclude that the collection rate regression model is not statistically significant at the 10 per cent level.

The current ratio model indicates that unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditures do have negative effects on the current ratio and are not statistically significant at the 10 per cent level. The R-square statistic indicates that only 3.2 per cent of the variation in the current ratio can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 96.8 per cent of the variation in the current ratio is unknown. Considering the F-statistic, we can conclude that current ratio regression model is not statistically significant at the 10 per cent level.

The remuneration as a percentage of total expenditure model indicates that unauthorised expenditure and irregular expenditures do have negative effects on remuneration, but only irregular expenditure is statistically significant at the five per cent level. However, fruitless and wasteful expenditure does have a positive effect on remuneration as a percentage of total expenditure and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 9.6 per cent of the variation in remuneration can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 90.4 per cent of the variation in remuneration is unknown. Considering the F-statistic, we can conclude that the remuneration regression model is statistically significant at the five per cent level.

Table 5.7: Multiple regression results for 2014/15

Variables	Multiple Regression Coefficients						
	Debt Coverage	Net Operating Surplus Margin	Outstanding Service Debt to Revenue	Cost Coverage	Collection Rate	Current Ratio	Remuneration as a % of Total Expenditure
Constant	0.004	0.067***	0.332***	0.487***	1.000***	1.985***	0.326***
Unauthorised expenditure	-0.094	-0.047*	-0.052	-0.090	0.016	-0.264	-0.020*
Irregular expenditure	0.058	0.015	-0.013	-0.038	-0.018	-0.129	-0.015
Fruitless and wasteful expenditure	-0.024	-0.020	-0.036	-0.058	0.005	-0.178	-0.005
R-square	0.6%	4.0%	0.5%	3.4%	0.8%	3.9%	11.6%
F-stat	0.21	1.56	0.20	1.32	0.31	1.49	4.81**
Count	121	121	121	121	121	121	121
Unused	6	6	7	6	6	6	6

*Key: *** 1%, ** 5% and * 10% significant level*

Source: Researcher's own compilation (Minitab V17 statistical software)

The debt coverage model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on debt coverage, and both are not statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on debt coverage and is not statistically significant at the 10 per cent level. The R-square statistic indicates that 0.6 per cent of the variation in debt coverage can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.4 per cent of the variation in debt coverage is unknown. Considering the F-statistic, we can conclude that the debt coverage regression model is not statistically significant at the 10 per cent level.

The net operating surplus margin model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on the net operating surplus margin and only unauthorised expenditure is statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on net operating surplus margin and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 4.0 per cent of the variation in net profit can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 96.0 per cent of the variation in the net operating surplus is unknown. Considering the F-statistic, we can conclude that the net operating surplus regression model is not statistically significant at the 10 per cent level.

The outstanding service debtors to revenue model indicates that unauthorised expenditure, irregular expenditures, and fruitless and wasteful expenditure do have negative effects on outstanding service debtors to revenue, and all are not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.5 per cent of the variation in outstanding service debtors to revenue can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.5 per cent of the variation in outstanding service debtors to revenue is unknown. Considering the F-statistic, we can conclude that the outstanding service debtors to revenue regression model is not statistically significant at the 10 per cent level.

The cost coverage model indicates that unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditures do have negative effects on cost coverage, and all are not statistically significant at the 10 per cent level. The R-square

statistic indicates that only 3.4 per cent of the variation in cost coverage can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 96.6 per cent of the variation in cost coverage is unknown. Considering the F-statistic, we can conclude that the cost coverage regression model is not statistically significant at the 10 per cent level.

The collection rate model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have positive effects on collection rate, and both are not statistically significant at the 10 per cent level. However, irregular expenditure does have a negative effect on the collection rate and is statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.8 per cent of the variation in the collection rate can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.2 per cent of the variation in collection rate is unknown. Considering the F-statistic, we can conclude that the collection rate regression model is not statistically significant at the 10 per cent level.

The current ratio model indicates that unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditures do have negative effects on the current ratio, and all are not statistically significant at the 10 per cent level. The R-square statistic indicates that only 3.9 per cent of the variation in current ratio can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 96.1 per cent of the variation in the current ratio is unknown. Considering the F-statistic, we can conclude that the current ratio regression model is not statistically significant at the 10 per cent level.

The remuneration as a percentage of total expenditure model indicates that unauthorised expenditures, irregular expenditures, and fruitless and wasteful expenditures do have negative effects on remuneration as a percentage of total expenditure, but only unauthorised expenditure is statistically significant at 10 per cent level. The R-square statistic indicates that only 11.6 per cent of the variation in remuneration can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 89.4 per cent of the variation in remuneration is unknown. Considering the F-statistic, we can conclude that the remuneration regression model is statistically significant at the five per cent level.

Table 5.8: Multiple regression results for 2015/16

Variables	Multiple Regression Coefficients						
	Debt coverage	Net operating surplus margin	Outstanding service Debt to revenue	Cost Coverage	Collection rate	Current ratio	Remuneration as a % of total expenditure
Constant	0.003	0.086***	0.272***	0.452***	1.003***	2.1***	0.336***
Unauthorised expenditure	-0.024	-0.071***	-0.060	-0.124*	-0.005	-0.449	-0.025
Irregular expenditure	-0.080	0.036	0.025	0.015	0.002	0.001	-0.012
Fruitless and wasteful expenditure	0.087	-0.034	-0.033	-0.070	-0.002	-0.277	-0.005
R-square	0.9%	8.0%	1.1%	4.7%	0.2%	5.5%	14.4%
F-stat	0.34	3.24	0.41	1.85	0.07	2.14*	6.3***
Count	118	118	118	118	118	118	118
Unused	2	2	2	2	2	4	2

*Key: *** 1%, ** 5% and * 10% significant level*

Source: Researcher's own compilation (Minitab V17 statistical software)

The debt coverage model indicates that unauthorised expenditure and irregular expenditures do have negative effects on debt coverage, and both are not significant at the 10 per cent level. However, fruitless and wasteful expenditure does have a positive effect on debt coverage and is not significant at the 10 per cent level. The R-square statistic indicates that 0.9 per cent of the variation in debt coverage can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.1 per cent of the variation in debt coverage is unknown. Considering the F-statistic, we can conclude that the debt coverage regression model is not statistically significant at the 10 per cent level.

The net operating surplus margin model indicates that unauthorised expenditure and fruitless expenditures do have negative effects on the net operating surplus margin, and only unauthorised expenditure is statistically significant at the one per cent level. However, irregular expenditure does have a positive effect on the net operating surplus margin, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 8.0 per cent of the variation in the net profit can be explained by unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditures, and the explanation for the remaining 92.0 per cent of the variation in the net operating surplus margin is unknown. Considering the F-statistic, we can conclude that the net-profit regression model is not statistically significant at the 10 per cent level.

The outstanding service debtors to revenue model indicates that unauthorised expenditure and fruitless expenditures do have negative effects on outstanding service debtors to revenue, and all are not statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on outstanding debt, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 1.1 per cent of the variation in outstanding debt can be explained by unauthorised, irregular and fruitless expenditures and the explanation for the remaining 98.9 per cent of the variation in outstanding debt is unknown. Considering the F-statistic, we can conclude that the outstanding debt regression model is not statistically significant at the 10 per cent level.

The cost coverage model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on cost coverage, but only

unauthorised expenditure is statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on outstanding debt, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 4.7 per cent of the variation in cost coverage can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 95.3 per cent of the variation in cost coverage is unknown. Considering the F-statistic, we can conclude that the cost coverage regression model is not statistically significant at the 10 per cent level.

The collection rate model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on the collection rate, and both are not statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on the collection rate, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.2 per cent of the variation in collection rate can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.8 per cent of the variation in collection rate is unknown. Considering the F-statistic, we can conclude that the collection rate regression model is not statistically significant at the 10 per cent level.

The current ratio model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on the current ratio and all are not statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on the current ratio, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 5.5 per cent of the variation in the current ratio can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 94.5 per cent of the variation in current ratio is unknown. Considering the F-statistic, we can conclude that the current ratio regression model is statistically significant at the 10 per cent level.

The remuneration as a percentage of total expenditure model indicates that unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditures do have negative effects on remuneration, and none is statistically significant at the 10 per cent level. The R-square statistic indicates that only 14.4 per cent of the variation in remuneration can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 85.6 per cent of the

variation in remuneration is unknown. Considering the F-statistic, we can conclude that the remuneration regression model is statistically significant at the one per cent level.

Table 5.9: Multiple regression results for 2016/17

Variables	Multiple Regression Coefficients						
	Debt coverage	Net operating surplus Profit margin	Outstanding service Debt to revenue	Cost Coverage	Collection rate	Current ratio	Remuneration as a % of total expenditure
Constant	0.003	0.030*	0.344***	0.418***	1.015***	2.043***	0.360***
Unauthorised expenditure	-0.064	-0.036**	0.028	-0.108	0.011	-0.446	-0.040
Irregular expenditure	-0.109	0.061**	0.048	0.028	0.001	0.281	-0.002
Fruitless and wasteful expenditure	0.101	-0.056**	-0.101	-0.094	-0.005	-0.452	-0.005
R-square	0.9%	8.0%	0.7%	5.0%	0.6%	4.4%	2.6%
F-stat	0.33	3.21**	0.26	1.96	0.21	1.67	0.99
Count	118	118	118	118	118	118	118
Unused	3	3	3	3	3	4	4

*Key: *** 1%, ** 5% and * 10% significant level*

Source: Researcher's own compilation (Minitab V17 statistical software)

The debt coverage model indicates that unauthorised expenditures and irregular expenditures do have negative effects on debt coverage, and both are not significant at the 10 per cent level. However, fruitless and wasteful expenditure does have a positive effect on debt coverage and is not significant at the 10 per cent level. The R-square statistic indicates that 0.9 per cent of the variation in debt coverage can be explained by unauthorised, irregular, and fruitless expenditures, and the explanation for the remaining 99.1 per cent of the variation in debt coverage is unknown. Considering the F-statistic, we can conclude that the debt coverage regression model is not statistically significant at the 10 per cent level.

The net operating surplus margin model indicates that unauthorised expenditures and fruitless and wasteful expenditures do have negative effects on the net operating surplus, and both are statistically significant at the five per cent level. However, irregular expenditure does have a positive effect on the net operating surplus and is statistically significant at the five per cent level. The R-square statistic indicates that only 8.0 per cent of the variation in net profit can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 92.0 per cent of the variation in the net profit is unknown. Considering the F-statistic, we can conclude that the net profit regression model is statistically significant at the five per cent level.

The outstanding service debtors to revenue model indicates that unauthorised expenditures and irregular expenditures do have positive effects on outstanding debt, and all are not statistically significant at the 10 per cent level. However, fruitless and wasteful expenditure does have a negative effect on outstanding debt, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.7 per cent of the variation in outstanding debt can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.3 per cent of the variation in outstanding debt is unknown. Considering the F-statistic, we can conclude that the outstanding debt regression model is not statistically significant at the 10 per cent level.

The cost coverage model indicates that unauthorised expenditures and fruitless and wasteful expenditures do have negative effects on cost coverage, and both are not statistically significant at the 10 per cent level. However, irregular expenditure does

have a positive effect on outstanding debt and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 5.0 per cent of the variation in cost coverage can be explained by unauthorised, irregular and fruitless expenditures and the explanation for the remaining 95.0 per cent of the variation in cost coverage is unknown. Considering the F-statistic, we can conclude that the cost coverage regression model is not statistically significant at the 10 per cent level.

The collection rate model indicates that unauthorised expenditures and irregular expenditures do have positive effects on the collection rate, and both are not statistically significant at the 10 per cent level. However, fruitless and wasteful expenditure does have a negative effect on the collection rate and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.6 per cent of the variation in collection rate can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.4 per cent of the variation in collection rate is unknown. Considering the F-statistic, we can conclude that the collection rate regression model is not statistically significant at the 10 per cent level.

The current ratio model indicates that unauthorised expenditures and fruitless and wasteful expenditures do have negative effects on the current ratio, and all are not statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on the current ratio and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 4.4 per cent of the variation in the current ratio can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 95.6 per cent of the variation in the current ratio is unknown. Considering the F-statistic, we can conclude that the current ratio regression model is not statistically significant at the 10 per cent level.

The remuneration as a percentage of total expenditure model indicates that unauthorised expenditure, irregular expenditure, and fruitless and wasteful expenditures do have negative effects on remuneration, and none is statistically significant at 10 per cent level. The R-square statistic indicates that only 2.6 per cent of the variation in remuneration can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 97.4 per cent of the

variation in remuneration is unknown. Considering the F-statistic, we can conclude that the remuneration regression model is not statistically significant at the 10 per cent level.

Table 5.10: Multiple regression results for 2017/18

Variables	Multiple Regression Coefficients						
	Debt coverage	Net operating surplus Profit margin	Outstanding service Debt to revenue	Cost Coverage	Collection rate	Current ratio	Remuneration as a % of total expenditure
Constant	-0.001	-0.017	0.318***	0.389***	0.994***	2.191***	0.351***
Unauthorised expenditure	-0.075	-0.019	-0.009	-0.118*	0.016	-0.561*	-0.030***
Irregular expenditure	-0.238	0.090	0.088	0.100	-0.025	0.495	0.005
Fruitless and wasteful expenditure	0.407	-0.067	-0.104	-0.115	-0.009	-0.618	-0.013
R-square	5.4%	0.4%	0.7%	4.6%	0.5%	5.3%	14.4%
F-stat	2.13*	0.13	0.27	1.80	0.20	2.01	6.22***
Count	118	118	118	118	118	118	118
Unused	3	3	4	3	4	7	3

*Key: *** 1%, ** 5% and * 10% significant level*

Source: Researcher's own compilation (Minitab V17 statistical software)

The debt coverage model indicates that unauthorised expenditure and irregular expenditures do have negative effects on debt coverage, and both are not significant at the 10 per cent level. However, fruitless and wasteful expenditure does have a positive effect on debt recovery, although it is not significant at the 10 per cent level. The R-square statistic indicates that 5.4 per cent of the variation in debt coverage can be explained by unauthorised expenditure, irregular expenditure as well as fruitless and wasteful expenditures. The explanation for the remaining 94.6 per cent of the variation in debt coverage is unknown. Considering the F-statistic, we can conclude that the debt coverage regression model is statistically significant at the 10 per cent level.

The net operating surplus model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on the net operating surplus margin, and both are statistically significant at the 10 per cent level. However, irregular expenditure does have a positive effect on net profit and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.4 per cent of the variation in net profit can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.6 per cent of the variation in net profit is unknown. Considering the F-statistic, we can conclude that the net-profit regression model is not statistically significant at the five per cent level.

The outstanding service debtors to revenue model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have positive effects on outstanding service debtors to revenue, and both are not statistically significant at the 10 per cent level. However, irregular expenditure does have a negative effect on outstanding service debtors, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.7 per cent of the variation in outstanding debt can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.3 per cent of the variation in outstanding debt is unknown. Considering the F-statistic, we can conclude that the outstanding debt regression model is not statistically significant at the 10 per cent level.

The cost coverage model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on cost coverage, but only unauthorised expenditure is statistically significant at the 10 per cent level. However,

irregular expenditure does have a positive effect on outstanding debt and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 4.6 per cent of the variation in cost coverage can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 95.4 per cent of the variation in cost coverage is unknown. Considering the F-statistic, we can conclude that the cost coverage regression model is not statistically significant at the 10 per cent level.

The collection rate model indicates that irregular expenditure and fruitless and wasteful expenditures do have negative effects on collection rate, and both are not statistically significant at the 10 per cent level. However, unauthorised expenditure does have a positive effect on the collection rate, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 0.5 per cent of the variation in collection rate can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 99.5 per cent of the variation in the collection rate is unknown. Considering the F-statistic, we can conclude that the collection rate regression model is not statistically significant at the 10 per cent level.

The current ratio model indicates that unauthorised expenditures and fruitless and wasteful expenditures do have negative effects on the current ratio, and only unauthorised expenditure is statistically significant at 10 per cent level. However, irregular expenditure does have a positive effect on the current ratio and is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 5.3 per cent of the variation in the current ratio can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 94.7 per cent of the variation in the current ratio is unknown. Considering the F-statistic, we can conclude that the current ratio regression model is not statistically significant at the 10 per cent level.

The remuneration as percentage of total remuneration model indicates that unauthorised expenditure and fruitless and wasteful expenditures do have negative effects on remuneration, and only unauthorised expenditure is statistically significant at the one per cent level. However, irregular expenditure does have a positive effect on the current ratio, although it is not statistically significant at the 10 per cent level. The R-square statistic indicates that only 14.4 per cent of the variation in remuneration

can be explained by unauthorised, irregular and fruitless expenditures, and the explanation for the remaining 85.6 per cent of the variation in remuneration is unknown. Considering the F-statistic, we can conclude that the remuneration regression model is statistically significant at the one per cent level.

5.5 DISCUSSION OF RESULTS

5.5.1 Unauthorised expenditure

As shown in Table 3.1, 69 per cent of municipalities in South Africa incurred unauthorised expenditure.

Table 5.11 below summarises the relationship between unlawful expenditure and municipal financial performance based on the statistical results above. The statistical results indicating the positive and negative relationships between unauthorised expenditure and each of the seven municipal financial performance measures is further discussed below.

Table 5.11: Unauthorised expenditure

Financial year	Debt coverage	Outstanding service debtors to revenue	Cost coverage	Collection rate	Current ratio	Remuneration as a % of total expenditure	Net operating surplus margin
Relationship	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**
2013/14	Pos***	Neg	Neg	Pos	Neg	Neg	Neg*
2014/15	Neg	Neg	Neg	Pos	Neg	Neg*	Neg*
2015/16	Neg	Neg	Neg*	Neg	Neg	Neg	Neg***
2016/17	Neg	Pos	Neg	Pos	Neg	Neg	Neg**
2017/18	Neg	Neg	Neg*	Pos	Neg*	Neg***	Neg

**Significant relationship exists at 10%*

***Significant relationship exists at 5%*

****Significant relationship exists at 1%*

Source: Researcher's own compilation

As defined in Section 1.7, *unauthorised expenditure* refers to overspending of the municipal budget or vote (SAG 2003). Unauthorised expenditure mainly occurs as a result of underbudgeting on expenditure and revenues, and non-adherence to internal control and supply chain management processes. As shown in Table 3.1, 98 per cent of unauthorised expenditure was due to overspending on municipal budgets. Furthermore, municipalities underbudgeted, which resulted in unauthorised expenditure, may be due to a lack of adequate policies and procedures on procurement processes, a poor control environment, deliberate ignorance of internal control, financial constraints imposed on municipalities to cut budgets, cost containment measures imposed on municipalities by the National Treasury, pressures from the politicians to commit expenditure not budgeted for, fraud and corruption, and a lack of consequence management, as discussed in Sections 3.5 and 3.6.

5.5.1.1 Unauthorised expenditure and debt coverage

Debt coverage measured the amount of short-term debt covered by municipal own revenue from rendering municipal services. Debt coverage was calculated by dividing operational revenue with fixed service payment, which included interest on redemption of the principal amount outstanding. From the hypothesis in Section 1.9, the study intended to ascertain whether a negative relationship existed between unauthorised expenditure and debt coverage. Based on the statistical results summarised in Table 5.11, both positive and negative relationships were found, suggesting that the statistical relationship between the said variables is inconclusive. The variation of the relationship between unauthorised expenditure and debt coverage may be because the causes of unauthorised expenditure highlighted in the paragraph above, did not have a direct impact on debt coverage. In other words, lack of adequate policies and procedures on procurement processes, a poor control environment, deliberate ignorance of internal controls in place, financial constraints imposed that resulted in budget cuts, and cost containment do not cause debt coverage to be poor.

5.5.1.2 Unauthorised expenditure and outstanding service debtors to revenue

The outstanding service debtors to revenue ratio measured the rate of outstanding service debtors to revenue billed to serviced customers. The ratio was calculated by

dividing outstanding service debtors by revenue received in a financial year. In other words, outstanding service debtors to revenue simply measured how much municipalities collected for services rendered in a specific period.

The unauthorised expenditure ratio measured how much municipalities exceeded spending on their approved budgets. In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a positive relationship between unauthorised expenditure and outstanding service debtors to revenue. Based on the statistical results, both positive and negative relationships were found, suggesting that the relationship between the two variables is inconclusive. The reason for conflicting relationships between these two variables may be because overspending on an approved budget does not translate to inability to collect billed revenue.

5.5.1.3 Unauthorised expenditure and cost coverage

This ratio indicated total cash available monthly to cover monthly fixed operating expenditure. In terms of the hypothesis developed in Section 1.9, the study intended to ascertain whether there is a negative relationship between unauthorised expenditure and cost coverage. Based on the statistical results, a negative relationship was found between unauthorised expenditure and cost coverage. The impact was statistically significant, as shown by the statistical results. The statistically significant negative relationship may have been because the continued non-adherence to policies and procedures, poor financial management processes in place to monitor spending, poor budgeting processes to ensure that budgets are funded, and spending outside the budget, all culminated in the incurrence of unauthorised expenditure, which resulted in poor cost coverage. Overspending of the budget may have resulted in the depletion of cash resources and, ultimately, poor cost coverage. In support of the result, as shown in Section 2.6, some municipalities reported year-end overdraft bank balances in their financial statements, while other municipalities reported a financial deficit.

5.5.1.4 Unauthorised expenditure and collection rate

The ratio indicates the collection rate, i.e., the level of payments. It measures increases or decreases in debtors relative to annual billed revenue**.** In terms of the hypothesis developed in Section 1.9, the study intended to ascertain whether there is a negative relationship between unauthorised expenditure and collection rate. Based on the

statistical results, both positive and negative relationships were found. The contrasting results may have been because overspending on the municipal approved budget is not a direct reason for a municipality's failure to collect revenue on billed services. As stated in Section **Error! Reference source not found.** of this study, the poor collection rate for most municipalities in South Africa emanated from the culture of non-payment for municipal services.

5.5.1.5 Unauthorised expenditure and current ratio

The current ratio assessed the municipality's ability to pay back its short-term liabilities with its short-term assets (National Treasury 2014:7). In terms of the hypothesis developed in Section 1.9, the study intended to ascertain whether there is a negative relationship between unauthorised expenditure and the current ratio. Based on the statistical results, a negative relationship was found and the impact was statistically significant. The statistically significant negative relationship may have been because most municipalities are financially distressed, as alluded to in Section 2.6. Furthermore, as explained in Section 3.6, municipalities' overspending on their approved budgets resulted in unauthorised expenditure, contributing to the municipalities' inability to cover their short-term liabilities. As a result, the current ratio has deteriorated against increasing unauthorised expenditure. In addition, the AGSA reported slow progress in the development of municipal infrastructure, due to underspending on the MIG, as explained in Section 2.7.

5.5.1.6 Unauthorised expenditure and remuneration as a percentage of total expenditure

The remuneration as a percentage of total expenditure ratio measured the extent of remuneration compared to total operating expenditure (National Treasury 2014:16). In terms of the hypothesis developed in Section 1.9, the study intended to ascertain whether there is a positive relationship between unauthorised expenditure and remuneration as a percentage of total expenditure. Based on the statistical results, a statistically significant negative relationship was found. The statistically significant negative relationship may be due to overspending on the procurement of goods and services, failure to budget for non-cash items not resulting in additional employee costs. Furthermore, as explained in Section 2.7, most municipalities experienced high

vacancy rates in critical positions (AGSA 2018:10). Remuneration as a percentage of total expenditure remained constant at 31 per cent and 33 per cent due to high vacancy rates.

5.5.1.7 Unauthorised expenditure and net operating surplus margin

The net operating surplus margin ratio assessed the extent to which the municipality generated operating surpluses (National Treasury 2014:10). In terms of the hypothesis developed in Section 1.9, the study intended to ascertain whether there is a negative relationship between unauthorised expenditure and the net operating surplus margin. Based on the statistical results, a statistically significant negative relationship was found between unauthorised expenditure and the net operating surplus margin. The statistically significant negative relationship may have been because municipalities were compelled to cut budgets to ensure funded spending and cost containment to limit expenditure. Furthermore, the AGSA (2018:15) and the National Treasury (2018:54) reported that most municipalities were unable to budget for surpluses and, as a result, they experienced cash and liquidity problems.

5.5.2 Irregular expenditure

The statistical results indicating the positive and negative relationships between irregular expenditure and each of the seven municipal financial performance measures are discussed below.

Table 5.12: Irregular expenditure

Financial year	Debt coverage	Outstanding service debtors to revenue	Cost coverage	Collection rate	Current ratio	Remuneration as a % of total expenditure	Net operating surplus margin
Relationship:	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**
2013/14	Neg***	Neg	Neg	Neg*	Neg	Neg**	Pos
2014/15	Pos	Neg	Neg	Neg	Neg	Neg	Pos
2015/16	Neg	Pos	Pos	Pos	Pos	Neg	Pos
2016/17	Neg	Pos	Pos	Pos	Pos	Neg	Pos**
2017/18	Neg	Pos	Pos	Neg	Pos	Pos	Pos

**Significant relationship exists at 10%*

***Significant relationship exists at 5%*

****Significant relationship exists at 1%*

Source: Researcher's own compilation

Over the period covered in this study, municipalities in South Africa recorded irregular expenditure amounting to R92 billion (see Table 3.2). Irregular expenditure increased year on year, with a decrease only noted in the last year of the study period. As explained in Section 3.6, irregular expenditure is caused by poorly developed or non-existent policies and procedures on the procurement process, a lack of consequence management, deliberate ignorance of internal controls, a lack of accountability, and a lack of oversight.

An average of 89 per cent of municipalities in South Africa incur irregular expenditure. In addition, as stated in Table 3.2, the reasons for the irregular expenditure incurred range from failure to follow competitive bidding procedures, or non-compliance with procurement processes, to non-compliance with legislative requirements for contract management. Furthermore, municipalities were hampered by a high number of vacancies in critical positions, including finance-related positions, which exacerbated the rate of non-compliance with procurement laws and regulations. Municipalities also had incompetent personnel in leadership positions, which resulted in the poor

application of policies and procedures, culminating in failures to implement financial controls in the supply chain management process (AGSA 2018:29, Koma 2010:6).

5.5.2.1 Irregular expenditure and debt coverage

In terms of the hypothesis developed in Section 1.9, the study intended to ascertain whether there is a negative relationship between irregular expenditure and debt coverage. Based on the statistical results, both positive and negative relationships were found, leaving the statistical results inconclusive. The debt coverage ratio measures the municipality's ability to pay service debt from its own generated revenue. The ratio is calculated by dividing operating revenue by debt service payment.

It is arguable that there is no direct relationship between irregular expenditure and debt coverage because irregular expenditure does not affect the municipality's ability to pay service debt. It was notable in the study that municipalities in South Africa were confronted by financial unsustainability concerns ranging from irrecoverable debt, net operating deficit, and net current liability to bank overdrafts (see Figure 2.2). As shown in Section 1.3, 33 per cent of municipalities in South Africa are not generating sufficient revenue and, as a result, they are financially distressed. Poor debt collection resulted in low cash reserves and so debt coverage fluctuated over the study period, resulting in a varying relationship between irregular expenditure and debt coverage.

5.5.2.2 Irregular expenditure and outstanding service debtors to revenue

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a positive relationship between irregular expenditure and outstanding service debtors to revenue. Based on the statistical results, both positive and negative relationships were found. Therefore, irregular expenditure did not affect outstanding service debtors to revenue.

As explained in Section 1.10, the outstanding service debtors to revenue ratio is calculated from outstanding service debtors over revenue actually received. Similar to debt coverage above, it can be argued that there is no relationship between irregular expenditure and outstanding service debtors to revenue on the basis that irregular expenditure does not have an effect on the municipality's ability to collect revenue.

Therefore, the incurrence of irregular expenditure does not have an impact on the performance of outstanding service debtors to revenue.

The variation in outstanding service debtors to revenue performance may be due to inability to collect sufficient revenues for the services billed. Consumer debtors from municipalities in rural or remote areas could not afford to pay for municipal services. Furthermore, lack of financial discipline as a result of incompetence and vacancies in critical positions compounded the challenge of debt collection. Some municipalities were unable to implement financial systems to enhance accuracy in billing due to a lack of skills, and debt collection under those circumstance became difficult.

5.5.2.3 Irregular expenditure and cost coverage

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a negative relationship between irregular expenditure and cost coverage. Based on the statistical results, both positive and negative relationships were found. Therefore, irregular expenditure did not influence cost coverage.

The conflicting relationship may be because cost coverage deteriorated during the period covered in the study as a result of insufficient cash reserves to finance fixed-term operating expenditure. As highlighted above under debt coverage and outstanding service debtors to revenue, the factors contributing to low cash reserves were poor debt collection, a lack of skills in financial positions to assist in debt collection, and a lack of effective leadership at the top to instil financial discipline.

Irregular expenditure did not have a direct impact on cost coverage, as shown in Table 3.2. In other words, the incurrence of irregular expenditure did not directly result in the excess expenditure that would have reduced available resources. The nature of irregular expenditure incurred, as shown in Table 3.2, does not indicate that there was no value in the goods and services procured as a result of non-compliance with procurement processes or the non-existence of policies and procedures. There is, therefore, no relationship between irregular expenditure and cost coverage, which is the reason for the inconclusive statistical results found.

5.5.2.4 Irregular expenditure and collection rate

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a negative relationship between irregular expenditure and the collection rate. Based on the statistical results, both positive and negative relationships were found. Therefore, irregular expenditure did not have an impact on the collection rate.

The conflicting relationships found between the collection rate and irregular expenditure may be because most municipalities in South Africa were unable to meet the collection rate of 95 per cent set by the National Treasury. Most municipalities, especially in the underprivileged or remote areas, are unable to collect debt because the consumer debtors cannot afford to pay, as explained in Section **Error! Reference source not found.**. Furthermore, the poor collection rate may be because most municipalities lacked human capacity in their finance departments, while other municipalities were capacitated with personnel who did not possess the requisite skills and experience. Still other municipalities faced billing challenges due to a combination of inappropriate skills or skills shortages and inadequate systems.

Although the collection rate was notably poor over the study period, irregular expenditure did not directly contribute to the poor debt collection because the debt collection rate measures the municipality's ability to collect revenue billed from municipal services, whereas irregular expenditure was incurred as a result of non-compliance with procurement processes.

5.5.2.5 Irregular expenditure and current ratio

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a negative relationship between irregular expenditure and the current ratio. Based on the statistical results, both positive and negative relationships were found. These contrasting relationships were because irregular expenditure did not have an impact on current ratio.

As explained above, the current ratio is calculated from current assets and current liabilities. It was noted from the statistical results that the current ratio varied between 1:1 and 1:4. This ratio is considered poor as it is below the National Treasury recommended threshold rate of 1:5 to 2:5. The poor current ratio may have been

caused by the increasing current debt due to low cash reserves, provision for doubtful debts, bad debts written off due to non-payment, and interest charged on long-outstanding debtors.

On the other hand, irregular expenditure occurred as a result of procurement without following competitive bidding requirements, as well as non-compliance with procurement processes and contract management legislative requirements. Non-compliance with procurement processes was due to poor procurement policies, control overrides and poor governance.

5.5.2.6 Irregular expenditure and remuneration as a percentage of total expenditure

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a positive relationship between irregular expenditure and remuneration as a percentage of total expenditure. Based on the statistical results, both positive and negative relationships were found. The statistical result between the two variables is therefore inconclusive. This may be because the non-compliance with procurement processes that resulted in irregular expenditure did not have an impact on employee costs, although it may be argued that the irregular expenditure was due to vacancies in critical positions, especially in finance departments, which resulted in non-compliance with procurement processes. In addition, it may also be argued that vacancies in key positions resulted in employee costs' remaining constant between 31 per cent and 33 per cent, as noted in the statistical characteristics of the data above (see Tables 5.1 to 5.5). In other words, if municipalities were fully capacitated with qualified and competent personnel, employee costs would have increased and irregular expenditure would have decreased due to compliance with procurement processes.

5.5.2.7 Irregular expenditure and net operating surplus margin

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a negative relationship between irregular expenditure and net operating surplus margin. Based on the statistical results, a statistically significant positive relationship was found.

As pointed out in Section 3.4, irregular expenditure does not necessarily indicate misappropriation of funds or fraud and corruption or that there was a financial loss to the municipality. Furthermore, as depicted in Table 3.2, a significant amount of irregular expenditure was incurred as a result of non-compliance with procurement process, failure to follow competitive bidding procedures, and non-adherence to contract management principles. The statistically significant positive relationship suggests that there was no financial loss to the municipality as a result of irregular expenditure incurred. In conclusion, irregular expenditure did not have a negative impact on the net operating surplus margin.

5.5.3 Fruitless and wasteful expenditure

The statistical results indicating the positive and negative relationship between fruitless and wasteful expenditure and each of the seven municipal financial performance measures are discussed below.

Table 5.13: Fruitless and wasteful expenditure

Financial year	Debt coverage	Outstanding service debtors to revenue	Cost coverage	Collection rate	Current ratio	Remuneration as a % of total expenditure	Net operating surplus margin
Relationship:	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**	**Pos/Neg**
2013/14	Pos***	Neg	Pos	Pos	Neg	Pos	Pos
2014/15	Neg	Neg	Neg	Pos	Neg	Neg	Neg
2015/16	Pos	Neg	Neg	Neg	Neg	Neg	Neg
2016/17	Pos	Neg	Neg	Neg	Neg	Neg	Neg**
2017/18	Pos	Neg	Neg	Neg	Neg	Neg	Neg

**Significant relationship exists at 10%*

***Significant relationship exists at 5%*

****Significant relationship exists at 1%*

Source: Researcher's own compilation

Fruitless and wasteful expenditure was defined in Chapter 1 as an expenditure that is made in vain and could have been avoided had reasonable care been exercised (SAG 2003). As shown in Table 3.3, the percentage of municipalities in South Africa that incurred fruitless and wasteful expenditure increased from 77 to 85 over the period covered in this study.

The increasing number of municipalities incurring fruitless and wasteful expenditure strongly suggests that the control environment is weakening rather than strengthening. One of the main reasons for this weakening control environment is that there is no stability in leadership because of the high vacancy rate in critical positions, as highlighted in Section 2.7. There were 59 per cent vacancies in critical positions in the 2016/17 financial year (AGSA 2018:22).

As shown in Table 3.3, more municipalities are continuing to incur fruitless and wasteful expenditure, mainly due to the interest on late payments, which amounted to an average of 79 per cent of the total fruitless and wasteful expenditure. Most municipalities were unable to pay their creditors within 30 days due to a poor debt collection rate, misappropriation of funds, and incorrect billing from inadequate systems, as discussed in sections **Error! Reference source not found.** and 3.6. Furthermore, as explained in Section 3.3, poor planning contributed to the increasing rate at which municipalities incurred fruitless and wasteful expenditure. On average, 21 per cent of municipalities incurred fruitless and wasteful expenditure as a result of poor planning, such as cancellation fees for accommodation, flights, no shows in conferences and, lastly, from unsuccessful implementation of software systems. In addition, the issue of insufficient or incompetent skilled personnel has compounded the challenge of vacancies in critical positions, such as for skilled professionals in finance with the relevant experience to deal correctly with issues of procurement in line with National Treasury guidelines. Another factor is that there is a lack of financial discipline when it comes to spending public funds at municipal level. The AGSA has also emphasised in its general reports that more funds are committed to fruitless and wasteful expenditure causes, due to a lack of consequence management by those charged with governance, such as municipal councils (AGSA 2018:89). Fruitless and wasteful expenditure also increased as a result of non-existent or inadequate policies and procedures. Poorly developed policies and procedures may have contributed to the poor management of municipal resources because they are an important

mechanism that management should put in place to foster high performance and safeguard municipal resources.

5.5.3.1 Fruitless and wasteful expenditure and debt coverage

Debt coverage was calculated by dividing revenue from billed services by debt service payments. Based on the debt coverage calculation, fruitless and wasteful expenditure did not have an impact on debt coverage because expenditure incurred in vain does not have an impact on a municipality's ability to collect debt on billed services.

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a negative relationship between fruitless and wasteful expenditure and debt coverage. Based on the statistical results, both positive and negative relationships were found, making this relationship inconclusive. It was also noted that debt coverage gradually increased from 47 per cent to 58 per cent over the period covered in this study because municipal revenues increased over time as a result of tariffs increases, while service debt was decreasing. The decrease in service debt was because municipalities are discouraged from borrowing money to fund operations; as a result, there were few municipalities with loans.

5.5.3.2 Fruitless and wasteful expenditure and Outstanding service debtors to revenue

The outstanding service debtors to revenue ratio is calculated by dividing outstanding service debtors by revenue actually received for services rendered. This ratio is, therefore, not affected by fruitless and wasteful expenditure incurred. For this reason, no relationship could be established between the act of fruitless and wasteful expenditure and outstanding service debtors to revenue.

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a positive relationship between outstanding service debtors to revenue and fruitless and wasteful expenditure. Based on the statistical results, a negative relationship was found between these two variables. The contrasting relationships was because fruitless and wasteful expenditure incurred did not have an impact on the municipality's ability to collect revenue from its customers. Contrary to this view, one can argue that the fact that 79 per cent of fruitless and wasteful

expenditure was due to interest and penalties on late payments. It can therefore be argued that the cause of fruitless and wasteful expenditure is high outstanding debtors as a result of poor collection. In other words, if municipalities did not have a debt collection problem, there would be no fruitless and wasteful expenditure from interest and penalties as a result of late payments.

5.5.3.3 Fruitless and wasteful expenditure and cost coverage

The cost coverage ratio was measured by dividing cash available with monthly fixed operating expenses. Monthly fixed operating expenses are not influenced by fruitless and wasteful expenditure incurred because these expenses are fixed. Ideally, there should be no relationship between fruitless and wasteful expenditure and cost coverage because fruitless and wasteful expenditure does not affect fixed costs. However, fruitless and wasteful expenditure had a negative impact on cash reserves due to payment of interest and penalties. As a result, increasing numbers of municipalities reported financial health concerns, as reported in Figure 2.3.

Most municipalities incurred interest on late payments from suppliers such as the South African Revenue Service and Eskom (Ormajee 2018:1). Lower cash reserves may also have been attributable to municipalities' inability to budget properly for various reasons, such as a lack of personnel with adequate financial skills, a lack of policies and procedures, financial constraints, implementation of cost curtailments resulting in budget cuts, spending outside budget, interference from politicians to override controls, and a lack of consequence management. On the other hand, a positive relationship was reported during the 2013/14 financial year between fruitless and wasteful expenditure and cost coverage as a result of an improvement in the internal control processes reported by the AGSA (2015:89).

In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a negative relationship between fruitless and wasteful expenditure and cost coverage. Based on the statistical results, both positive and negative relationships were found between fruitless and wasteful expenditure and cost coverage.

5.5.3.4 Fruitless and wasteful expenditure and collection rate

The collection rate was calculated by dividing trade receivables by billed revenue. The collection rate was therefore not influenced by fruitless and wasteful expenditure incurred as these expenses. There is therefore no relationship between fruitless and wasteful expenditure and the collection rate.

In terms of the hypothesis defined in Section 1.9, the study sought to prove that there is negative relationship between fruitless and wasteful expenditure and the collection rate. Based on the statistical results, both positive and negative relationships were found. These contrasting relationships between the two variables may have been because the collection rate is not influenced by fruitless and wasteful expenditure. Contrarily, one can argue that fruitless and wasteful expenditure is incurred precisely as a result of interest and penalties on late payments emanating from a poor collection rate. Late payments are mainly caused by having insufficient cash to pay, within 30 days, trade payables such as Eskom bills.

5.5.3.5 Fruitless and wasteful expenditure and current ratio

The current ratio measured the municipal ability to pay short-term debts with short-term assets. The ratio was calculated by dividing current assets by current liabilities. The collection rate should therefore not be influenced by fruitless and wasteful expenditure incurred. Ideally, there should be no relationship between fruitless and wasteful expenditure and the current ratio. However, the nature of the fruitless and wasteful expenditure identified during the period covered in this study did have an impact on the current ratio. The interest and penalties on late payment caused an increase in current liabilities (accrual) or a decrease in current assets (cash payments). As a result of the variations above, there was a negative impact on the current ratio. In addition, the fruitless and wasteful expenditure recoverable from transgressors may have been included in receivables. As a result, the current ratio remained constant between 1:9 and 2:1 over the period covered in the study.

In terms of the hypothesis defined in Section 1.9, the study intended to establish that there is a negative relationship between fruitless and wasteful expenditure and the current ratio. Based on the statistical results, a negative relationship was found between these two variables. As explained in Section 1.2, a significant number of

municipalities in South Africa are financially distressed, leaving them with less ability to pay off current obligations with current assets. Most municipalities that incurred fruitless and wasteful expenditure may have been unable to settle their short-term obligation due to low cash reserves. This was supported by the fact that 79 per cent of fruitless and wasteful expenditure emanated from interest and penalties on late payments.

5.5.3.6 Fruitless and wasteful expenditure and remuneration as a percentage of total expenditure

The remuneration as a percentage of total expenditure ratio was calculated by dividing total remuneration of employees and councillors by total expenditure. In terms of the hypothesis defined in Section 1.9, the study intended to ascertain whether there is a positive relationship between fruitless and wasteful expenditure and remuneration as a percentage of total remuneration. Based on the statistical results, both positive and negative relationships were found.

The contrasting relationships may have occurred as a result of an escalation in non-compliance with procurement processes by municipalities. On the other hand, remuneration as a percentage of total remuneration remained stable between 31 per cent and 33 per cent. The stable ratio may have been because most municipalities had vacancies in critical positions, especially in financial reporting. As explained in Section 2.6, there were 59 per cent vacancies in critical positions in 2016/17 financial year reported by the AGSA (AGSA 2018:22).

Another reason for the inconclusive relationship may be that there is no direct relationship between the causes of fruitless and wasteful expenditure and the remuneration of employees, as identified in Section 3.5. In fact, contrary to the hypothesis, the increasing fruitless and wasteful expenditure resulted in a decreasing ratio of remuneration as a percentage of total expenditure due to the constant employee costs. This is supported by the statistical results that showed a negative relationship in four of the five financial reporting periods covered. It can therefore be argued that, had municipalities been operating at full capacity in terms of human capital, a different outcome would have been achieved.

5.5.3.7 Fruitless and wasteful expenditure and net operating surplus margin

To test the hypothesis defined in Section 1.9, the study intended to ascertain whether there is negative relationship between fruitless and wasteful expenditure and the net operating surplus margin. Based on the statistical results, both positive and negative relationships were found between these two variables. The negative relationship was reported in four of the five years covered in this study. The negative relationship over the four years may have been caused by increasing fruitless and wasteful expenditure. However, a positive relationship was found in 2013/14, which may have been due to a 10 per cent increase in the number of municipalities with effective or improved governance (AGSA 2015:89). It was also noted that municipalities that needed intervention decreased by 5% (AGSA 2015:89) in the same period. Furthermore, the lowest amount of fruitless and wasteful expenditure was recorded in 2013/14, as shown in Table 1.3. Inconclusive relationships between fruitless and wasteful expenditure and the net operating surplus margin may have been caused by the positive relationship found in the 2013/14 financial period. It is, however, noteworthy that, throughout the four years after that negative relationship, it was reported that fruitless and wasteful expenditure kept on increasing.

5.6 CHAPTER SUMMARY

This chapter presented panel data, the statistical characteristics of the data, the multiple regression results and, lastly, a discussion of the statistical results. A statistically significant relationship was found between unauthorised expenditure and cost coverage, current ratio, remuneration as a percentage of total expenditure, and net operating surplus margin. A statistically significant negative relationship was found between fruitless and wasteful expenditure and the current ratio.

The next chapter summarises the study and deals with the study's conclusions and recommendations.

CHAPTER 6. CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter discussed the regression results from the panel data gathered in the quest to answer the research question. In this chapter, the study is summarised and its results, contributions, limitations and recommendations are discussed.

6.2 ADDRESSING THE HYPOTHESES

Section 1.4 of this study stated the research hypotheses. Based on the regression results of assessing the relationships between each of the elements of unlawful expenditure and each of the dependent variables, the study concludes as follows:

H1: There is a negative relationship between unlawful expenditure and debt coverage

Based on statistical results, both negative and positive relationships were found between unauthorised expenditure and debt coverage. In terms of unauthorised expenditure, the hypothesis is rejected.

Based on statistical results, both negative and positive relationships were found between irregular expenditure and debt coverage. In terms of irregular expenditure, the hypothesis is rejected.

Based on statistical results, both negative and positive relationships were found between fruitless and wasteful expenditure and debt coverage. In terms of fruitless and wasteful expenditure, the hypothesis is rejected.

H2: There is a positive relationship between unlawful expenditure and outstanding service debtors to revenue

Based on statistical results, both negative and positive relationships were found between unauthorised expenditure and outstanding service debtors to revenue. The hypothesis is therefore rejected.

Based on statistical results, both negative and positive relationships were found between irregular expenditure and outstanding service debtors to revenue. The hypothesis is therefore rejected.

Based on statistical results, a negative relationship was found between fruitless and wasteful expenditure and outstanding service debtors to revenue. The hypothesis is therefore rejected.

H3: There is a negative relationship between unlawful expenditure and cost coverage

Based on statistical results, a negative relationship was found between unauthorised expenditure and cost coverage. The hypothesis is therefore accepted.

Based on statistical results, both negative and positive relationships were found between cost coverage and irregular expenditure. The hypothesis is therefore rejected.

Based on statistical results, both negative and positive relationships were found between fruitless and wasteful expenditure and cost coverage. The hypothesis is therefore rejected.

H4: There is a negative relationship between unlawful expenditure and collection rate

Based on statistical results, both negative and positive relationships were found between unauthorised expenditure and the collection rate. The hypothesis is therefore rejected.

Based on statistical results, both negative and positive relationships were found between irregular expenditure and the collection rate. The hypothesis is therefore rejected.

Based on statistical results, both negative and positive relationships were found between fruitless and wasteful expenditure and the collection rate. The hypothesis is therefore rejected.

H5: There is a negative relationship between unlawful expenditure and current ratio

Based on statistical results, a negative relationship was found between unauthorised expenditure and the current ratio. The hypothesis is therefore accepted.

Based on statistical results, both negative and positive relationships were found between irregular expenditure and the current ratio. The hypothesis is therefore rejected.

Based on statistical results, a negative relationship was found between fruitless and wasteful expenditure and the current ratio. The hypothesis is therefore accepted.

H6: There is a positive relationship between unlawful expenditure and remuneration as a percentage of total expenditure

Based on statistical results, a negative relationship was found between unauthorised expenditure and remuneration as a percentage of total expenditure. The hypothesis is therefore rejected.

Based on statistical results, both negative and positive relationships were found between irregular expenditure and remuneration as a percentage of total expenditure. The hypothesis is therefore rejected.

Based on statistical results, both negative and positive relationships were found between fruitless and wasteful expenditure and remuneration as a percentage of total expenditure. The hypothesis is therefore rejected.

H7: There is a negative relationship between unlawful expenditure and net operating surplus margin

Based on statistical results, a negative relationship was found between unauthorised expenditure and the net operating surplus margin. The hypothesis is therefore accepted.

Based on statistical results, a positive relationship was found between irregular expenditure and the net operating surplus margin. The hypothesis is therefore rejected.

Based on statistical results, both positive and negative relationships were found between fruitless and wasteful expenditure and the net operating surplus margin were found. The hypothesis is therefore rejected.

6.3 RECOMMENDATIONS

Based on the research question and statistical results, the study makes the following recommendations.

6.3.1 Unlawful expenditure

Those charged with governance should consider the results of this study and conduct further research in their respective municipalities to establish the significance of the influential relationships that currently exist between unlawful expenditure and municipal financial performance.

Those charged with governance should address the following causes of poor cost coverage, current ratio and net operating surplus margin:

- **poor or non-existent personnel skills** - as discussed in section 2.6.1 of the study, those charged with governance should enforce the upskilling of existing employees through training programmes, re-evaluating recruitment policies, such as retentions and promotion, and forming partnerships with nearby educational institutions of higher learning for new talent;
- **poor financial discipline** - as discussed in section 2.6.2 of the study, those charged with governance should enforce proper budgeting in line with National Treasury guidelines, ensuring that management spends in accordance with approved budgets, bringing to task all municipal officials that commit financial misconduct, setting realistic financial strategic objectives and targets, and enforcing a culture of paying creditors within 30 days in order to avoid additional penalties and interests;
- **poor governance** - as discussed in section 2.6.3 of the study, those charged with governance should ensure appointment of competent personnel in the sub-committees of councils such as audit, compliance, performance, information technology and risk committees, by prioritising risk management processes, enforcing timely submission of financial information that will enable council to make economic decisions and, lastly, by conducting evaluations of council performance;
- **poor ethical culture** - as discussed in section 2.6.4 of the study, those charged with governance should ensure setting the tone at the top, leading by

example, ensuring that there is a formally developed, documented and communicated code of conduct in place, by enforcing consequence management of those who commit unethical conduct; and

- **inadequate municipal infrastructure** - as discussed in section 2.6.5 of the study, those charged with governance should ensure development of revenue enhancement strategies that will enable the municipality to generate sufficient reserves for the acquisition of new and maintenance of existing infrastructure, putting in place revenue debt collection plans, such as for the appointment of debt collectors, and lastly, by closely monitoring capital expenditure grand spending to ensure that it is spent in line with grant conditions.

6.3.1.1 Good governance

In addressing the causes of poor municipal financial performance and unlawful expenditure, and in fostering good governance, those charged with governance should consider adopting the following sound governance theories, or a combination of them, into their governance structures:

- **Resource-based theory** - as discussed in section 2.4, those charged with governance should ensure development of Integrated Development Plans (IDP) that are based on municipal capabilities and resources, such as municipal personnel and infrastructure assets;
- **Stakeholder theory** - as discussed in section 3.4,1, those charged with governance should formulate strategic objectives based on community need rather than best practices and political motives; and
- **Stewardship theory** - as discussed in section 3.4.2, those charged with governance should delegate all the administrative powers to management to manage the municipality without interference from council and politicians.

6.3.1.2 Chapter 9 institutions

Those charged with governance of these institutions should consider the significant negative relationships found between unlawful expenditure (unauthorised expenditure and fruitless and wasteful expenditure) and cost coverage, the current ratio and the net operating surplus margin. The findings discussed in Section 5.5 will assist Chapter 9 institutions when dealing with internal control deficiencies and proposing

recommendations to improve poor municipal financial performance and eradicate unlawful expenditure.

6.3.2 Unauthorised expenditure and fruitless and wasteful expenditure

Those charged with governance should address the following causes of unauthorised expenditure and fruitless and wasteful expenditure:

- **weak financial management process** - as discussed in section 3.6.1, those charged with governance should enforce preparation of budgets that are in line with Treasury guidelines, spending in line with budgets approved by council, and enforcing cost curtailment measures as issued by the National Treasury;
- **poor municipal debt collection rate** - as discussed in section 3.6.5, those charged with governance should enforce entering into payment arrangements with significant debtors, and installing prepared water and electricity smart metres;
- **poor budgeting processes** - as discussed in section 3.6.6, those charged with governance should ensure budgets are adequately reviewed by the audit committees before they go to council for approval, and ensuring that budgets with unfunded items are rejected by council;
- **overspending of municipal budgets** - as discussed in section 3.6.7, those charged with governance should ensure reviewing of actual spending against budgets every quarter, and by ensuring that all expenditure line items where quarterly budgets have been exceeded are explained by management and accompanied by an action plan for corrective measures to improve performance; and
- **lack of consequence management** - as discussed in section 3.5, those charged with governance should enforce consequence management, such as recovering expenditure where municipality suffered a loss as a result of poor discipline from municipal officials.

6.3.3 Irregular expenditure

Although no negative relationship was found between irregular expenditure and municipal financial performance, irregular expenditure still exist and it is increasing. It is therefore recommended that the following proposed recommendations be

considered by the policy makers in their respective municipalities in order to mitigate the causes of irregular expenditure:

- **weak recruitment processes** - as discussed in 3.6.2, those charged with governance should place more focus on diversifying and re-defining job requirements, employing recruitment strategies, such as talent scouting, headhunting, by enhancing vetting processes, and using computer systems to eliminate human involvement;
- **weak policies and procedures** or lack of implementation thereof - as discussed in section 3.6.3, those charged with governance should ensure benchmarking of policies against best practices, having the council review policies annually, and by enforcing policy implementation feedback to council every quarter;
- **weak internal controls** – as discussed in section 3.6.8, those charged with governance should ensure appropriate action plan in place for internal audit to monitor, and provide assurance to council and its sub-committees, how management has implemented corrective actions,
- **political interference** should be avoided – as discussed in section 3.6.9, those charged with governance should ensure re-defining the roles and responsibilities of council and other political structures in the delegations of authority, and by enforcing such delegations of authority throughout the municipal operations as discussed in section 3.6.9; and
- **weak purchasing supply chain management processes** - as discussed in section 3.6.4, those charged with governance should enforce regular training of all supply chain management personnel in line with Treasury regulations, by regular monitoring of supply chain management policy implementation through quarterly review of supply chain management reports, by enforcing consequence management, and by taking steps to recover irregular expenditure where there was no value for money.

6.4 STUDY CONTRIBUTION

The purpose of the study was to contribute to the stakeholders listed below.

6.4.1 Those charged with governance

The objective of the study was to establish the impact of unlawful expenditure on municipal financial performance. Furthermore, the study intended to inform those charged with governance, such as accounting officers, executive mayors, audit committees, municipal council, the Ministry at the Department of COGTA, and the Standing Committee on Public Accounts (SCOPA), of the extent and causes of unlawful expenditure, and to recommend strategies that can be employed to minimise unlawful expenditure.

Based on the study results, a statistically significant negative relationship was found between unauthorised expenditure and cost coverage, the current ratio, remuneration as a percentage of total expenditure, and the net operating surplus margin. A significant negative relationship was also found between fruitless and wasteful expenditure and the current ratio.

6.4.2 Contribution to the literature

Currently, there is insufficient literature on unlawful expenditure and municipal financial performance in South Africa. In fact, there has been no study of this nature where a relationship between unlawful expenditure and municipal financial performance has been investigated. This study, therefore, contributes to the literature available on South African unlawful expenditure and municipal financial performance.

6.4.3 Contribution to Chapter 9 institutions

The study also intended to assist Chapter 9 institutions, such as the office of the Audit General of South Africa (the AGSA) and the Public Protector (the PP), when recommending corrective measures for improving municipal financial performance and curbing unlawful expenditure. This study may also assist other law enforcement agencies such as the Special Investigating Unit (the SIU) when making recommendations for improved performance.

6.4.4 The South African public

In Chapter 1, a hypothesis was developed, stating that there is a negative correlation between and unlawful expenditure and municipal financial performance in South

African municipalities. In Chapter 3, it was found that there is a perception in South Africa that both poor financial performance and poor service delivery are associated with fraud, corruption and unlawful expenditure, and result in poor economic growth (City of Tshwane 2016:online; Monte and Papagni 2001:1).

- The hypothesis made in this study was accepted in four definitions and rejected in 17 definitions, as discussed in Section 6.3. The regression results showed that there was a statistically significant negative relationship between unauthorised expenditure and cost coverage, the current ratio, remuneration as a percentage of total expenditure, and the net operating surplus margin.
- Second, a statistically significant positive relationship was found between irregular expenditure and net operating surplus margin.
- Lastly, a statistically significant negative relationship was found between fruitless and wasteful expenditure and the current ratio but there was a statistically positive relationship between fruitless and wasteful expenditure and outstanding service debtors to revenue.

Statistical results suggest that irregular expenditure did not have an impact on municipal financial performance in the form of debt coverage, outstanding service debtors to revenue, cost coverage, collection rate, current ratio and remuneration as a percentage of total expenditure. A statistically significant positive relationship was found between irregular expenditure and the net operating surplus margin, indicating that non-compliance with procurement processes that caused irregular expenditure did not translate to fraud, corruption or financial loss to the municipality. It is, however, important to state that, in line with National Treasury guidelines, further investigation of irregular expenditure should be conducted by each municipality in order to identify the true cause of non-compliance and ensure there was no financial loss to the municipality.

6.5 STUDY LIMITATIONS

The study was limited to South African municipalities, as explained in Section 1.5. Furthermore, the municipal panel data gathered and analysed was limited to the 121 municipal annual reports that were available in the National Treasury database. The sample was based on the targeted population of 226 municipalities that were not affected by the re-demarcation in 2016.

Some municipalities were excluded because of the unavailability of annual reports for the full five years covered in the study, encompassing the 2013/14 to 2017/18 financial reporting periods. Some instances were identified where annual reports were available for four out of the five years covered in the study and were excluded for consistency purposes. It was also noted that some municipalities had uploaded annual reports, but they were not in a readable format.

Only seven municipal financial performance measures (dependent variables) were used, as explained in Section **Error! Reference source not found.**. Factors outside the study objective may have also resulted in the relationship presented by the regression results.

6.6 AREA OF FUTURE RESEARCH

This study has provided an opportunity for further research into unlawful expenditure and municipal financial performance. Researchers may consider expanding on the current study by adding more to the sample, increasing the number of years covered or conducting similar research in other spheres of government, such as national departments or provincial departments, or in other South African public entities. Future research may also focus on other municipal financial performance measures not explored in this study.

6.7 STUDY SUMMARY

The main objective of this study, as identified in Chapter 1, was to establish whether there are relationships (and the extent thereof) between types of unlawful expenditure and municipal financial performance in South Africa. This objective emanated from the research problem that South African municipal financial performance has been deteriorating while unlawful expenditure has been increasing at a fast rate. As a result, there has been an increasing number of protests by South African communities about poor service delivery. Secondary objectives were developed to assist in achieving the main objective, as discussed in Section 1.4.

Chapter 2 of the study discussed South African municipal financial performance. Financial performance measures used worldwide were reviewed, and the motivations for the final selection of the seven performance measures that were considered most

appropriate to achieve the research objective were discussed. These performance measures, classified as dependent variables, were debt coverage, net operating surplus margin, outstanding service debtors to revenue, cost coverage, collection rate, current ratio, and remuneration as a percentage of total expenditure. The study also highlighted the following causes of weakening municipal financial performance: poor personnel skills, poor financial discipline, poor governance, poor ethical culture and inadequate municipal infrastructure.

Chapter 3 contextualised unlawful expenditure in South African municipalities. Unauthorised, irregular and fruitless and wasteful expenditures were discussed. The reasons for including these independent variables in the analysis were justified. The researcher determined that the majority of South African municipalities have incurred unlawful expenditure, with notable irregular expenditure incurred by 86 per cent of municipalities in South Africa, followed by fruitless and wasteful expenditure incurred by 79 per cent of them, and unauthorised expenditure incurred by 66 per cent of them. Causes of unlawful expenditure identified during the literature review were also highlighted, namely: weak financial management processes, weak recruitment processes, weak policies and procedures or non-implementation thereof, weak purchasing supply chain management processes, a poor municipal debt collection rate, poor budgeting processes, overspending of municipal budgets, weak internal controls, and political interference.

Chapter 4 of the study discussed the methodology followed and its appropriateness in addressing the research question. The research method chosen was a quantitative analysis of secondary data. This method was considered the most relevant based on the stated research objective.

Chapter 5 of the study discussed the data collected, its interpretation and analysis. Although the results indicated both positive and negative relationships between unlawful expenditure and municipal financial performance variables, the statistically significant results are summarised below:

- **Unauthorised expenditure**: A statistically significant negative relationship was found between unauthorised expenditure and cost coverage, the current ratio, remuneration as a percentage of total expenditure and the net operating surplus margin. No statistically significant relationship was found between

unauthorised expenditure and debt coverage, outstanding service debtors to revenue and the collection rate.

- **Irregular expenditure**: A statistically significant positive relationship was found between irregular expenditure and the net operating surplus margin. No statistically significant relationship was found between irregular expenditure and debt coverage, outstanding service debtors to revenue, cost coverage, the collection rate, the current ratio and remuneration as a percentage of total and expenditure.
- **Fruitless and wasteful expenditure**: There was a statistically significant negative relationship between fruitless and wasteful expenditure and both outstanding service debtors to revenue and the current ratio. No statistically significant relationship was found between fruitless and wasteful expenditure and debt coverage, cost coverage, the collection rate, remuneration as a percentage of total expenditure and the net operating surplus margin.

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AGSA see Auditor-General of South Africa

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Appendix A

Research Ethics Certificate

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UNISA COLLEGE OF ACCOUNTING SCIENCES ETHICS REVIEW COMMITTEE

Date 2019-08-15

ERC reference :
2019_CAS_031
Name: M Sikhosana
Student/ Staff #: 61452076

Dear Mr M Sikhosana,

Decision: Ethics Approval from 2019-08-14 to 2022-08-13

Researcher: M Sikhosana
skosana.mxolisi@gmail.com

Working title of research:

The Relationship between Municipal Financial Performance and Unlawful Expenditure in a South African Context

Qualification: MPhil in Accounting Sciences

Thank you for the application for research ethics clearance by the Unisa College of Accounting Sciences Research Ethics Review Committee. Ethics approval is granted for the period indicated above.

*The application was reviewed by the College of Accounting Sciences Research Ethics Review Committee on **14 August 2019** in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment, and approved.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College of Accounting Sciences Research Ethics Review Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

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4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No field work activities may continue after the expiry date of this certificate.

Note:

The reference number of this certificate should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

Prof L J Erasmus
Chair of CAS RERC
E-mail: erasmlj1@unisa.ac.za
Tel: 012 429 8844

Prof L Ntsalaze
Acting Executive Dean CAS

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THE RELATIONSHIP BETWEEN UNLAWFUL EXPENDITURE AND MUNICIPAL FINANCIAL PERFORMANCE IN A SOUTH AFRICAN CONTEXT

by

MXOLISI JOE SIKHOSANA (5

SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS

for the degree of

MASTER OF PHILOSOPHY IN ACCOUNTING SCIENCES

in the subject

FINANCIAL GOVERNANCE

at the

UNIVERSITY OF SOUTH AFRICA

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Attention: Mxolisi Sikhosana
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To whom it may concern

Confirmation of document editing

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> THE RELATIONSHIP BETWEEN UNLAWFUL EXPENDITURE AND MUNICIPAL FINANCIAL PERFORMANCE IN A SOUTH AFRICAN CONTEXT

The document was the work of Mxolisi Sikhosana.

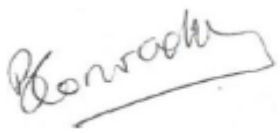
I have involved the contributions of a subcontractor.

We have edited the document for errors of grammar, punctuation, and style. I have also provided the author with a list of aspects needing further attention or correction.

Excluded from the editing work were the annexures (if applicable), the spelling of authors' names and other proper nouns, and fact checking.

I am a registered member of the SA Institute of Translators and the subcontractor is accredited with the Professional Editors Group.

Yours faithfully



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