South African CitiesNetwork

STATE OF CITY FINANCES

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State of City Finances Interviews

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FOREWORD

SITHOLE MBANGA

Chief Executive Officer

> CITIES NEED RESOURCES TO BECOME PRODUCTIVE, INCLUSIVE, SUSTAINABLE AND WELL-GOVERNED URBAN SPACES.

Sustainable, stable revenues and strategic expenditure are crucial to the growth and development of any city. The Well-governed Cities programme of the South African Cities Network (SACN) focuses on the financing and governance of the country's biggest cities, its metropolitan municipalities. A key research area looks at how municipalities generate income, collect revenue and budget for expenditure.

Cities need resources to become productive, inclusive, sustainable and well-governed urban spaces. At the heart of the financial challenges facing cities is achieving an effective balance between capital infrastructure investment and efficient operations and management.

The State of City Finances (SoCF) report examines the finances of Johannesburg, Cape Town, eThekwini, Ekurhuleni, Tshwane, Nelson Mandela Bay, Buffalo City, Mangaung and Msunduzi, to determine their general wellbeing and assess their ability to deliver on developmental mandates. It is the only publication that analyses city finances from this perspective, highlighting the systemic issues in the fiscal framework that prevent cities achieving the developmental outcomes envisioned in South Africa's urban policy, the Integrated Urban Development Framework (IUDF).

In July 2021, the SACN entered the first year of its new five-year strategic business cycle. The strategy is centred on supporting cities to implement the IUDF within their unique contexts. The IUDF has four strategic goals (spatial integration, inclusion and access, growth, and governance) that will be achieved through nine policy levers, of which Lever 8: Effective urban governance and Lever 9: Sustainable finances are the most important (COGTA, 2016).

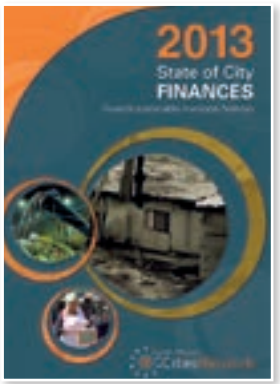
In 2016, the SACN's State of South African Cities Report (SoCR) predicted that cities will be the main sites of engagement for the biggest social challenges of poverty, inequality and unemployment identified in the National Development Plan (SACN, 2016). The report found that cities have good governance structures and processes in place, but they do not adequately mobilise all urban stakeholders in building a long-term vision of and commitment to spatial transformation. Accordingly, the 2021 SoCR focused on urban governance and the importance of the whole-of-government and all-of-society approach called for in the 1998 Local Government White Paper (SACN, 2022). Like previous reports, it reflected on South African urban performance over the previous five years and made policy recommendations for incoming city administrations and urban stakeholders.

This SoCF report analyses municipal finances over two local government administrative terms: 2011–2016 and 2016–2021, following the watershed local government election of 2016. In a significant departure from previous reports and recognising that city finances are affected by national policy choices and global economic trends, the report begins by outlining the major events that affected cities and their impact. In telling the 10-year story of municipal finances, it describes the governance environment that shaped city budgets, in order to extract lessons from that experience and suggest a policy agenda to ensure the sustainability of municipal finances into the future — and the city voice is prominent throughout the report.

CHAPTER 1

INTRODUCTION

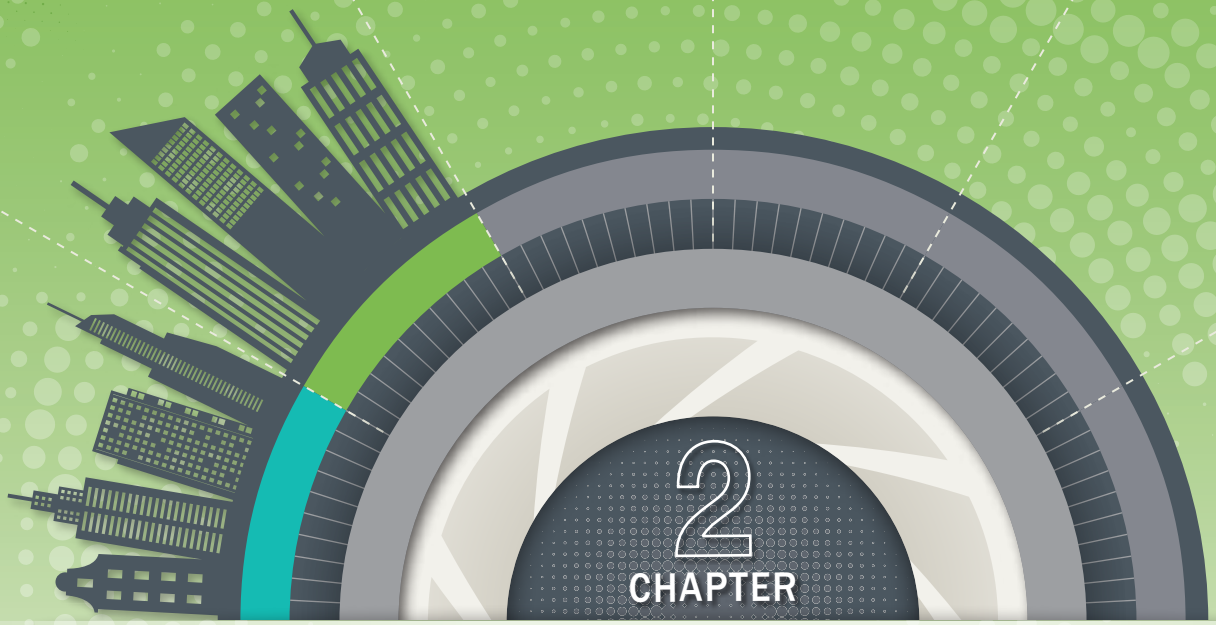
This SoCF is the sixth report based on research by the SACN into the finances of South Africa's biggest cities, with the aim of determining their general wellbeing and assessing their ability to deliver on developmental mandates. It is one of the SACN's flagship publications and, like previous editions (published in 2011, 2013, 2015, 2018 and 2020), this report examines the finances of nine cities in South Africa: Johannesburg, Cape Town, eThekwini, Ekurhuleni, Tshwane, Nelson Mandela Bay, Buffalo City, Mangaung and Msunduzi.



- The SoCF 2011 outlined the country's local government fiscal framework and situated metros within that framework.
- The SoCF 2013 established the linkages between the affordability of municipal bills and the ability of cities to raise revenue for infrastructure maintenance, and considered how the green agenda could be financed. It established a pattern, which was followed in subsequent reports, of updating the state of municipal finances and examining the ability of cities to achieve urban policy outcomes.
- The SoCF 2015 called for a rethink of how cities are financed and urged cities to get the basics right, i.e., collect revenue owed and spend budgets effectively and efficiently, as well as find innovative ways to increase municipal revenues, improve basic service delivery and enable green economic growth. It also considered the implications of cities fulfilling functions that are delegated to provincial and national governments but are more logically performed by local government, specifically sustainable human settlements and affordable and integrated public transport.
- The SoCF 2018 focused on sustainably financing cities, through aligning municipal budgets with policy and planning to achieve spatial transformation, increasing own revenue and finding alternative financing solutions to bridge the capital funding gap, addressing energy diversification, and financing climate change adaptation and resilience.
- The SoCF 2020 looked at the Local Government Equitable Share (LGES), a very important component of the division of revenue and the local government fiscal framework, as well as the initial impact of the COVID-19 shock on city finances.

This SoCF continues where the 2020 report left off, describing external shocks and macroeconomic developments that have affected municipal finances over the last decade (Chapter 2), providing an overview of city financial performance and looking at changes in the affordability of municipal bills between 2015/16 and 2020/21 (Chapters 3 and 4). Chapter 5 takes a longer view, telling the 10-year story of city finance, comparing and commenting on differences in performance of two local government administrations: 2010/11–2015/16 and 2015/16–2020/21. In so doing, it attempts to examine holistically the factors that affect city finances, including external events and matters related to city governance and politics. The final chapter proposes an action and policy agenda for cities and the custodians of the local government fiscal framework to ensure sustainable municipal finances into the future.

The SACN would like to thank those who participated in almost 30 interviews, including current and former city officials, academics, National Treasury staff and others, as their inputs have added invaluable richness and texture to the analysis. The greatly expanded scope of this SoCF report was made possible by the contributions of the many stakeholders who were interviewed, in particular the city chief financial officers (CFOs) and their staff who provided the context for the data. The SACN is indebted to the many stakeholders with knowledge of the local government fiscal framework for sharing their insights and observations. Staff from the budget and policy sections of the National Treasury Intergovernmental Relations Directorate provided valuable comments and input to the report, as did Matthew Glasser. Finally, the SACN is grateful for the expert review of the publication by former eThekwini CFO Krish Kumar and SACN Research Associate Michael Sachs.



CHAPTER 2

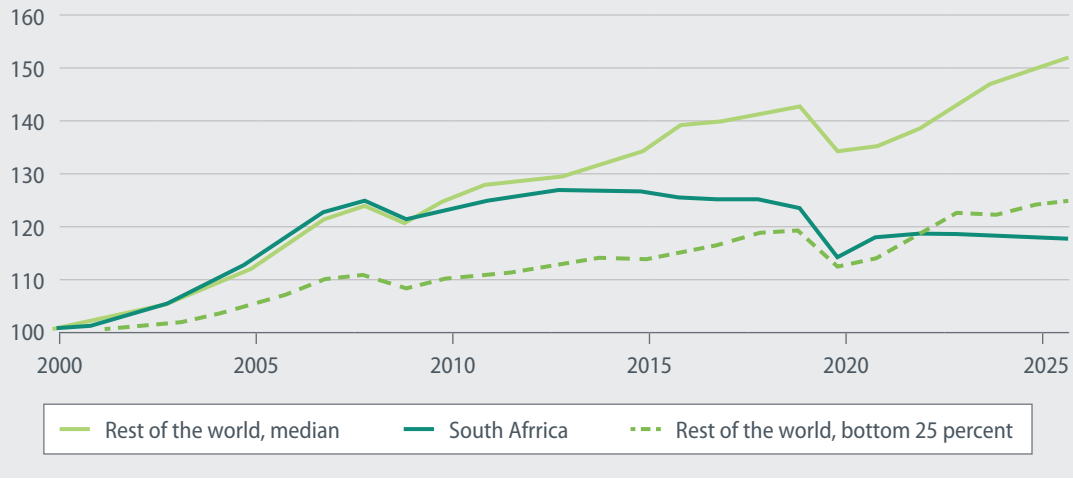
EVENTS AFFECTING MUNICIPAL FINANCES SINCE 2011

Cities are at the centre of delivering basic services to urban communities in South Africa. Cities make decisions that influence the effectiveness of this service delivery but are also affected by global, national and provincial events and decisions. The 2022 State of City Finances Report takes a longer view than some of the previous reports, looking back over a 10-year period. To provide some context, this chapter gives an overview of what has affected municipal finances over the past decade.

A STAGNANT NATIONAL ECONOMY

Following the 2008/09 global financial crisis, economic growth stagnated in South Africa, whereas growth was positive in the rest of the world, even for the bottom 25% of countries (Figure 1).

FIGURE 1 Per capita real GDP in South Africa compared to the rest of the world (2000–2025)

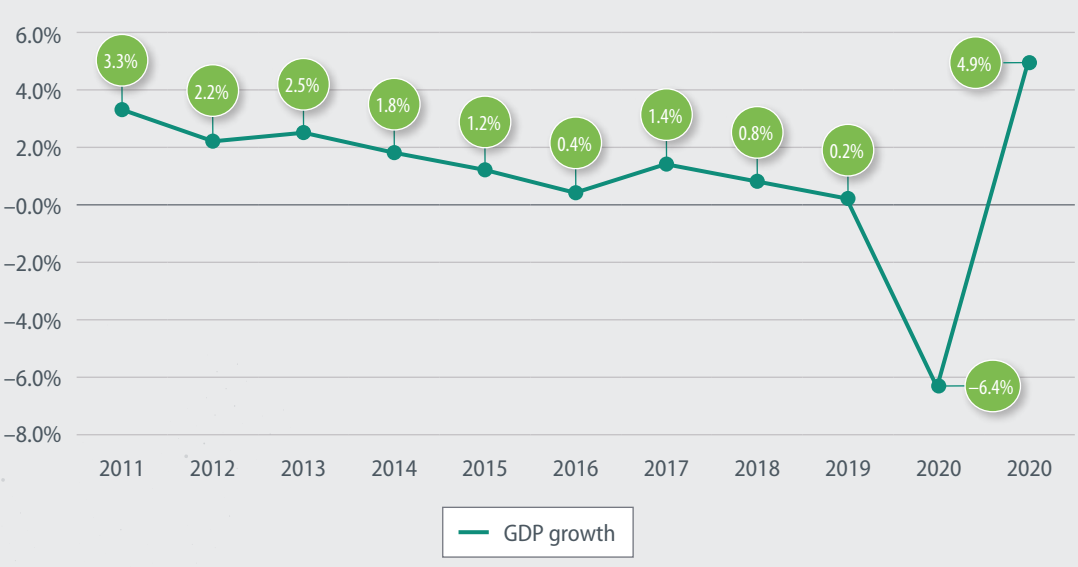


Note: 2000 = 100; 2022–2025 projected per capita real GDP.

Source: https://www.imf.org/en/News/Articles/2022/02/21/cf-how-south-africa-can-advance-reforms-to-achieve-its-climate-goals.

For South Africa, a defining feature of the past decade is slow or stagnant national economic growth (Figure 2). Between 2011 and 2019, South Africa's gross domestic product (GDP) grew by an average of just 1.3% per year, compared to 4.2% in the years leading up to the 2008 global financial crisis. The COVID-19 pandemic dealt a further blow to South Africa's already limping economy, which contracted by 6.4% in 2020 and then grew by 4.9% in 2021 (the most rapid growth in 14 years). Yet, despite bouncing back in 2021, the economy remains smaller than it was pre-2020.[1]

FIGURE 2 South African national GDP growth (2011–2021)



Source: Quantec EasyData for 2011–2019; Trading Economics for 2020–2021.

1 https://tradingeconomics.com/south-africa/gdp-growthhttps://tradingeconomics.com/south-africa/gdp-growth

A stagnant or declining national economy has an impact on a city's income from both own revenues and intergovernmental transfers.

A STAGNANT OR DECLINING NATIONAL ECONOMY HAS AN IMPACT ON A CITY'S INCOME FROM BOTH OWN REVENUES AND INTERGOVERNMENTAL TRANSFERS.

Impact on own revenues

A slow or stagnant economy erodes the city's ability to generate revenues from paying customers and increases the number of customers in need of subsidies from the city. With fewer new businesses, the city has fewer commercial customers and slower growth in property rates.[2] At the same time, as levels of unemployment and poverty increase, fewer households are able to pay for city services, resulting in higher rates of non-payment and more households being classified as indigent and therefore eligible for subsidy support from the city.

In larger cities, in-migration may magnify the effects of a stagnant national economy, as migrants from elsewhere in South Africa and Africa come to cities in search of better employment and earning prospects. While many migrants bring much-needed skills into a city, poorer migrants may place further pressure on the city's ability to roll out and to subsidise basic services. At the same time, although the majority of homeowners who move within South Africa still move from one city to another city, more South Africans (especially professionals) are "semigrating", i.e., "moving from metropolitan areas to smaller and larger towns",[3] which may further reduce the city's paying customer base.

Impact on intergovernmental transfers

A slowing economy results in a reduced national fiscus and tighter fiscal reforms that affect transfers from national to local government. Over the past decade, the national fiscus has been defined by decreasing revenues and unstable and unsustainable debt levels, which have resulted in reduced public expenditure, including on capital infrastructure, and repurposed or reallocated grants.

Between 2011/12 and 2015/16, nationally raised revenues grew by an annual average of 8.5%, while the local government share of these revenues grew by an annual average of 9.9%. Between 2016/17 and 2021/22, nationally raised revenues declined by an annual average of 6.9%, while the local government share declined by an annual average of 8.3% (Table 1).

2016/17 TO 2021/22 NATIONALLY RAISED REVENUES DECLINED BY AN ANNUAL AVERAGE OF **6.9%** LOCAL GOVERNMENT SHARE DECLINED BY AN ANNUAL AVERAGE OF **8.3%**

2 Note, though, that city decisions regarding the cent-in-the-rand to be levied also affect property rates, as discussed in detail later in this report.

3 *BusinessTech*, 'More South Africans are semigrating right now – here's where they are moving to', 14 May 2022. https://businesstech.co.za/news/property/582576/more-south-africans-are-semigrating-right-now-heres-where-they-are-moving-to/

TABLE 1 Local government share of nationally raised revenues (2010/11–2021/22)

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2019/20	2020/21	2021/22
Nationally raised revenue (R-billion)	743	815	877	947	1,017	1,116	1,159	1,242	1,325	1,486	1,556
Local government share (R-billion)	61.2	68.20	76.2	82.6	87.7	98.3	102.9	111.1	118.5	123.0	137.1
Local government share	8.2%	8.4%	8.7%	8.7%	8.6%	8.8%	8.9%	8.9%	8.9%	8.3%	8.8%
Growth in nationally raised revenue	–	9.6%	7.7%	7.9%	7.5%	9.7%	3.9%	7.2%	6.6%	12.2%	4.7%
Growth in local government share	11.4%	11.7%	8.4%	6.2%	12.1%	4.7%	8.0%	6.7%	3.8%	11.5%	11.4%

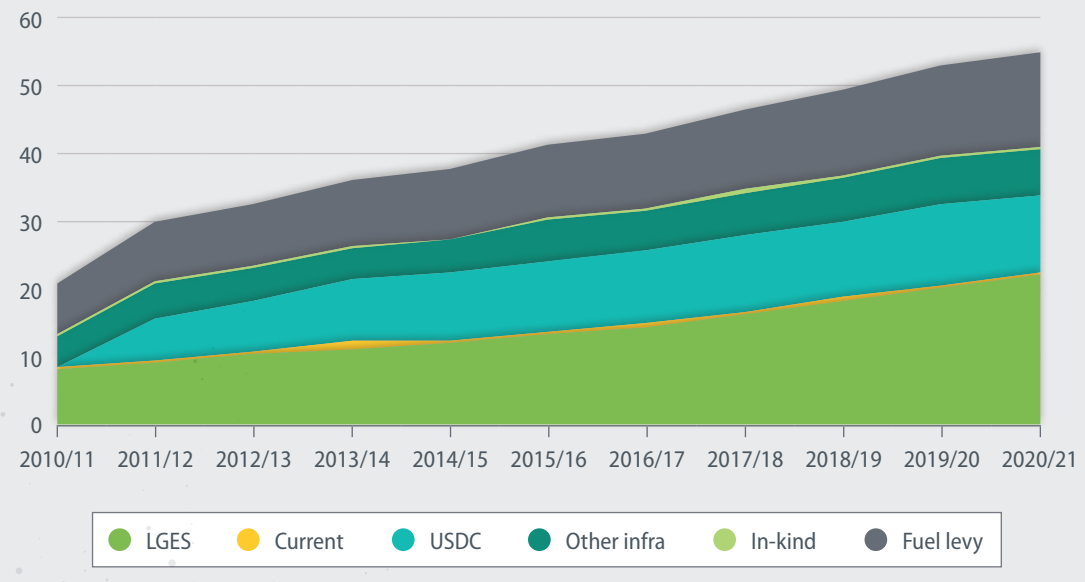
Source: National budget review documents for various years.

Every year, nationally raised revenues are allocated to cities in the Division of Revenue Act (DoRA) through four types of intergovernmental transfers:

- The unconditional Local Government Equitable Share (LGES).
- Various conditional current transfers.
- Capital infrastructure grants, such as the Urban Settlements Development Grant (USDG) and other infrastructure grants.
- Grants in-kind, which are funds allocated to be spent in the local government sphere by entities other than local government.

Cities also receive a share of the fuel levy, which is generated nationally. National Treasury treats fuel levies as a municipal own-revenue source, not a grant, because "it involves sharing a revenue source rather than the allocation of funds from national government's revenues" (South Africa, 2012: 103). As such, fuel levy allocations are not part of DoRA but are approved annually by the Minister of Finance and published in a Government Gazette, as prescribed by the Taxation Laws Amendment Act (No. 17 of 2009). Figure 4 shows the magnitude of these transfers to the nine cities between 2010/11 and 2020/21.

FIGURE 3 Magnitude of LGES, current, infrastructure and in-kind grants to cities (2010/11–2020/21)



Source: Annexures to the National Treasury Division of Revenue Bills for 2010 to 2020.

Table 2 shows the annual average rate of growth for the various transfers over the two periods.

TABLE 2 Changes in growth rate for various transfers to cities (2011/12–2015/16 and 2016/17–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH		CHANGE IN RATE OF GROWTH
	TERM 1 2011/12–2015/16	TERM 2 2016/17–2020/21	
LGES	10.2%	10.9%	0.7%
Current	16.7%	–6.2%	–23.0%
Infrastructure	28.8%	1.7%	–27.2%
In–kind	7.5%	–2.3%	–9.8%
Fuel levy	7.2%	5.6%	–1.5%
Total	14.7%	5.9%	–8.9%
CPI	5.7%	4.2%	–1.5%

Note: The Consumer Price Index (CPI) is a monthly price index that tracks changes in the price of consumer goods and can, therefore, be used to measure the rate of inflation (https://www.statssa.gov.za/?p=955).

Source: Authors' analysis of data from annexures to the National Treasury Division of Revenue Bills and Taxation Laws Amendment Acts for 2011/12 to 2020/21.

- The LGES was the only transfer with a higher average growth rate during the second term than during the first term.
- Current and infrastructure grants grew significantly during the first term (albeit from a very small base) and then contracted during the second term.
- Infrastructure grants were where cities felt the major impact of overall slower growth. After more than doubling in 2011/12 (after the introduction of the USDG), these grants grew by 9.7% per year up until 2015/16, but by only 1.7% per year from 2016/17 to 2020/21, indicating a contraction in real terms.
- The fuel levy grew by an average of 5.6% per year over the two terms.

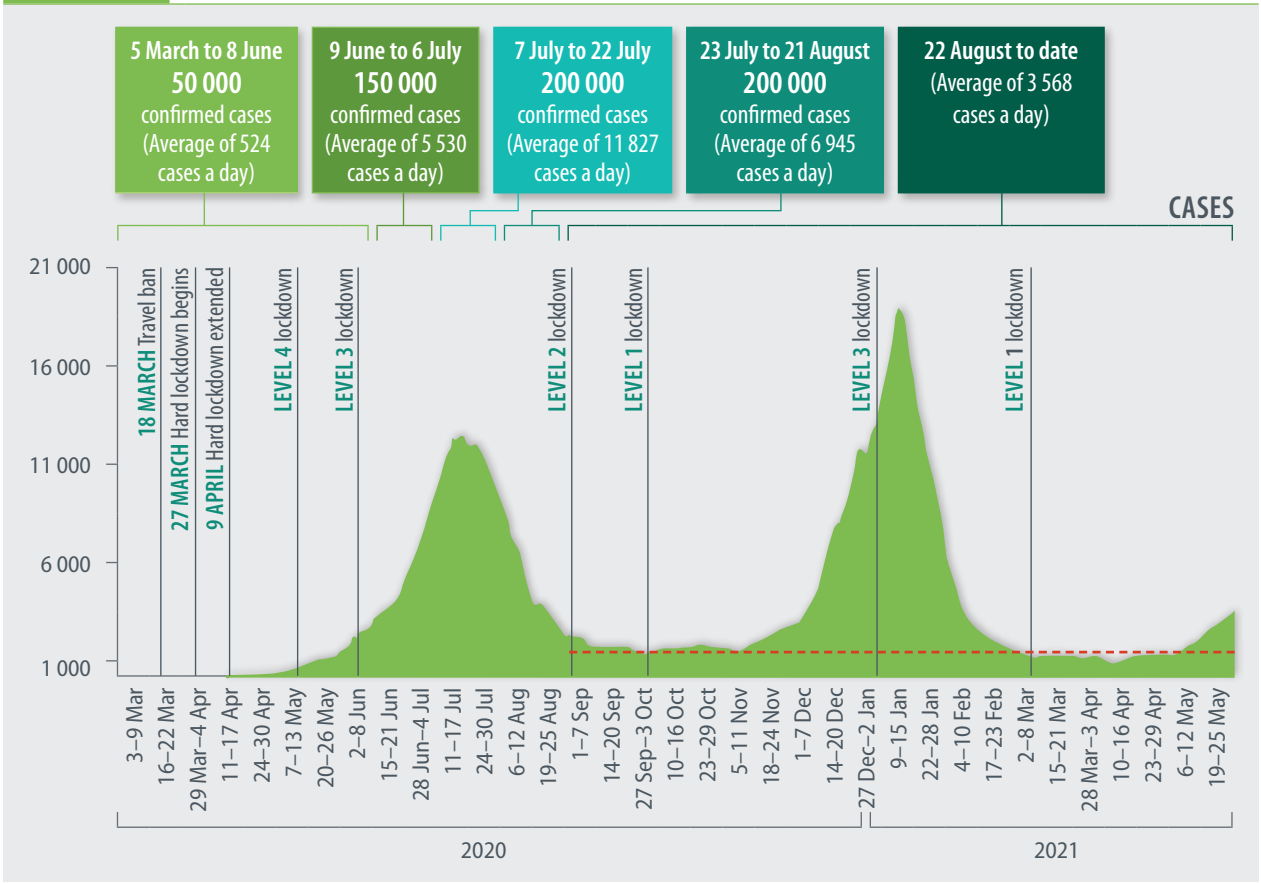
In summary, since 2011, South Africa's economic growth rate has been declining, with a significant contraction in the economy in 2020, but this is not reflected in the LGES and fuel levy allocations transferred to cities. The LGES allocations have continued to grow strongly, while the fuel levy share transferred to metros has been largely unaffected to date. In contrast, conditional transfers to fund infrastructure have grown more slowly, reflecting the slower national economy. Although city financial performance is not directly correlated with national economic growth, slower economic growth is certainly a severe constraint on cities and makes strong financial performance more difficult.

ALTHOUGH CITY FINANCIAL PERFORMANCE IS NOT DIRECTLY CORRELATED WITH NATIONAL ECONOMIC GROWTH, SLOWER ECONOMIC GROWTH IS CERTAINLY A SEVERE CONSTRAINT ON CITIES AND MAKES STRONG FINANCIAL PERFORMANCE MORE DIFFICULT.

COVID-19 PANDEMIC

From 30 December 2019, when the first case was identified in Wuhan, China, SARS-CoV-2 spread rapidly across countries, infecting many people around the world. On 5 March 2020, the first South African case was confirmed, and on 15 March 2020, a state of disaster was declared. The country went into lockdown Level 5 ('hard' lockdown), which meant that only those people providing essential services were allowed to move outside of their homes. These restrictions on movement were lifted progressively, as shown in Figure 4.

FIGURE 4 Rolling average of daily increase in COVID-19 cases in South Africa (March 2020–May 2021)



Source: https://www.investec.com/content/dam/south-africa/content-hub/annabel-bishop/sa-economics/documents/Covid-19-Note-23-September-2021.pdf.

South Africa experienced four waves of the virus. The last wave, between December 2021 and February 2022, was characterised by a significantly lower death rate, which was in part due to a vaccination programme that had been rolled out from February 2021. The state of disaster was lifted finally on 4 April 2022.

The pandemic and subsequent lockdown regulations profoundly disrupted government, business, travel, the health system, workplace conditions and the lives of ordinary citizens around the world. Experts predict that countries will take years to recover from the devastating impacts of the pandemic, which are still being felt in 2022 and include the loss of lives; extreme stress on the health-care system; business closures, liquidations and job losses.

For cities, the COVID-19 pandemic affected their operating expenditure, revenue, cash collection rates and capital expenditure.

Operating expenditure

By December 2020, the local government sector had spent almost R25-billion on COVID-19-related expenditure, of which almost two-thirds (64%) were spent by the metros. These expenditures included medical supplies; personal protective equipment; equipment for employees to work from home; shelter for the homeless; establishment of quarantine and isolation sites; provision of regular sanitation and cleaning of public places; and rapid expansion of water delivery in high-population areas, rural areas and informal settlements (FFC, 2021). However, according to city officials, COVID-19 also resulted in reduced expenditure in other areas, such as sponsorships, travel, subsistence and catering.[4] This meant that the net impact on city expenditures was small and could largely be accommodated through reprioritisation (ibid).

Own revenues

The temporary closure of businesses resulted in lower water and electricity sales, especially during the initial lockdowns, when citizens were unable to go to work. The impact of lower revenue from these service charges is likely to persist, even after lifting the lockdowns, as a result of business closures and higher levels of household poverty.

Cash collection rates

For all cities, the most severe impact was on cash collection rates.[5] The average collection rate in metros fell to 85% during the pandemic, from 94% prior to the pandemic (ibid). The result has been a depletion of city cash reserves, which places municipalities in a vulnerable financial position.

Capital expenditure

Capital expenditures in Q4 of 2019/20 and Q1 of 2020/21 were lower than in the same quarters of previous financial years, but had recovered somewhat by Q2 of 2020/21 (ibid). Although some capital projects were able to continue during the lockdowns, many sites were closed temporarily, while other projects were delayed because of shortages or unavailability of commodities, as a result of the pandemic's impact on supply chains worldwide.[6] In the medium term, the impact of COVID-19 on cash reserves has meant that cities have reduced their capital budgets and will need time to rebuild their depleted cash reserves.

Although COVID-19 has left cities more financially vulnerable, it also brought some benefits, such as making virtual communication and e-governance more acceptable. According to the City of Cape Town, the introduction of a hybrid work model due to COVID-19 had a positive effect on white collar workers and will assist with attracting and retaining these workers. Certain municipalities have been more resilient to the impacts of COVID-19 than others. Municipalities with proper governance structures, organisational continuity, threat control, good financial management and advanced systems were more resilient and agile, and able to respond to the modifications and challenges of COVID-19 and the associated restrictions (Ajam et al., 2021).

4 Interviews conducted as part of the research (see Chapter 1).
5 Ibid
6 Ibid

CLIMATE CHANGE IMPACTS

AFTER DECADES OF WARNINGS BY SCIENTISTS, CLIMATE CHANGE IMPACTS ARE AT THE FOREFRONT OF GLOBAL AND NATIONAL AGENDAS. MANY COUNTRIES AROUND THE WORLD HAVE EXPERIENCED (AND CONTINUE TO EXPERIENCE) CATASTROPHIC NATURAL DISASTERS ...

After decades of warnings by scientists, climate change impacts are at the forefront of global and national agendas. Many countries around the world have experienced (and continue to experience) catastrophic natural disasters: earthquakes and tsunamis in Asia, hurricanes and floods in the Americas, wildfires in Australia, and droughts and floods in Africa.

South Africa continues to experience drought and wildfires in the Western Cape and flooding in Gauteng, KwaZulu-Natal and the Free State.

- Since 2016, droughts have affected coastal cities in particular. In 2018, the City of Cape Town came perilously close to declaring 'Day Zero', the day the municipal water supply would have to be shut off, forcing residents to queue for emergency water supplies. Cape Town instituted stringent water restrictions, which affected the local economy (especially tourism) and public health, and the crisis was averted when good rains arrived in the winter of 2018. Elsewhere in the country, drought persisted and was re-declared a national emergency in March 2020. Buffalo City appears to be emerging from the crisis, with dam levels increasing since November 2021, but Nelson Mandela Bay remains at risk of a Day-Zero scenario.
- In April 2022, KwaZulu-Natal, and in particular eThekwini, experienced several days of torrentially heavy rain — Virginia Airport, to the north-east of Durban, recorded 304mm of rain in a 24-hour period. The result was severe flooding that led to the death of more than 435 people and left infrastructure significantly damaged, with the latest estimates of damage to municipal infrastructure amounting to R6-billion.[7]

As these types of disasters become more common, they highlight the need for cities to improve their preparedness for climate change impacts. Most South African cities have undertaken vulnerability assessments and developed adaptation strategies (SACN, 2018), yet do not give sufficient priority to climate resilience in infrastructure planning. An important step is to improve access to climate finance. Broadly defined, climate finance aims to reduce emissions and enhance sinks of greenhouse gases, as well as reduce the vulnerability and maintain and increase the resilience of "human and ecological systems to negative climate change impacts" (UNFCCC, 2014: 2). However, cities have struggled to access climate funds, which usually require applications to be made through accredited national or regional entities (SACN, 2018). For instance, in South Africa, access to one of the biggest funds, the Green Climate Fund (GCF), is through the Development Bank of Southern Africa (DBSA). Some of the barriers to cities accessing climate finance include complex intergovernmental relationships, a lack of internal capacity and insufficient data on risks (ibid). Efforts are being made to overcome these barriers. For example, the City Support Programme at National Treasury is currently looking at packaging several projects together to form a programme for application to the GCF.

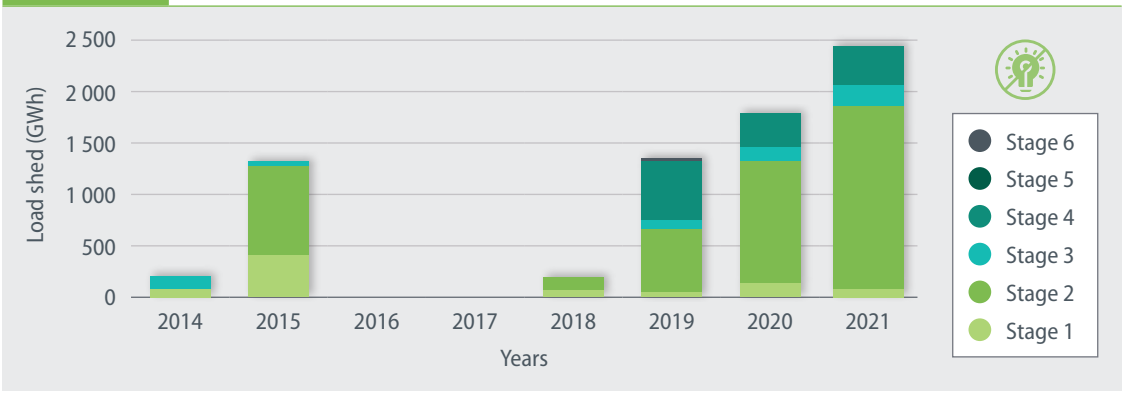
7 Interviews conducted as part of the research (see Chapter 1).

CONTINUING ENERGY CRISIS

Electricity reticulation is a constitutional function of local government in South Africa, but the electricity distribution function is split between Eskom and municipalities. While most cities are electricity distributors, purchasing electricity from Eskom, Eskom itself also distributes electricity directly to large parts of most South African cities. Moreover, Eskom has an almost complete monopoly over the generation and transmission of electricity, and so cities are almost entirely dependent on Eskom for bulk electricity supply, which has been failing since 2007.

The White Paper of 1998 predicted that, unless action was taken, Eskom would run out of power reserves by 2007. However, these warnings went unheeded, and in 2007 and 2008, South Africa experienced its first period of 'load-shedding'.[8] Uncertain energy supply characterises the decade under review, with periods of load-shedding, especially since 2019 (Figure 6).

FIGURE 5 GWh load shed in South Africa (2014–2021)



Source: CSIR https://www.csir.co.za/sites/default/files/Documents/Loadshedding%20plot.pdf.

These electricity interruptions have harmed the country's economy, causing businesses to lose trading time, decreasing production time for the workforce and resulting ultimately in job losses. It is estimated that "South Africa's economy was between 8% and 10% smaller in 2021 than it would have been without load-shedding, resulting in one million jobs lost".[9]

The causes of the energy crisis are complex and include inappropriate tariffs in the 1980s and 1990s, policy indecision by the post-apartheid government, poor infrastructure planning, poor human resource management, and large-scale corruption.[10] In 2019, President Ramaphosa announced the unbundling of Eskom into generation, transmission and distribution entities, each with a divisional board and managing director. The process of legally separating the three entities is anticipated to be complete by December 2022 (PMG, 2021). Other steps to improve energy supply have been outlined in the National Infrastructure Plan 2050 (DPWI, 2022), and in July 2022, President Ramaphosa announced further steps. These are aimed at improving the performance of Eskom's existing fleet of power stations, accelerating the procurement of new generation capacity, increasing private investment in generation capacity, enabling businesses and households to invest in rooftop solar, and fundamentally transforming the electricity sector.

8 Load-shedding occurs when electricity demand exceeds available supply, and planned supply interruptions have to be implemented.
9 https://businesstech.co.za/news/energy/602056/stage-6-load-shedding-costs-south-africa-over-r4-billion-a-day-economist/
10 Muller, S. M. (n.d.). Why the restructuring embattled Eskom won't end #Loadshedding. Retrieved May 24, 2022, from https://www.iol.co.za/news/opinion/why-restructuring-embattled-eskom-wont-end-loadshedding-20279955

One mechanism for cities to improve their resilience to Eskom load-shedding is to develop their own generation capacity or to purchase power from independent power providers (IPPs). However, historical barriers to cities doing this include requirements in the Electricity Regulation Act (No. 4 of 2006) related to licensing for the generation of electricity. Certain recent developments go some way to overcoming these barriers and opening up the space for a more competitive energy supply market:

- Amendments to the Electricity Regulations on New Generation Capacity (the "NewGen" regulations) were gazetted in October 2020 and allow municipalities in good financial standing to develop their own power generation projects and to procure energy from IPPs more easily.
- Amendments to Schedule 2 of the Electricity Regulation Act in August 2021 exempt IPPs from applying for a licence for embedded electricity generation projects of up to 100 MW (as long as they register with NERSA). President Ramaphosa's July announcements removed all licensing thresholds for embedded generation.

Contradictions remain between the NewGen Regulations and Schedule 2 of the Electricity Regulation Act in relation to municipal projects. The regulatory space is still far from clear and not yet enabling for cities, but the July announcements indicated that legal and regulatory obstacles to new generation capacity would be addressed. Therefore, further clarity will hopefully emerge soon.

THE COMBINATION OF HIGH ESKOM TARIFF INCREASES, WHICH ARE PASSED ON TO CITY CUSTOMERS THROUGH THE CITY TARIFFS, AND UNRELIABLE ELECTRICITY SUPPLY HAVE AFFECTED ELECTRICITY DEMAND, AS BUSINESSES AND HOUSEHOLDS SEEK ALTERNATIVE SOURCES OF SUPPLY.

The energy crisis has had significant impacts on cities. Historically, electricity sales have been the most important revenue source for cities, which use surpluses from electricity sales to cross-subsidise the provision of other services. The declining electricity sales have had an impact on the overall financial model of cities. The combination of high Eskom tariff increases, which are passed on to city customers through the city tariffs, and unreliable electricity supply have affected electricity demand, as businesses and households seek alternative sources of supply. More and more businesses and households in higher income brackets are installing small-scale embedded generation (SSEG) systems. Modelling suggests that a 15–20% penetration of solar PV would reduce city revenues by 2–2.5% (SACN, 2018), reducing the city's capacity to cross-subsidise within the electricity service and to use surcharges on wealthier households and businesses to fund services for indigent households. In addition, customers who install SSEG systems seldom leave the municipal grid entirely, meaning that cities must continue to incur fixed costs in maintaining adequate grid capacity.

In response to the energy crisis, cities have introduced rooftop PV support programmes; time-of-use, SSEG and electric vehicle tariffs; wheeling charges[11]; and internal expenditure efficiencies (ibid). Many cities are also putting plans in place to diversify their energy supply.[12]

11 "Wheeling charges are standard tariff charges raised to all parties that use the grid." https://www.eskom.co.za/distribution/tariffs-and-charges/wheeling/

12 Interviews conducted as part of the research (see Chapter 1).

THE RISE OF COALITION GOVERNMENTS

The 2016 local government elections marked the emergence of coalitions as a feature in metropolitan municipalities, with this trend strengthening further in 2021 (Table 3).

TABLE 3 Summary of local government election results in cities (2011, 2016 and 2021)

	2011	2016		2021
Buffalo City	ANC	ANC		ANC
Cape Town	DA	DA		DA
Ekurhuleni	ANC	ANC-led coalition		DA-led coalition
eThekwini	ANC	ANC		ANC-led coalition
Johannesburg	ANC	DA- then	ANC-led coalition	DA-led coalition
Mangaung	ANC	ANC		ANC
Msunduzi	ANC	ANC		ANC-led coalition
Nelson Mandela Bay	ANC	DA-led coalition		ANC-led coalition
Tshwane	ANC	DA-led coalition		DA-led coalition

After the 2016 local government elections, coalitions were formed in four of the nine largest cities, with the DA leading coalitions in Johannesburg,[13] Nelson Mandela Bay and Tshwane, and the ANC leading a coalition in Ekurhuleni. After the 2021 local government elections, coalitions were in place in six of the nine cities:

- The ANC lost control in Ekurhuleni, Johannesburg, eThekwini and Msunduzi.
- DA-led coalitions took control in Ekurhuleni and Johannesburg.
- ANC-led coalitions emerged in eThekwini and Msunduzi. In Msunduzi, the ANC won exactly 50% of the seats and so the coalition comprises the ANC and one other independent councillor.
- Nelson Mandela Bay switched from a DA-led to an ANC-led coalition.

In theory, coalitions have several advantages:[14]

- They provide opportunities to bring together stakeholders across the political spectrum and develop policy based on inclusion and compromise.
- They have the potential to improve accountability and oversight.
- They provide opportunities to access a broader range of candidates from across the coalition grouping.

13 Leadership of this coalition switched to the ANC during the term.
14 Moffat C. 'SA municipal elections – Unpacking the coalition puzzle', *Good Governance Africa (GGA)*, 4 October 2021. https://gga.org/sa-municipal-elections-unpacking-the-coalition-puzzle/

However, coalitions can also be highly contested and lead to policy incoherence and dissonance and delayed decision-making. Following the 2016 local elections, the coalition in Ekurhuleni was relatively stable, but the other three metros experienced a high degree of instability:[15]

- City managers and other senior managers were replaced (Olver, 2021).
- Policy incoherence affected the development planning and land functions, in particular.
- Decision-making was slower, with the administration often not knowing which issues would pass in council.
- The preparation and adoption of budgets caused the most problems, due to "containing the fiscal fallout from unaffordable compromises" (ibid: 283).
- Political-administrative interface issues, which many municipalities grapple with, were heightened in municipalities governed by coalitions.

Coalitions are likely to remain a feature of South Africa's local political landscape for the foreseeable future. Whether a coalition can tap into its advantages or fall prey to its disadvantages will depend largely on the degree of stability within it.

CORRUPTION AND DETERIORATING LOCAL GOVERNANCE

In 2016, allegations began to emerge of a close and potentially corrupt relationship between the Gupta family, President Jacob Zuma and others, leading ultimately to the establishment of the Zondo Commission in 2018. The Zondo Commission, or the "Judicial Commission of Inquiry into Allegations of State Capture, Corruption and Fraud in the Public Sector including Organs of State", exposed wide-scale corruption and fraud in multiple public entities and government departments.

ALTHOUGH THE ZONDO COMMISSION HAS BROUGHT PUBLIC-SECTOR CORRUPTION INTO THE OPEN, CORRUPTION IS NOT NEW NOR UNIQUE TO SOUTH AFRICAN POLITICS.

Although the Zondo Commission has brought public-sector corruption into the open, corruption is not new nor unique to South African politics. It dates back to Jan Van Riebeek himself (who was sent to colonise the Cape after being fired for using the company office to pursue personal financial interest) and was already deeply embedded in business–government relations prior to majority rule in 1994.[16]

15 In Johannesburg, the coalition was relatively stable until the departure of Mayor Herman Mashaba, after which it became highly contested.

16 Friedman S. 2020. 'How corruption in South Africa is deeply rooted in the country's past and why that matters', *The Conversation*. https://theconversation.com/how-corruption-in-south-africa-is-deeply-rooted-in-the-countrys-past-and-why-that-matters-144973

Many hard-working, dedicated officials, who are committed to developmental outcomes, manage and run South Africa's cities. However, the efforts of these commendable public servants are hindered by corruption and rent-seeking, which is embedded in the local government system. The most common forms of corruption reported at local government level include bribery, procurement irregularities, employment irregularities, abuse of power and embezzlement of funds (Corruption Watch, 2021). Although cities perform relatively well compared to other municipalities with regard to unauthorised, irregular, fruitless and wasteful expenditure (SACN, 2015), it is widely accepted that private interests have captured some portion of city funding. Dealing with corruption is important, to ensure that all public funds are used for public benefit, especially because "if we eliminate fraud and corruption, there is plenty of money to go around".[17] It would also help to restore trust between local government and citizens, who would in turn be more willing to pay for services. All political parties included anti-corruption measures in their party manifestos for the 2021 local government elections, perhaps recognising that:

> Tackling corruption is a priority that, if left unattended, will make delivering on other core functions difficult. It requires a holistic approach with both preventive and punitive elements. Most crucial is the need for brave and determined leaders and managers who will monitor and implement these measures, with zero tolerance for slippage. [18]

CIVIL UNREST AND PROTESTS

Since the apartheid years and during the post-apartheid years, public protest is a recurring phenomenon in South Africa, which has "among the highest recorded levels of social protest of any country in the world".[19] Under Section 17 of the Constitution, "everyone has the right, peacefully and unarmed, to assemble, to demonstrate, to picket and to present petitions". However, in July 2021, a wave of unrest led to some of the worst public violence seen in South Africa since the end of apartheid. The unrest began in KwaZulu-Natal, as a political protest over the arrest of former president Jacob Zuma, but the protests widened, spilling over into Gauteng, in response to the broader socioeconomic issues of inequality, unemployment, poverty levels and negative economic growth. Looting and violence led to road closures on the N3 and N2, resulting in the transport of goods being suspended and the container ports in Richards Bay and Durban ceasing operations. This led to food, fuel and medical supply shortages, while widespread destruction of property occurred particularly in Johannesburg and Durban.

17 Interviews conducted as part of the research (see Chapter 1).
18 Chelin R. 'Curbing corruption must top South African municipal agendas', *ISS Today,* 24 November 2021. https://issafrica.org/iss-today/curbing-corruption-must-top-south-african-municipal-agendas
19 Visagie J, Turok I and Swartz S. 'What lies behind social unrest in South Africa, and what might be done about it', *The Conversation*, 18 August 2021. https://theconversation.com/what-lies-behind-social-unrest-in-south-africa-and-what-might-be-done-about-it-166130

The unrest resulted in 337 deaths, 2500 arrests and cost the economy an estimated R50-billion, with eThekwini losing an estimated R50-million in revenue during the first week of the unrest and more than R300-million in rates income due to property damage.[20] Both eThekwini and Johannesburg introduced supplementary valuation rolls to allow property owners to revalue properties damaged during the unrest, and eThekwini is considering the provision of a special rates rebate to those affected.

The causes of protest are complex. Despite having some of the highest levels of access to basic services in the country, metros are where an increasing number of service-delivery protests occur. Although "grievances over service delivery are a common trigger for social protest […] deep-seated social inequalities and segregated living conditions provide fertile ground for popular discontent".[21] Slow economic growth, high unemployment and poverty, exacerbated by COVID-19, natural disasters, and frustration with perceived corruption and mismanagement in government, make recurring protests highly likely, with one official describing eThekwini as "sitting on a tinderbox",[22] and protests likely to recur. Indeed, protests will remain a feature in South Africa until the socioeconomic divide is closed.[23]

SUMMARY

The fundamental challenges facing cities in 2022 are the erosion of the underlying economy and the ability to levy taxes and service charges. "We have lost sight of what makes a city work", which is "the economy that underlies it and the ability of the city to legitimately tax that economy".[24]

The continuing energy crisis has exacerbated the negative impact of the stagnant national economic growth on city economies, affecting the ability of cities to raise revenues and the ability of customers to pay for services. There is also increased pressure to expand social packages. Furthermore, unstable coalition governments and perceptions of corruption and poor governance mean that communities and businesses have declining trust in local government and may even question the legitimacy of city governance. This erodes their willingness to pay for services and creates a climate ripe for civil unrest and protest. Together, these factors also have a negative impact on investor sentiment and the ability of cities to raise capital finance.

20 Davids D. 'Counting the costs: Drivers and implications of South Africa's recent unrest', S-RM, 13 August 2021. https://insights.s-rminform.com/counting-the-costs-drivers-and-implications-of-south-africas-recent-unrest; Erasmus D. 'Business leaders concerned that eThekwini mayor offers platitudes but no concrete plans to rebuild operations", *Daily Maverick*, 23 July 2021. https://www.dailymaverick.co.za/article/2021-07-23-business-leaders-concerned-that-ethekwini-mayor-offers-platitudes-but-no-concrete-plans-to-rebuild-operations/; Duma N. 'eThekwini Municipality expecting to lose over R20bn of GDP due to riots', *EWN News*. https://ewn.co.za/2021/07/21/ethekwini-embarks-on-recovery-plan-after-riots-and-looting.

21 Visagie et al. https://theconversation.com/what-lies-behind-social-unrest-in-south-africa-and-what-might-be-done-about-it-166130

22 Interviews conducted as part of the research (see Chapter 1).

23 Visagie et al. (op. cit.).

24 Interviews conducted as part of the research (see Chapter 1). Note that the term 'tax' is interpreted loosely here to refer to both taxes and service charges.

CHAPTER 3

THE CHANGING STATE OF CITY FINANCES

This chapter examines city performance between 2016/17 and 2020/21 and provides an opportunity to observe how the issues raised in Chapter 2 have influenced city finances.

For several years, National Treasury has been leading a process to standardise the structure and format of local government's financial reporting in order to improve transparency and oversight. The standardisation also provides a basis for analysing and comparing financial performance across municipalities.

- In 2009, the Municipal Budget and Reporting Regulations (MBRR) were published in accordance with the Municipal Financial Management Act (MFMA) No. 56 of 2003. Under these regulations, municipalities must provide data for the current year, the next three years (medium-term budget) and the past three years (audited financial data) in standard tables, which are known as 'A tables', as they are labelled A1, A2, etc. These tables are published on National Treasury's website.
- In 2014, the Municipal Standard Chart of Accounts (*m*SCOA) was introduced. *m*SCOA is a "predefined set of labels, accounts and items used for classifying the budgeting, transacting, and reporting of revenue and expenditures of all accounting transactions within a municipality" (SACN, 2018: 34). The progressive roll-out of *m*SCOA began on 1 July 2017, when all 257 municipalities were required to submit their budgets and plans according to the *m*SCOA prescriptions.

The data from MBRR tables is drawn into a local government database[25] and is used to develop key municipal financial information found on the Municipal Money website,[26] which is aimed at the general public. Since 1 July 2018, data in the standard MBRR tables and in the local government database has been drawn directly from *m*SCOA financial systems, rather than from the manual reports provided by municipalities.

Before presenting the analysis, the following should be noted regarding the data:

- The implementation of *m*SCOA is running behind in several cities. Although cities may have some of the best capacities and systems, they are also significantly larger, have more complex financial systems and far larger numbers of daily transactions than many other municipalities. As a result, not all of the reporting into the local government database since 2018/19 may be 100% credible.
- The timing of this report means that audited data for the 2020/21 financial year is not yet available to the public on the above-mentioned websites. Audited financial results are typically published approximately 12 months after the end of a financial year, once National Treasury has carried out a comprehensive data-verification process with the cities. For the purposes of this report, National Treasury granted the SACN access to the unpublished data for 2020/21, which was used where relevant. This data is based on audited financial statements (AFS), which are available to the public and so, where possible, any questionable data for 2020/21 in the local government database was verified against the municipal AFS.
- Some of the analyses in the MBRR formats are not available in the local government database, which meant that either certain analyses presented in previous iterations of the SOCF Report could not be included or that the 2020/21 financial year had to be omitted.
- In alignment with National Treasury, this report refers to the year in which a financial year ends, e.g., the 2020/21 financial year, which starts on 1 July 2020 and ends on 30 June 2021, and is referred to as 2021.

25 https://municipaldata.treasury.gov.za/docs#intro
26 www.municipalmoney.gov.za

REVENUE

Between 2016/17 and 2020/21, total revenue for all cities combined grew at an average rate of 6.4% per year. (Table 4: Green indicates growth above and red indicates growth below the average rate for all cities combined.)

TABLE 4 City revenues (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	42,556	45,069	52,629	53,737	58,661	8.4%
CPT	36,383	37,628	40,276	42,402	43,221	4.4%
ETH	30,571	33,024	34,843	38,068	39,360	6.5%
EKU	29,592	32,530	34,048	36,788	38,269	6.6%
TSH	28,091	30,605	33,173	32,845	35,703	6.2%
NMB	8,919	9,512	10,101	10,872	11,532	6.6%
BCM	5,628	5,379	6,041	6,708	7,884	8.8%
MAN	6,801	6,631	6,831	7,076	7,111	1.1%
MSU	4,342	4,371	5,039	5,430	5,650	6.8%
All cities	192,881	204,750	222,979	233,926	247,392	6.4%
CPI	–	–	–	–	–	4.0%

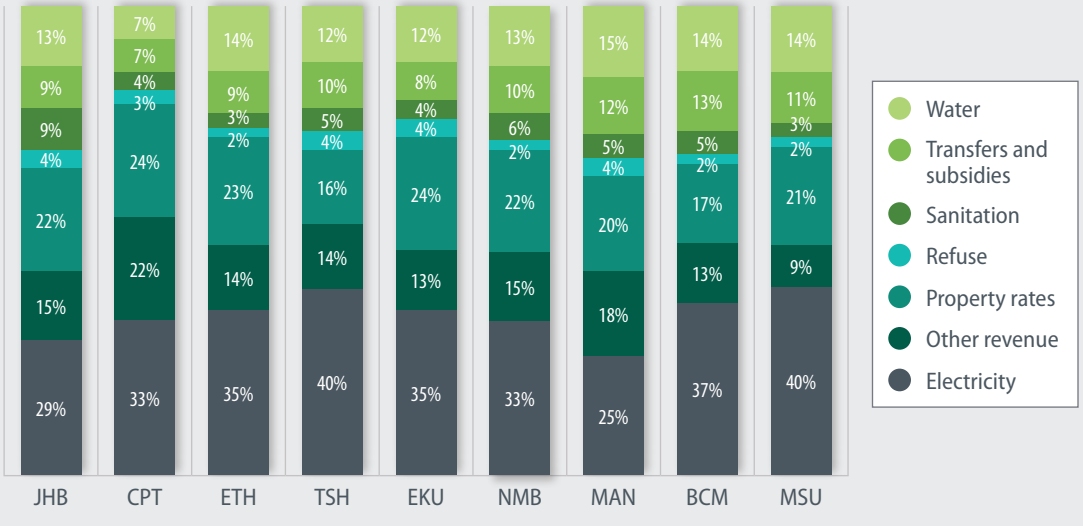
Source: National Treasury Local Government Database. Calculations by authors.

Revenues grew at a similar average annual rate across all cities, with some outliers. The highest revenue increases were in Buffalo City (8.8%) and Johannesburg (8.4%), while the lowest revenue increases were in Cape Town (4.4%) and Mangaung (1.1%). Revenues grew ahead of CPI in all cities except for Mangaung and only marginally so in Cape Town.

Composition of revenue

Figure 6 provides an analysis of the composition of revenue for each city in 2020/21.

FIGURE 6 City revenue by source (2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

For all cities, electricity is the dominant revenue source, contributing 34% of revenue for the cities as a group and as much as 40% of revenue in Msunduzi and Tshwane. Property rates is the next most significant revenue source, contributing 22% for the cities as a group, while transfers and subsidies allocated in the Division of Revenue Act (DoRA) accounts for 9% of revenues and the fuel levy a further 6%.

Figure 7 shows how the composition of revenue changed between 2016/17 and 2020/21, reflecting different growth rates in sources of revenue. Of note is the slow growth in electricity revenues, which represent a declining share of city revenues.

FIGURE 7 Change in city revenue sources (2016/17–2020/21)

Source: National Treasury Local Government Database. Calculations by authors.

The individual revenue sources are discussed in more detail below.

Property rates

Municipalities are empowered to levy property rates based on the market values of all properties within their jurisdictions. The Municipal Property Rates Act No. 6 of 2004 (MPRA) outlines the municipal powers and processes relating to property rates. Every five years, cities implement a new General Valuation (GV) roll that captures the increase in property values over time. They also undertake supplementary valuations to adjust for omitted, new, subdivided, consolidated and incorrectly valued or recorded properties. A city's rates revenue is determined by the number, type and value of rateable properties, which are influenced by the city's economy and structure. This revenue is also affected by decisions taken by cities regarding the cent amount in the rand (cent-in-the-rand), which is levied on the market value of properties, and the extent of rebates and exemptions provided to households.

Table 5 shows the property rates revenue in each city from 2016/17 to 2020/21, as well as the annual average growth rate over this period. (Green indicates growth above and red indicates growth below the average rate for all cities combined.)

TABLE 5 Property rates revenue (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	7,912	9,111	12,372	12,552	13,035	13.3%
CPT	8,100	8,468	9,529	10,081	10,275	6.1%
ETH	6,570	7,673	8,321	8,685	9,239	8.9%
EKU	3,990	5,200	5,395	5,669	5,935	10.4%
TSH	5,913	6,761	7,116	7,425	8,404	9.2%
NMB	1,640	1,999	2,128	2,352	2,505	11.2%
BCM	859	973	1,296	1,467	1,589	16.6%
MAN	1,025	1,158	1,210	1,335	1,190	3.8%
MSU	793	794	931	1,177	1,207	11.1%
All cities	36,803	42,138	48,299	50,744	53,382	9.7%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

For all cities combined, property rates revenues grew by an average of 9.7% per year over the period, or 5.7% above inflation. However, the rate of growth differs significantly from year to year, as highlighted in Table 6, which includes the year in which the latest GV roll was implemented. (Green indicates growth above the rate for all cities combined.)

TABLE 6 Growth in property rates revenue (2017/18–2020/21) and date of latest GV roll

	2017/18	2018/19	2019/20	2020/21	MOST RECENT GENERAL VALUATION ROLL IMPLEMENTED
JHB	15.1%	35.8%	1.5%	3.8%	Jul-18
CPT	4.5%	12.5%	5.8%	1.9%	Jul-18
ETH	16.8%	8.4%	4.4%	6.4%	Jul-17
EKU	30.3%	3.8%	5.1%	4.7%	Jul-17
TSH	14.4%	5.2%	4.3%	13.2%	Jul-17
NMB	21.9%	6.5%	10.5%	6.5%	Jul-17
BCM	13.3%	33.1%	13.3%	8.3%	Jul-18
MAN	12.9%	4.5%	10.3%	–10.8%	Jul-17
MSU	20.0%	17.2%	26.4%	2.6%	Jul-19
All cities	14.5%	14.6%	5.1%	5.2%	–

Source: National Treasury Local Government Database. Calculations by authors.

The implementation of a new GV roll has an impact on property rates revenue, even when cities do not increase or decrease the cent-in-the-rand that year, in order to 'buffer' the impact of increased property values on rates bills. For example, in 2018/19 Johannesburg did not increase the cent-in-the-rand levied, and so the 36% increase in property rates revenue was entirely due to the impact of the new property values in the GV roll. In the same year, Cape Town also introduced a new GV roll and reduced its cent-in-the-rand by 17.4%, but property rates revenues still increased by 13%.

TABLE 7 Property value above which rates are levied (2016/17–2020/21)

	2016/17	2020/21
JHB	R200,000	R350,000
CPT	R200,000	R300,000
ETH	R120,000	R120,000
EKU	R150,000	R150,000
TSH	R75,000	R150,000
NMB	R15,000	R15,000
BCM	R15,000	R15,000
MAN	R70,000	R80,000
MSU	R100,000	R100,000

Source: National Treasury Local Government Database. Calculations by authors.

Property rates revenue is also affected by city decisions to provide rebates and exemptions on property rates, particularly to pensioners,[27] or not to charge rates on properties below a certain value. The MPRA requires that cities zero-rate at least the first R15,000 value of a property, but many cities choose to zero-rate a higher value or to increase the zero-rated value over time. When cities do not increase the zero-rated portion, they are effectively reducing the subsidy because, as house prices increase, the subsidised portion becomes a smaller proportion of the total property value. Table 7 shows the zero-rating decisions made by cities between 2016/17 and 2020/21.

27 Decisions regarding the size of rebates and exemption will also have an impact on the quantum of property rates revenue generated. However, data on the level of rebates offered was not collected for this iteration of the report and so is not reported on.

The Lightstone Residential Property Index[28] suggests that the price of low-value houses increased by about 10.2% per year between 2016/17 and 2020/21. Johannesburg, Mangaung and Tshwane are the only cities to have increased the subsidy to households on low-value properties. Whatever the case, expanding the zero-rated value of properties reduces the rate of growth in property rates revenues.

The example of property rates demonstrates how decisions made by cities affect a revenue stream. While city councils may have sound reasons in difficult economic times for expanding subsidies or keeping the cent-in-the-rand increases low, these decisions affect city revenue negatively, which is not always adequately recognised.

Service charges

The Constitution and the Municipal Systems Act No. 32 of 2000 (MSA) mandate municipalities to provide basic services to communities in a financially sustainable manner. Municipalities levy consumption-based charges for services provided to consumers. According to the MSA, the amount paid by users should be generally in proportion to their use of a service. Thus revenues from service charges depend largely on the volumes sold and tariffs applied. However, this is not the case for all services.

- Electricity and water tariffs include a consumption-based charge (per kWh or kl sold respectively) in the form of inclining block tariffs (IBTs), but some cities have also introduced fixed levies.
- Sanitation tariffs are either based on the value of water sold (in Cape Town, eThekwini, Ekurhuleni, Tshwane and Nelson Mandela Bay — Tshwane also includes a fixed charge) or are fixed monthly charges (in Johannesburg, Buffalo City, Mangaung and Msunduzi).
- Refuse removal charges are based on the number of bins removed per household in all cities.

Subsidies are provided through the tariff structure, with IBTs enabling low-volume users to be subsidised through surcharges on high-volume users. All cities also provide separate tariffs for indigent customers. Electricity tariffs are strictly regulated by the National Energy Regulator of South Africa (NERSA), but there is little national regulation of water, sanitation and refuse tariffs, which explains the greater variability in service charge revenues for water, sanitation and refuse compared to electricity.

28 https://lightstone.co.za/house-price-indices

LOW-VALUE HOUSES INCREASED BY ABOUT

10.2%

PER YEAR BETWEEN 2016/17 AND 2020/21

SERVICE CHARGES

ELECTRICITY AND WATER TARIFFS
Consumption-based charge (per kWh or kl sold respectively)

SANITATION TARIFFS
Based on the value of water sold or fixed monthly charges

REFUSE REMOVAL CHARGES
Based on the number of bins removed per household

Table 8 shows service charge revenues and the average annual growth in these revenues for each city between 2016/17 and 2020/21. (Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 8 Service charge revenue revenues (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	24,197	24,292	26,839	30,251	31,455	6.8%
CPT	17,878	17,378	18,877	20,099	20,276	3.2%
ETH	16,535	17,151	17,907	19,772	21,036	6.2%
EKU	18,683	18,404	20,586	22,386	23,266	5.6%
TSH	16,186	16,921	18,615	18,344	19,699	5.0%
NMB	4,910	5,186	5,234	5,778	6,207	6.0%
BCM	2,594	2,576	2,824	3,261	3,937	11.0%
MAN	3,512	3,492	3,771	4,045	4,109	4.0%
MSU	2,538	2,536	2,943	3,105	3,330	7.0%
All cities	107,032	107,937	117,596	127,042	133,315	5.6%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

Between 2016/17 and 2020/21, the cities combined saw their revenue from service charges grow by an annual average of 5.6%, just 1.6% above inflation, with growth rates varying across cities, ranging from 3.2% in Cape Town to 11.0% in Buffalo City. Table 9 shows how the slow growth in electricity revenues affected the overall growth in revenue from service charges. (Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 9 Average annual growth in revenue from different service charges (2016/17–2020/21)

	ELECTRICITY	WATER	SANITATION	REFUSE
JHB	3.4%	10.0%	12.6%	13.6%
CPT	4.9%	3.6%	5.2%	2.7%
ETH	3.2%	15.2%	9.1%	8.4%
EKU	4.4%	8.9%	12.9%	2.1%
TSH	3.3%	7.5%	11.8%	9.1%
NMB	1.2%	18.1%	13.1%	17.0%
BCM	3.5%	28.0%	15.8%	13.8%
MAN	2.7%	4.6%	9.8%	14.5%
MSU	5.3%	13.4%	8.1%	5.2%
All cities	3.7%	10.2%	11.2%	8.0%
CPI	4.0%	4.0%	4.0%	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

The slow growth in electricity revenues was in part due to the low tariff increases allowed by NERSA, which meant lower increases in the bulk purchase price charged by Eskom (see later discussion on page 32), and mainly the result of reduced growth in electricity volumes sold,[29] which is linked to the overarching trends described in Chapter 2. Some cities ascribe the reduced growth to the high price and unstable supply of electricity, which resulted in customers leaving the grid and pursuing alternative sources of supply, while other cities attribute it to non-revenue electricity (NRE), primarily illegal connections and theft. (See Chapter 5 for a more detailed discussion of NRE in cities.)

For the cities as a group, revenue from water services grew by an average of 10.2% per year. Buffalo City and Nelson Mandela Bay saw this revenue stream grow by 28.0% and 18.1% respectively, which was due to the introduction of water restriction tariffs in 2019/2020 in response to the drought. However, these increased tariffs did not shift the demand for water. High consumption continued, but customers simply did not pay the higher bills. This confirms lessons from the Cape Town drought experience, where effective communication campaigns using behavioural nudges, not price mechanisms, encouraged consumers to save water (Matikinca et al., 2020; Brick & Visser, 2018; Booysen et al., 2019). Between 2016/17 and 2020/21, Cape Town's water revenues grew by an average of 3.6% per year, the lowest of all the cities, despite tariff increases of 19.25% and 19.9% in 2017/18 and 2018/19 respectively.

Revenues from sanitation charges grew by an average of 11.2% per year for the cities combined, with Buffalo City and Nelson Mandela Bay again showing the highest growth, while revenues from refuse removal grew by an annual average of 8.0%, ranging from 2.7% in Cape Town to 17% in Nelson Mandela Bay.

Transfers and grants

Cities receive several operating grants and transfers, which are dominated by the LGES, as Figure 3 shows (Chapter 2, page 8). Between 2016/17 and 2020/21, grants and transfers grew by an average of 10.9% per year for the cities as a group, well ahead of inflation, making them the fastest-growing revenue stream (Table 10). (Green indicates growth above and red indicates growth below the average for all cities combined.)

REVENUE FROM SERVICE CHARGES FOR COMBINED CITIES

ELECTRICITY
Slow growth in electricity revenues

WATER
Revenue from water services grew by an average of 10.2% per year

SANITATION
Revenues from sanitation charges grew by an average of 11.2% per year

29 Until recently, cities have not reported on the volumes of electricity or water purchased or sold. This has changed recently, with the introduction of MFMA Circular 88 on the rationalisation and planning and reporting requirements of metropolitan municipalities. Cities must now report on a number of non-financial indicators through this process, including purchase volumes and sales. This will allow for easier analysis of trends in these data elements in future.

TABLE 10 Operating grants and transfers allocated to cities (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLIONS)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	2,928	3,249	3,709	4,273	4,721	12.5%
CPT	1,868	2,070	2,329	2,624	2,863	11.0%
ETH	2,210	2,398	2,694	3,014	3,277	10.4%
EKU	2,224	2,420	2,778	3,185	3,501	12.3%
TSH	1,703	1,918	2,156	2,443	2,668	11.3%
NMB	813	822	866	959	1,041	8.2%
BCM	688	690	722	802	870	7.8%
MAN	669	707	721	784	852	6.7%
MSU	402	449	478	510	552	7.5%
All cities	13,505	14,723	16,453	18,594	20,345	10.9%
CPI	–	–	–	–	–	4.0%

Source: Division of Revenue Bills for 2016 to 2020. Calculations by authors.

The LGES is allocated to the 257 municipalities based on a formula that takes into account demographic and other data, including increases in the number of households (based on estimated growth rates every year) and changes in the cost of service provision (based on price increases, such as for Eskom and water board bulk purchases). The formula has five components:

$$LGES = BS + (I + CS) \times RA \pm C$$

Where

- BS is the basic services component
- I is the institutional component
- CS is the community services component
- RA is the revenue adjustment factor, which diverts funds to municipalities with limited potential to raise their own revenue
- C is the correction and stabilisation factor, which levels out changes in allocations over time

The different growth rates in LGES allocations across cities are due to different assumptions in the LGES formula about household growth, revenue adjustment factors and the application of the correction and stabilisation factor in individual cities (SACN, 2020).

The adequacy of the LGES is the subject of much debate, yet allocations to the cities grew rapidly between 2016/17 and 2020/21, well above inflation and other city revenue sources, and despite a difficult national economic environment. Compared to the LGES, the other transfers received by cities are small and are allocated for a specific purpose.

- The **Infrastructure Skills Development Grant (ISDG)** is intended for capacity-building within municipalities, through developing a sustainable pool of young professionals with technical skills in areas such as water, electricity and town planning.

- The **Expanded Public Works Programme (EPWP) Grant** supports the use of labour-intensive methods in delivering municipal infrastructure and services.
- The **Local Government Financial Management Grant** promotes and supports reforms in financial management by building capacity in municipalities to implement the MFMA.
- The **Electricity Efficiency and Demand Side Management (EEDSM) Grant** supported municipalities in implementing EEDSM programmes aimed at reducing municipal electricity consumption and improving energy efficiency. (The EEDSM Grant was discontinued after 2019/20.)
- The **Municipal Human Settlements Capacity Grant** was aimed at building capacity in municipalities to deliver and subsidise the operational costs of administering human settlements programmes. (This grant was disbursed in 2016/17 only.)
- The **Municipal Demarcation Transition Grant** was allocated to Mangaung in 2017 and 2018 to support policy rationalisation and change management following demarcation changes.

Fuel levies

Since 2009/10, metropolitan municipalities (which exclude Msunduzi) have received a share of nationally raised fuel levies. This share was introduced as a replacement of the former Regional Services Council (RSC) and Joint Service Board (JSB) levies.[30] The fuel levy share is allocated based on fuel sales data. Table 11 shows the fuel levies allocated to each city. (Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 11 Fuel levy allocated to metros (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLIONS)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	2,596	2,711	2,942	3,273	3,683	9.1%
CPT	2,198	2,418	2,558	2,570	2,595	4.2%
ETH	2,185	2,212	2,339	2,611	2,854	6.9%
EKU	1,626	1,694	1,735	1,711	1,781	2.3%
TSH	1,440	1,444	1,449	1,452	1,492	0.9%
NMB	497	545	624	690	707	9.2%
BCM	410	468	514	547	593	9.7%
MAN	273	293	308	312	320	4.1%
MSU	–	–	–	–	–	–
All cities	11,224	11,785	12,469	13,167	14,027	5.7%
CPI	–	–	–	–	–	4.0%

The fuel levy grew strongly in Johannesburg, Nelson Mandela Bay and Buffalo City, but was notably low in Tshwane.

30 The RSC/JSB levies were abolished as from 1 July 2006. The main reason was to alleviate the administrative burden on businesses, as the levies were based on self-declaration by businesses.

OPERATING EXPENDITURE

Operating expenditure refers to the daily costs incurred by cities in providing services. Between 2016/17 and 2020/21, this expenditure grew at an annual average rate of 7.4% for the cities combined. (Table 12: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 12 City operating expenditures (2016/17–2020/21)

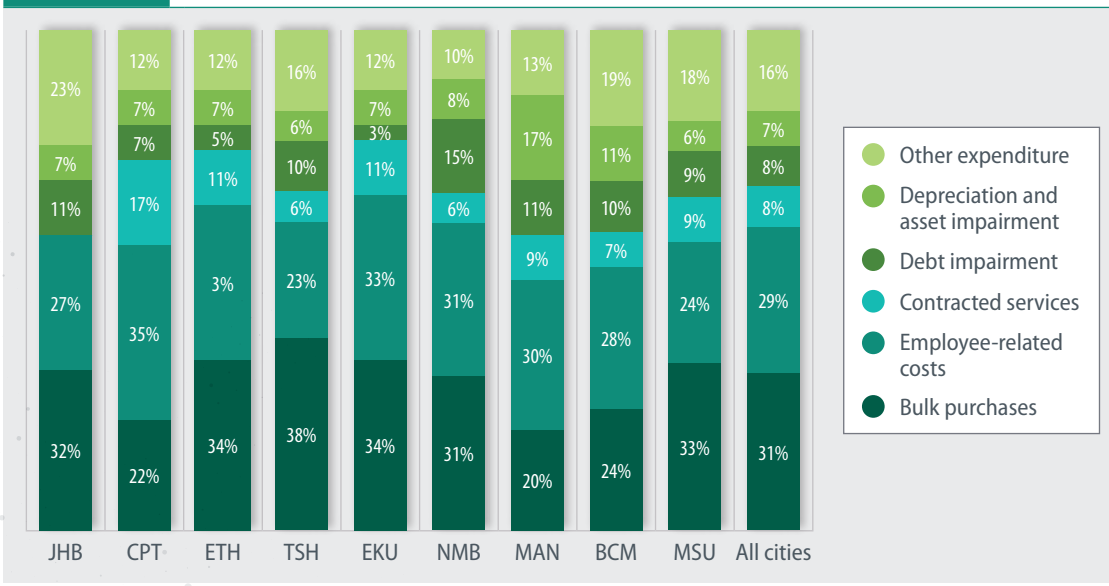
	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	44,338	44,800	48,438	54,682	57,681	6.8%
CPT	31,685	33,507	36,164	40,440	43,393	8.2%
ETH	31,345	33,734	35,094	40,681	41,349	7.2%
EKU	30,351	32,555	37,475	39,463	41,116	7.9%
TSH	28,023	29,965	32,395	37,522	37,168	7.3%
NMB	8,846	8,623	10,171	10,657	12,090	8.1%
BCM	5,588	6,074	6,846	7,830	8,277	10.3%
MAN	6,575	7,241	7,859	7,417	7,977	5.0%
MSU	4,609	5,609	5,675	5,674	5,868	6.2%
All cities	191,361	202,109	220,118	244,365	254,920	7.4%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

Composition of expenditure

Figure 8 shows the breakdown of city operating expenditure in 2020/21. Bulk purchases of electricity (almost entirely from Eskom) and water from various water boards accounted for 31% of operating expenditure for the cities as a group. Cape Town's bulk purchases are for electricity only, as it produces its own bulk water (it is the only city not served by a water board). Employee-related costs made up 29% of operating expenditure for the cities as a group.

FIGURE 8 Breakdown of city operating expenditure (2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

Between 2016/17 and 2020/21, bulk purchases and contracted services declined, while debt impairment and employee-related costs increased significantly as a share of expenditure. (Table 13: Red indicates increased contribution and green indicates decreased contribution to overall expenditure.)

TABLE 13 Change in contribution of operating expenditure categories (2016/17–2020/21)

	BULK PURCHASES	EMPLOYEE-RELATED COSTS	CONTRACTED SERVICES	DEBT IMPAIRMENT	DEPRECIATION AND ASSET IMPAIRMENT	OTHER EXPENDITURE
JHB	–2.0%	3.4%	–5.2%	2.2%	0.3%	1.3%
CPT	–4.2%	4.2%	–0.3%	1.7%	–0.6%	–0.9%
ETH	2.0%	2.3%	–1.9%	–1.2%	–0.1%	–1.2%
TSH	–2.6%	2.6%	2.8%	1.6%	–0.5%	–3.9%
EKU	0.9%	4.0%	–0.3%	–1.7%	1.0%	–3.9%
NMB	–3.5%	–4.1%	–6.9%	7.9%	4.8%	1.7%
MAN	–8.2%	1.1%	8.7%	7.6%	2.5%	–11.7%
BCM	–3.8%	5.3%	–6.1%	5.0%	2.7%	–3.1%
MSU	–7.6%	3.0%	–2.8%	7.7%	–6.6%	6.4%
All cities	–3.2%	2.4%	–1.3%	3.4%	0.4%	–1.7%

Source: National Treasury Local Government Database. Calculations by authors.

Bulk purchases

In most cities, bulk purchases is the highest operational expenditure item and grew by an annual average of 5.9% for the cities as a group (Table 14: Green indicates growth above and red indicates growth below the average for all cities combined).

TABLE 14 Bulk purchases expenditure and average annual growth (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	14,979	15,173	16,535	17,671	18,331	5.2%
CPT	8,413	8,122	8,632	9,318	9,719	3.7%
ETH	10,099	10,434	11,481	13,237	14,169	8.8%
EKU	12,403	12,245	13,359	15,161	15,730	6.1%
TSH	9,380	9,802	10,777	11,961	12,783	8.0%
NMB	3,011	3,014	3,229	3,387	3,694	5.2%
BCM	1,559	1,552	1,629	1,529	1,632	1.2%
MAN	1,842	1,949	2,430	1,758	1,932	1.2%
MSU	1,866	1,957	2,010	1,756	1,928	0.8%
All cities	63,551	64,249	70,083	75,777	79,918	5.9%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

Bulk tariffs from Eskom and the water boards are the main drivers of bulk purchase costs. As mentioned previously, the relatively low growth in bulk purchase expenditure was due to the relatively low price increases from Eskom. This contrasts with the water boards, which in 2020/21 requested "unaffordable" water tariff increases. The South African Local Government Association (SALGA) has been vocal about the water boards' "free-for-all approach" to tariff setting which is due to the lack of "an independent water regulator".[31] Cape Town's bulk purchase expenditure is significantly lower than in other large cities because the city has its own bulk water treatment plants and so purchases raw water only.

Employee-related costs

Between 2016/17 and 2020/21, employee-related costs grew on average by 10.3% per year for the cities combined, significantly ahead of inflation. These costs are the second-fastest growing expenditure item, after debt impairment. (Table 15: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 15 Employee-related costs and headcount growth (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE GROWTH RATE	GROWTH IN HEADCOUNT
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21	
JHB	10,255	10,685	12,668	14,794	15,300	10.5%	4.7%
CPT	9,756	10,977	12,459	12,853	15,179	11.7%	–0.2%
ETH	8,863	10,082	10,475	11,205	12,626	9.2%	2.4%
EKU	6,172	7,553	8,505	9,178	9,413	11.1%	3.3%
TSH	8,023	8,163	9,088	11,615	12,126	10.9%	–11.1%
NMB	3,069	2,518	3,248	3,115	3,696	4.8%	–0.5%
BCM	1,627	1,877	2,050	2,206	2,501	11.3%	1.2%
MAN	1,517	1,878	2,045	2,057	2,264	10.5%	–4.4%
MSU	990	1,121	1,268	1,243	1,437	9.8%	–
All cities	50,274	54,853	61,806	68,265	74,541	10.3%	0.6%
CPI	–	–	–	–	–	4.0%	–

Note: The headcount data for MSU is excluded due to concerns about credibility.

Source: National Treasury Local Government Database. MBRR table SA24 for headcounts. Calculations by authors.

Between 2016 and 2021, all cities saw their employee-related costs grow faster than their employee headcounts, which means that their per-employee costs increased. In Cape Town, Tshwane, Nelson Mandela Bay and Mangaung, employee headcounts decreased and yet total employee-related costs increased. These costs are driven in part through two separate salary processes.

- For senior management salaries, the Minister of Cooperative Governance and Traditional Affairs (COGTA) sets a range every year within which salaries can move. The upper limits on salaries for municipal managers and managers who report directly to municipal managers have not increased since 2018/19.
- Salaries for other municipal staff are set through a collective bargaining process in which SALGA bargains on behalf of local government. Between 2016 and 2021, these salaries increased by an annual average of 6.8%.

31 Mvumvu Z. 'Salga rejects proposed water tariffs, calls for independent regulator', *Dispatch Live*, 3 June 2020. Available at: https://www.dispatchlive.co.za/news/2020-06-03-salga-rejects-proposed-water-tariffs-calls-for-independent-regulator/ (Accessed 18 July 2022)

Although over the long term, the above-inflation salary increases negotiated through the collective bargaining process have driven the growth in employee-related costs, these do not appear to explain the rapid growth since 2016, as the number of employees grew by just 0.6% per year for the cities as a group (Table 15). Clearly other factors are at play here, many of which are within the control of cities. Examples of these include:[32]

- In 2017, Tshwane was upgraded from a category 9 to a category 10 municipality, leading to a change in the grading for determining senior management salaries. These salaries grew rapidly after being 'benchmarked' against salaries in other cities.
- When Buffalo City became a metro in May 2011, salaries were 'standardised' over several years, which contributed to their high growth.
- In Johannesburg, insourcing, which was the subject of much negotiation in the coalition government elected in 2016, contributed to the increased employee headcount.
- Very high levels of overtime play a role, as cities do not always have adequate policies in place (or do not enforce the policies) for managing overtime.
- Allowances for benefits, such as cars and housing, or scarce skills allowances are high and sometimes incorrectly allocated. However, cities face significant resistance from employees if they attempt to rationalise these allowances — "labour is running our cities"[33]. To reverse this trend will require strong leadership and political will.

Contracted services

Reporting on contracted services appears to have changed or lacks credibility in several cities. In particular, Buffalo City does not seem to have reported correctly on this item between 2016/17 and 2018/19, while Johannesburg showed no contracted services in 2019/20 and 2020/21 (Table 16: Green indicates growth above and red indicates growth below the average for all cities combined).

TABLE 16 Contracted services expenditure (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	2,321	3,329	2,984	–	–	–
CPT	5,387	5,648	6,256	6,948	7,253	7.7%
ETH	4,025	4,560	4,694	5,456	4,528	3.0%
EKU	1,061	1,346	2,470	2,528	2,584	24.9%
TSH	3,085	3,047	3,234	3,883	3,979	6.6%
NMB	1,148	1,100	1,047	647	739	–10.4%
BCM	1	3	6	682	721	–
MAN	880	881	703	578	581	–9.9%
MSU	557	622	671	475	543	–0.6%
All cities	18,466	20,536	22,065	21,196	20,928	6.7%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

Between 2016/17 and 2020/21, contracted services grew relatively slowly, averaging 6.7%, or 2.7% above the inflation rate for all cities combined (Table 16). Insourcing may have contributed to this trend in Johannesburg and Nelson Mandela Bay, but contracted services grew slowly or declined in other cities. It appears that contracted services was an easy budget item to cut when finances tightened. Of concern is that some cities have cut maintenance contracts, which may have long-term implications for infrastructure management going forward.

32 Interviews conducted as part of the research (see Chapter 1)
33 ibid

Debt impairment

Debt impairment is a non-cash expenditure item, which municipalities use for potential consumer debt that is considered irrecoverable and may need to be written off. High levels of debt impairment are associated with declining cash collection rates and rising consumer debtors. Reliable data to calculate the cash collection rates in the cities in 2020 and 2021 was not available at the time of writing this report, but debt impairment is likely to be higher if cash collection rates are declining. Therefore, the impact of changes in cash collection can be seen in this expenditure item. Between 2016/7 and 2020/21, debt impairment was the fastest-growing expenditure item, averaging 13.2% per year for all cities combined. (Table 17: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 17 Debt impairment expenditure (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	3,941	3,483	4,578	6,880	6,395	12.9%
CPT	1,582	1,362	1,583	2,804	2,906	16.4%
ETH	2,059	2,076	1,204	2,797	2,233	2.0%
EKU	2,610	1,471	4,148	3,730	4,207	12.7%
TSH	1,417	1,714	1,804	3,241	1,259	–2.9%
NMB	604	873	775	1,228	1,777	31.0%
BCM	204	321	373	602	927	46.0%
MAN	333	448	766	823	806	24.7%
MSU	41	909	698	589	503	87.4%
All cities	12,790	12,657	15,930	22,693	21,013	13.2%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

In 2018/19 and 2019/20, debt impairment increased rapidly. Despite declining in 2020/21, it remains significantly higher than in 2017/18. This has been the most significant expenditure impact of COVID-19, although water-restriction tariffs also contributed to the particularly high increases in Buffalo City and Nelson Mandela Bay. Cities reported a steep decline in payments by residential customers. In some cities, councils took decisions to halt credit control measures entirely. All cities offered some sort of debt rehabilitation programme between 2019 and 2021.

The decline in debt impairment in 2021/21 is encouraging because a city's financial viability depends on the extent to which it is able to reintroduce credit control processes and increase cash collection rates.

Depreciation and asset impairment

Depreciation is a non-cash expenditure that accounts for the decline in an asset's value over time. Ideally, it results in the generation of a cash surplus that can be set aside, to be used for asset replacement in the future. Impairment refers to the writing off of assets that have reached the end of their useful lives before they have been fully depreciated (i.e., some residual value remains in the asset register). Between 2016/17 and 2020/21, depreciation and asset impairment expenditure grew by an average of 8.5% per year for the cities as a group. (Table 18: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 18 Depreciation and asset impairment expenditure (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	2,999	3,133	3,259	3,352	4,101	8.1%
CPT	2,336	3,088	2,890	3,059	2,939	5.9%
ETH	2,189	2,312	2,419	2,696	2,854	6.9%
EKU	2,115	2,546	2,582	2,714	2,653	5.8%
TSH	1,589	2,044	2,121	2,142	2,464	11.6%
NMB	294	280	973	1,072	987	35.3%
BCM	807	1,018	1,297	1,710	1,402	14.8%
MAN	579	900	965	948	916	12.2%
MSU	605	470	468	424	381	–10.9%
All cities	13,514	15,791	16,973	18,118	18,697	8.5%
CPI	–	–	–	–	–	4.0%

Source: National Treasury Local Government Database. Calculations by authors.

The step-up in depreciation and asset impairment for Nelson Mandela Bay seems to be due to the change in reporting in 2018/19, not actual changes in expenditure.

Depreciation expenditure depends on the value and composition of the asset base to be depreciated, and the basis used for depreciation. Buffalo City has a high level of depreciation for a relatively small city because it uses a different basis for valuing its infrastructure assets. Most cities value an asset based on its historic cost (i.e., the cost when it was first purchased or constructed), which means that asset values are fixed and so the amount of depreciation recorded for a specific asset is also fixed each year. In contrast, Buffalo City revalues its assets periodically, meaning that asset values increase continually and, as a result, expenditure on depreciation increases.

Infrastructure asset management practitioners favour the revaluation method because it generates a higher theoretical cash surplus for replacing assets. Under the historic cost method, the cash surplus generated will never be more than the asset's original cost, but the cost of replacing an asset 20 years later, for example, will be much higher than the original cost. Therefore, using the historic cost method inevitably leads to a shortfall in funding for asset replacement. In theory, the revaluation method should be best practice, but it leads to higher expenditure on depreciation, which puts upward pressure on tariffs. Buffalo City is considering the possibility of moving to the historic cost method, as the revaluation method is difficult to sustain in an environment with strong pressure to keep tariffs low. The city will have to weigh the impact on tariff affordability against benefits for future infrastructure asset management. This is an example of the trade-offs that cities must make in difficult economic conditions. However, Buffalo City (and other cities) also need to take a long-term view on such decisions: keeping depreciation low may keep tariffs low today but makes managing infrastructure assets difficult, contributing to failing assets and an inability to provide future services.

OPERATING SURPLUSES OR DEFICITS[34]

Cities need to generate revenues to cover their operating expenditures in order to be financial sustainable and creditworthy. Cities that generate sufficient surpluses are able to build up reserves, which could fund capital projects and reduce dependency on grants and transfers.

Between 2016/17 and 2020/21, city revenues increased by an annual average of 6.4%, while operating expenditures increased by 7.4% (see Tables 4 and 12). The net impact was a sharp decline in operating surpluses, from R14.9-billion in 2016/17 to just R5.6-billion in 2020/21. (Table 19: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 19 Operating surpluses or deficits as a percentage of revenue (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE RATE OF GROWTH
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	1,373	2,614	6,883	3,633	2,517	16.4%
CPT	5,153	5,568	6,430	4,353	1,909	–22.0%
ETH	2,194	2,109	2,149	427	817	–21.9%
EKU	1,180	1,766	–791	–254	349	–26.3%
TSH	2,429	2,438	2,791	–4,279	–1,035	–
NMB	1,064	2,304	1,189	980	558	–14.9%
BCM	359	203	470	–204	715	18.8%
MAN	1,142	13	–275	221	7	–71.9%
MSU	–19	–589	14	188	–218	–
All cities	14,874	16,428	18,860	5,063	5,619	–21.6%

Note: Where cities generated a deficit in 2021, the growth rate cannot be calculated and is left blank.

Source: National Treasury Local Government Database. Calculations by authors.

The decline in operating surpluses was primarily due to the impact of COVID-19 on debt impairment in 2019/20 and 2020/21. Several cities reported operating deficits: Ekurhuleni (2018/19 and 2019/20), Tshwane (2019/20 and 2020/21), Buffalo City (2019/20), Mangaung (2018/19) and Msunduzi (2016/17, 2017/18 and 2020/21).

34 Operating surpluses occur when revenues exceed operating expenditures, whereas operating deficits occur when operating expenditures exceed revenues.

CAPITAL EXPENDITURE AND CAPITAL FINANCE

Cities incur capital expenditure to provide services to all households and the infrastructure necessary to support the economy. Capital expenditure covers both new assets and the renewal of existing assets. Between 2016/17 and 2020/21, capital expenditure declined by an average of 2.8% per year for the cities as a group. (Table 20: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 20 Capital expenditure (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE GROWTH RATE
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	7,672	6,557	7,651	5,784	6,098	–5.6%
CPT	6,273	5,720	5,382	6,035	7,399	4.2%
ETH	5,466	4,791	4,951	4,550	4,244	–5.9%
EKU	4,702	5,918	6,151	5,068	4,666	–0.2%
TSH	3,200	3,047	3,302	2,950	3,274	0.6%
NMB	1,431	1,643	1,680	2,356	1,218	–3.9%
BCM	1,281	1,332	1,760	1,549	1,591	5.6%
MAN	1,214	835	822	420	827	–9.2%
MSU	648	595	477	–	686	1.4%
All cities	31,888	30,439	32,176	29,293*	30,004	–2.8%

Source: National Treasury Local Government Database. Calculations by authors.

** This total includes an estimate of capital expenditure by MSU calculated as the average of expenditure in 2018/19 and 2020/21, as capital expenditure figures were not available for that year.*

The lower capital expenditure in 2020 was due to the impact of the COVID-19 pandemic:

- Disrupted supply chains meant that certain items and commodities were in short supply or unavailable.
- The lockdown regulations placed limits on the workforce allowed on construction sites and affected project delivery at that time.
- City capital programmes were either deferred or cut when budgets were redirected to emergency COVID-19-related expenditures.

Some cities struggled to fund capital expenditure, while others managed to continue to spend on capital in 2020, despite these constraints.

Cities typically fund capital expenditure through a combination of transfers from national government (such as infrastructure grants, of which the largest is the USDG), internally generated funds and borrowing. As Table 21 shows, the proportion of capital expenditure funded by capital transfers fluctuated between 2016/17 and 2020/21 (green indicates growth above and red indicates growth below the average for all cities combined).

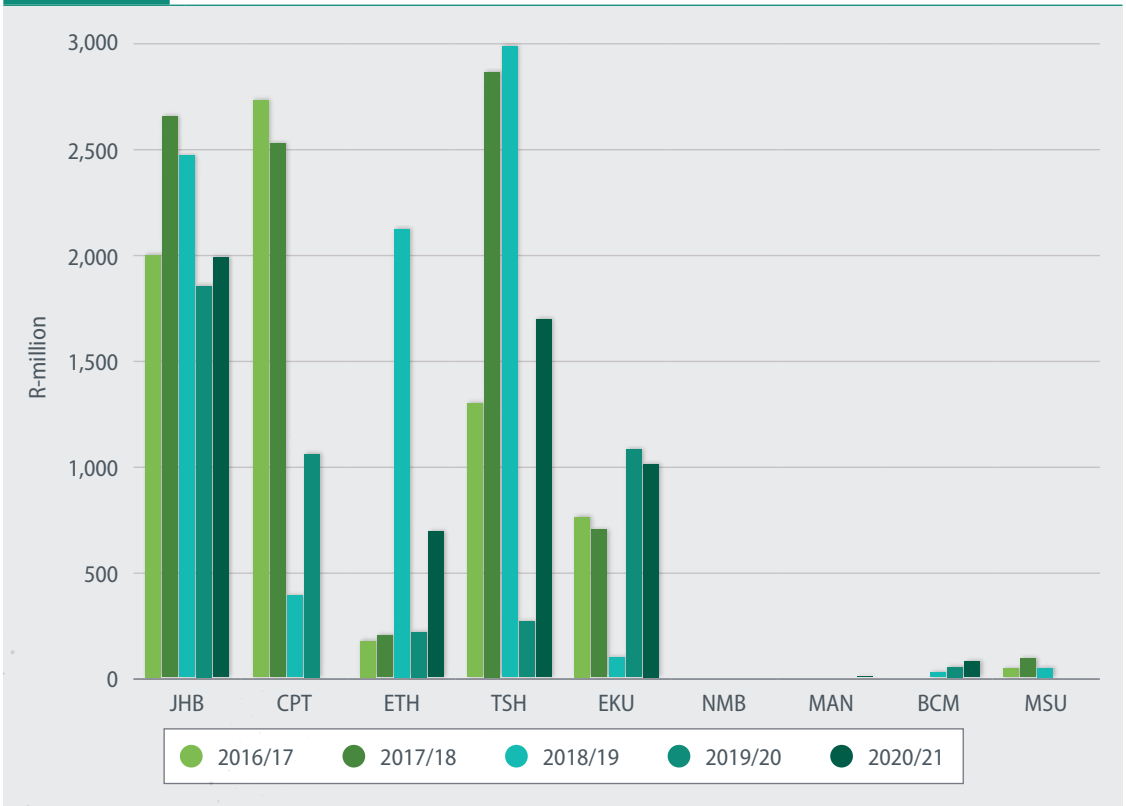
TABLE 21 Proportion of capital expenditure funded through capital transfers (2016/17–2020/21)

	2016/17	2017/18	2018/19	2019/20	2020/21
JHB	40%	37%	35%	53%	47%
CPT	34%	32%	39%	32%	24%
ETH	54%	55%	48%	35%	55%
EKU	38%	34%	33%	40%	52%
TSH	72%	69%	63%	51%	59%
NMB	78%	83%	52%	30%	99%
BCM	52%	63%	51%	58%	61%
MAN	76%	75%	68%	68%	74%
MSU	62%	61%	76%	0%	0%
All cities	48%	46%	44%	41%	47%

Source: National Treasury Local Government Database. Calculations by authors.

The greater dependence of the smaller cities on transfers is in part explained by their low levels (or lack) of borrowing to fund capital expenditure (Figure 9).

FIGURE 9 Capital expenditure financed through borrowing (2016/17–2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

CASH MANAGEMENT

The availability of cash is a key determinant of a city's short-term financial sustainability, as cities need to have sufficient cash to cover their commitments. Between 2016/17 and 2020/21, only three cities (Johannesburg, Cape Town and Nelson Mandela Bay) improved their cash positions. (Table 22: Green indicates growth above and red indicates growth below the average for all cities combined.)

TABLE 22 Cash and cash equivalents (2016/17–2020/21)

	AUDIT OUTCOMES (R-MILLION)					AVERAGE GROWTH RATE
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	3,096	2,240	5,339	5,583	6,645	21.0%
CPT	3,774	5,807	8,713	9,538	8,148	21.2%
ETH	6,597	6,387	6,926	4,695	5,454	–4.6%
EKU	6,001	3,658	3,529	1,669	1,139	–34.0%
TSH	457	562	334	278	209	–17.7%
NMB	1,630	2,610	3,209	3,218	4,208	26.7%
BCM	1,690	1,825	1,172	1,374	1,126	–9.7%
MAN	218	236	128	428	211	–0.7%
MSU	676	513	308	519	361	–14.5%
All cities	24,138	23,838	29,658	27,302	27,502	3.3%

Source: National Treasury Local Government Database. Calculations by authors.

The cash coverage ratio measures whether or not cities have sufficient cash to meet their financial commitments. It shows how many months of operating expenditure can be covered by cash and cash equivalents at the end of the year — National Treasury recommends a cash coverage ratio of three months. Table 23 shows the cash coverage ratios per city (green indicates above three months and red indicates below three months).

TABLE 23 Cash coverage ratios (2016/17–2020/21)

	AUDIT OUTCOMES					CHANGE
	2016/17	2017/18	2018/19	2019/20	2020/21	2016/17–2020/21
JHB	0.8	0.6	1.3	1.2	1.4	0.54
CPT	1.4	2.1	2.9	2.8	2.3	0.82
ETH	2.5	2.3	2.4	1.4	1.6	–0.94
EKU	2.4	1.3	1.1	0.5	0.3	–2.04
TSH	0.2	0.2	0.1	0.1	0.1	–0.13
NMB	2.2	3.6	3.8	3.6	4.2	1.96
BCM	3.6	3.6	2.1	2.1	1.6	–2.00
MAN	0.4	0.4	0.2	0.7	0.3	–0.08
MSU	1.8	1.1	0.7	1.1	0.7	–1.02
All cities	1.5	1.4	1.6	1.3	1.3	–0.22

Source: National Treasury Local Government Database. Calculations by authors.

Between 2016/17 and 2020/21, Buffalo City and Nelson Mandela Bay were the only two cities to have exceeded the recommended three months, although Buffalo City's cash coverage ratio declined substantially from 2018/19. Only two other cities (Johannesburg and Cape Town), aside from Nelson Mandela Bay, managed to improve their cash coverage ratio.

AUDIT OUTCOMES

The Auditor-General of South Africa (AGSA) assesses the quality and accuracy of municipal financial reporting and compliance with financial and performance management requirements. Audit outcomes are often used as an indicator of good governance because they are a test of the extent to which a municipality's financial processes and systems have been effective in ensuring trustworthy financial reporting. The AGSA can give one of several audit opinions:[35]

- A **clean** audit is "the ideal", a financially unqualified opinion with no findings, meaning that the AGSA has found no evidence of material misstatements in the financial statements and that the auditee has complied with the law and reported accurately on its performance objectives.
- A financially **unqualified** opinion with findings is "not bad, but not ideal", meaning that the financial statements are correct and complete and have no material errors, but the AGSA has found problems related to the performance reporting or compliance with the law, or both.
- A financially **qualified** opinion with findings is "worrying", meaning that the auditee did not fully account for its finances, the financial statements contain material misstatements about certain amounts, or insufficient evidence was available for the AGSA to conclude that the amounts are not materially misstated.
- An **adverse** opinion indicates multiple problems with the financial statements, meaning that the correct rules and procedures have not been followed, the information provided is not complete nor accurate, and there are multiple material misstatements.
- A **disclaimed** outcome is the worst outcome, indicating that the auditee cannot produce evidence to support its financial statements.
- An **outstanding** audit indicates that the financial statements were submitted too late for the AGSA to audit or were not submitted at all. This category is considered as bad as a disclaimer.

Table 24 provides a summary of audit outcomes for the cities from 2016/17 to 2020/21.

TABLE 24 City audit outcomes (2016/17–2020/21)

	2016/17	2017/18	2018/19	2019/20	2020/21
JHB	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified
CPT	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified
ETH	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified
EKU	Unqualified	Unqualified	Unqualified	Clean	Clean
TSH	Unqualified	Unqualified	Unqualified	Unqualified	Unqualified
NMB	Qualified	Qualified	Qualified	Qualified	Qualified
BCM	Unqualified	Qualified	Qualified	Qualified	Qualified
MAN	Qualified	Disclaimed	Qualified	Outstanding	Unqualified
MSU	Disclaimed	Adverse	Qualified	Qualified	Unqualified

Source: National Treasury Local Government Database.

- Ekurhuleni was the only city to achieve a clean audit (in 2019/20 and 2020/21).
- Johannesburg, Cape Town, eThekwini and Tshwane maintained unqualified audits.
- Nelson Mandela Bay (since 2016/17) and Buffalo City (since 2017/18) had qualified audits.
- The poor audit outcomes for Mangaung and Msunduzi are symptomatic of underlying administrative and governance issues, which resulted in the cities being placed under administration. However, both cities achieved an unqualified audit in 2020/21, which is encouraging.

35 https://onlineagsa.co.za/the-audit-outcomes-explained/

UNAUTHORISED, IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE

Audit reports indicate expenditure items that are not in accordance with the MFMA, which is the key piece of the legislation that informs municipal financial management practice. The categories of expenditure which contravene the MFMA are:

- **Unauthorised expenditure:** the municipality has overspent on an item contained in the approved budget or has spent money intended for a specific purpose on something else.
- **Irregular expenditure:** the municipality has incurred expenditure that is not in accordance with the MFMA, the MSA or the Public Office-Bearers Act No. 20 of 1998, or that contravenes the supply chain management policy and related bylaws.
- **Fruitless and wasteful expenditure:** the municipality has incurred expenditure that did not yield a desired result or where due diligence was not applied to ensure that the outcome was achieved.

Unauthorised, irregular, fruitless and wasteful (UIFW) expenditure is not necessarily an indication of corruption, although corrupt practices may contribute, but is a reflection of poor financial reporting or unplanned emergency-response spending. Of the three categories, fruitless and wasteful expenditure is most concerning, as it is expenditure that has not added value or advanced the municipality's growth and development (SACN, 2015).

The analysis that follows includes UIFW up to 2019/20, as data for 2020/21 was not available at the time of writing.

Unauthorised expenditure

Between 2016/17 and 2019/20, unauthorised expenditure for the cities as a group increased largely because of high levels in Tshwane, eThekwini and Mangaung in 2019/20. (Table 25: Red indicates increased and green indicates decreased growth in unauthorised expenditure over the four years.)

CATEGORIES OF EXPENDITURE WHICH CONTRAVENE THE MFMA

UNAUTHORISED EXPENDITURE

IRREGULAR EXPENDITURE

FRUITLESS AND WASTEFUL EXPENDITURE

TABLE 25 Unauthorised expenditure (2016/17–2019/20)

	AUDIT OUTCOME (R–MILLION)				AVERAGE ANNUAL GROWTH
	2016/17	2017/18	2018/19	2019/20	2016/17–2019/20
JHB	502	305	481	59	–41%
CPT	–	–	–	7	–
ETH	–	–	–	1,779	–
EKU	–	–	–	–	–
TSH	620	1,138	446	2,249	38%
NMB	432	260	248	30	–49%
BCM	96	160	43	18	–34%
MAN	722	852	1,364	1,165	13%
MSU	400	–	170	565	9%
All cities	2,772	2,716	2,752	5,871	21%

Note: Growth rates are blank for Cape Town, eThekwini and Ekurhuleni because these cities reported zero unauthorised expenditure in 2016/17, and it is not possible to calculate a growth rate from a zero base.

Source: National Treasury Local Government Database. Calculations by authors.

Unauthorised expenditure levels were low in Johannesburg throughout the period and all but eliminated in 2019/20, while Cape Town and Ekurhuleni incurred no or very low unauthorised expenditure over the full period. For eThekwini, the unauthorised expenditure in 2019/20 (4% of total operating expenditure) was related to non-cash items, mainly debt impairment due to the impact of COVID-19. Tshwane and the smaller cities continued to struggle with unauthorised expenditures, with levels particularly high in Mangaung.

Irregular expenditure

Irregular expenditure was the largest component of UIFW expenditure. (Table 26: Red indicates increased and green indicates decreased growth in irregular expenditure over the four years.)

TABLE 26 Irregular expenditure (2016/17–2019/20)

	AUDIT OUTCOME (R-MILLION)				AVERAGE ANNUAL GROWTH
	2016/17	2017/18	2018/19	2019/20	2016/17–2019/20
JHB	706	868	816	1,046	10%
CPT	47	236	950	669	94%
ETH	514	733	2,341	1,072	20%
EKU	591	275	413	147	–29%
TSH	1,825	1,684	2,877	2,530	9%
NMB	8,184	3,053	4,166	1,372	–36%
BCM	584	213	133	302	–15%
MAN	6	95	842	1,600	298%
MSU	150	133	215	52	–23%
All cities	12,606	7,290	12,753	8,791	–9%

Source: National Treasury Local Government Database. Calculations by authors.

Between 2016/17 and 2019/20, irregular expenditure increased in Johannesburg, Cape Town, eThekwini, Tshwane and particularly Mangaung.

Fruitless and wasteful expenditure

In 2016/17, the cities as a group incurred R180-million in fruitless and wasteful expenditure, but from 2017/18, this type of expenditure was eliminated in all cities, which is commendable.

UIFW expenditure as a percentage of operating expenditure

Between 2016/17 and 2019/20, UIFW expenditure dropped from 8.1% to 6.0% of all operating expenditure for the cities as a group. (Table 27: Red indicates an increased and green indicates a decreased percentage of operating expenditure over the four years.)

TABLE 27 UIFW expenditure as a % of operating expenditure (2016/17–2019/20)

	2016/17	2017/18	2018/19	2019/20	DIFFERENCE 2016/17–2019/20
JHB	2.7%	2.6%	2.7%	2.0%	–0.7%
CPT	0.1%	0.7%	2.6%	1.7%	1.5%
ETH	1.6%	2.2%	6.7%	7.0%	5.4%
EKU	2.0%	0.8%	1.1%	0.4%	–1.6%
TSH	8.9%	9.4%	10.3%	12.7%	3.9%
NMB	98.6%	38.4%	43.4%	13.2%	–85.5%
BCM	12.2%	6.2%	2.6%	4.1%	–8.1%
MAN	11.2%	13.1%	28.1%	37.3%	26.1%
MSU	12.2%	2.4%	6.8%	10.9%	–1.3%
All cities	8.1%	5.0%	7.0%	6.0%	–2.1%

Source: National Treasury Local Government Database. Calculations by authors.

Over the four years, Mangaung was the only city with a significant increase (26.1%) in UIFW expenditure as a percentage of total operating expenditure. In contrast, Nelson Mandela Bay brought down its UIFW expenditure substantially, from an extraordinary 98.6% in 2016/17 to 13.2% in 2019/20, which is still the second highest, followed by Tshwane and Msunduzi. For the other five cities, UIFW expenditure represented between 0.4% (Ekurhuleni) and 7.0% (eThekwini) of total operating expenditure in 2019/20.

CHAPTER 4

AFFORDABILITY OF MUNICIPAL BILLS (2016–2021)

Cities are at the heart of delivering basic services to their communities and must balance the need to cover their expenditure with the need to ensure services are affordable for customers. Revenue from tariffs and property rates must cover service-delivery expenditures, and so increasing costs of service provision place upward pressure on municipal bills.

Previous SoCF reports analysed the changes in price and affordability of municipal bills over a two-year period, whereas this report reflects on changes over the most recent municipal term, from 2015/16 to 2020/21. The changes are more dramatic than in previous reports because they are assessed over a longer period and because of two amendments to how affordability is calculated.

- Rather than assuming that household incomes increased by the rate of inflation for all cities, household income estimates from Quantec[36] have been used for the household income growth rate in each city,
- Rather than assuming that property values remained fixed over the period, the Lightstone Residential Property Indices[37] have been used for growth in property values.

These changes improve the extent to which the affordability calculations reflect real changes experienced by households in the different cities.

The chapter starts by analysing the changes in household incomes and in municipal bills over the five years. Municipal bills are then compared to household incomes in order to assess affordability, which in this context is the ability of households to pay their municipal bills.[38]

Affordability affects both access to basic services and collection of revenue. When households are unable to pay, cities are mandated to enforce credit control, which may include disconnecting (or reducing access to) services. In addition, when households are unable to pay their municipal bills, cities cannot collect their budgeted revenue, putting at risk their financial sustainability. To make municipal bills more affordable to consumers, especially those who are vulnerable, cities have introduced various strategies and mechanisms, which are discussed in the chapter.

SERVICE PACKAGES, TARIFFS AND HOUSEHOLD INCOMES

Standard service packages

Four standard service packages, based on the municipal bills for property rates, electricity, water, sewerage and refuse removal, are specified for four 'representative' households of different income levels (Table 28). Applying standard service packages is a pragmatic approach that allows for easy comparison, although some of the nuances and differences among cities are lost. For instance, a 'middle-income' household in Mangaung may live on a property with a different value and consume different quantities of service to a 'middle-income' household in Tshwane.

TABLE 28 Standard service packages

SERVICE PACKAGES	PROPERTY VALUE 2016 (R)	PROPERTY VALUE 2021 (R)	PROPERTY SIZE (M^2)	ELECTRICITY CONSUMPTION (KWH/MONTH)	WATER CONSUMPTION (KL/MONTH)	SOLID WASTE (WEEKLY REMOVAL OF 240L BIN)
TYPE A	210,000	340,000	300	400	20	1
TYPE B	310,000	400,000	400	500	25	1
TYPE C	660,000	800,000	800	800	30	1
TYPE D	1,400,000	1,600,000	1200	1500	40	1

Note: Property values in current rands.

36 https://www.quantec.co.za/easydata/
37 https://lightstone.co.za/house-price-indices
38 This is as opposed to the broader 'willingness to pay' concept, which looks beyond whether a household has the available funds to pay for a bill, to whether they are willing to do so.

As explained in Chapter 3, household municipal bills are affected by increases in property values when the increased values are captured in the GV roll, which cities update every five years, even if the city does not change its cent-in-the-rand rate. In addition, many cities use property value as a mechanism for targeting subsidies, which means that affordability is affected if the subsidy thresholds are not increased in line with property values. For example, eThekwini provides free water to households living on properties below a certain value, while Cape Town, eThekwini, Johannesburg and Ekurhuleni charge for refuse removal based on property value bands. In addition, all municipalities are required to charge zero rates on at least R15,000 of a property's value, with many cities choosing to zero-rate a higher portion of the value.

The following assumptions were made in calculating the municipal bill:

- The property values are based on Lightstone Residential Property Indices,[39] which provide growth rates for low-value, mid-value, high-value and luxury residential property values. The same property value increases are used for all cities.
- The other elements of the packages are calculated based on the assumptions of previous SoCF reports, although drought and rising energy costs have resulted in changing consumption patterns for water and electricity. However, as good data is not available to inform changes to the packages, they have not been revised and include substantial volumes of electricity and water consumed.

Tariffs applied

Tariff books and information on how tariffs are applied are crucial for transparency. Ideally, tariff books should be easily accessible, clearly defined and in languages that most residents can understand. However, this is not always the case. The tariffs used in the analysis were retrieved from city websites, but the accessibility of the tariff books varies significantly across cities. Cities also have multiple tariffs available for different services, which may make it difficult to determine which tariff to apply.

The following assumptions were made:

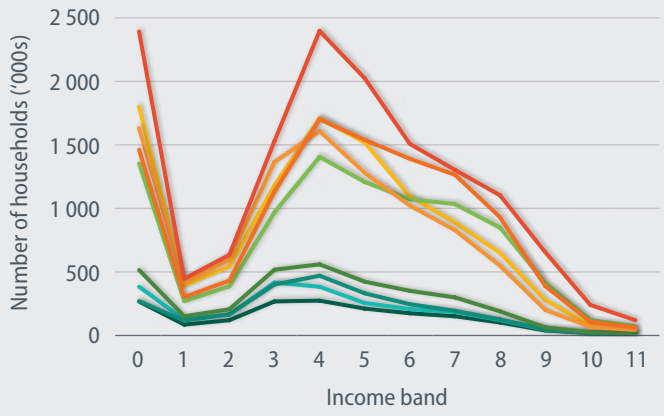
- The rates and service charges are residential tariffs for formal settlements.
- The rates and service charges applied are for households on the standard domestic tariffs and do not take into consideration pensioners, child-headed households and indigent households.
- The water charges are for directly metered connections to the municipal water reticulation system, with no flow restrictions or water consumption management meters, and no drought restriction levels.
- The electricity charges are residential tariffs for customers with single-phase 230V or multi-phase 400/230V connections with a capacity of up to 80A per phase. Where relevant, household types A and B are presumed to have pre-payment meters, while types C and D are assumed to have credit meter arrangements. Type A is assumed to have 20A supply and all other types to have 60A.
- VAT is applied to the service charges but not to property rates. If a service charge does not specify that it includes VAT, it is assumed to exclude VAT and 15% VAT is added to the charge.

39 https://lightstone.co.za/house-price-indices

Benchmarked household incomes

A representative household income is linked to each standard service package. Benchmarked household income categories are created using the distribution of household incomes from the 2011 Census, which remains the most recent source of detailed household income data at municipal level. As Figure 10 shows, the distribution of household income differs across the nine cities.

FIGURE 10 Distribution of household incomes



Income bands: monthly income (Rands)

0	0	7	12,801–25,600
1	1–400	8	25,601–51,200
2	401–800	9	51,201–102,400
3	801–1,600	10	102,401–204,800
4	1,601–3,200	11	204,801+
5	3,201–6,400		
6	6,401–12,800		

Source: Statistics South Africa Census 2011.

The analysis focuses on bands 5 to 8. A benchmark household income for each of these bands is connected with the relevant service package (Table 29).

TABLE 29 Monthly income distribution (2011) and benchmarked household incomes (2012)

INCOME BAND	INCOME RANGE 2011 (R/MONTH)	2012 BENCHMARK (R/MONTH)	ASSOCIATED SERVICE PACKAGE
5	3,201–6,400	6,000	A
6	6,401–12,800	12,000	B
7	12,801–25,600	24,000	C
8	25,601–51,200	48,000	D

HOUSEHOLD INCOMES CAN BE DIVIDED INTO THREE GROUPS:

1

INCOME BANDS 0–4
(Households with incomes below R3,200 per month in 2011 rands)

ACCOUNT FOR AROUND 53% OF ALL CITY HOUSEHOLDS.
According to city indigent policies, most of these households would not be liable for any municipal taxes and service charges, as long as they keep within determined consumption limits.

2

INCOME BANDS 5–8
(Households with incomes of R3,200–R51,200 per month in 2011 rands)

ACCOUNT FOR 42% OF ALL CITY HOUSEHOLDS.
These households are liable for rates and service charges.

3

INCOME BANDS 9–11
(Households with incomes above R51,201 per month in 2011 rands)

ACCOUNT FOR JUST 5% OF ALL CITY HOUSEHOLDS.
These households are liable for rates and service charges and have relatively high incomes, and so affordability is likely to be less of a constraint.

AFFORDABILITY IS A FUNCTION OF THE SIZE OF THE MUNICIPAL BILL AND THE HOUSEHOLD INCOME.

CHANGES IN HOUSEHOLD INCOMES

Affordability is a function of the size of the municipal bill and the household income. To determine affordability in 2016 and 2021, the changes in household income since the 2011 census needed to be estimated. In previous SoCF reports, household incomes were assumed to grow by the CPI every year, which was a pragmatic approach given the lack of reliable income data. However, this approach is likely to overstate incomes, given the impact of COVID-19 on incomes (as found in surveys such as that of National Income Dynamics[40]). Therefore, Quantec's estimates of household income growth are used. These are estimates, not data, that are compiled from available Statistics SA survey data and data on changes in gross national income in the national accounts. Although these estimates are unlikely to be completely accurate, they give a more accurate picture than CPI alone (Table 30).

TABLE 30 Changes in household income per city (2011–2016 and 2016–2021)

CITY	AVERAGE ANNUAL GROWTH IN HOUSEHOLD INCOME	
	2011–2016	2016–2021
CPT	5.6%	2.2%
NMB	6.9%	3.7%
BCM	6.9%	4.2%
MAN	6.5%	3.4%
MSU	6.3%	2.6%
ETH	6.2%	2.6%
EKU	5.3%	1.6%
JHB	5.0%	1.3%
TSH	5.4%	1.9%
All	5.7%	2.1%
CPI	5.6%	4.5%

Source: Authors' calculations based on Quantec EasyData RPOP and RIES estimates

As Table 31 shows, in the second term (2016–2021), income growth varied across the cities. It was low in the Gauteng cities but relatively high in the smaller metros (Buffalo City, Nelson Mandela Bay and Mangaung). This means that, for example, affordability in Johannesburg is likely to have come under greater pressure than in Buffalo City, even if the municipal bill in both metros increased at the same rate.

40 http://www.nids.uct.ac.za/

THE COMPOSITION OF MUNICIPAL BILLS IN 2021

Cities make different strategic decisions to balance property rates and service charges, through how they structure service charges and the mechanisms they use to make municipal bills affordable, such as rebates and exemptions. For instance, one city may offer inexpensive property rates due to high exemption values, while another may make water charges less expensive by not charging a fixed water levy. Households experience all these decisions through a municipal bill for the full package of services.

Table 31 shows the average composition of the municipal bill across the nine cities for the four standard service package types, while Table 32 shows the contribution of each item to the total municipal bill. It should be noted that previous SoCF reports presented all bills in 2012 rands, to allow for comparability between periods, whereas this report calculates the bills in 2021 rands, to provide a closer representation of what the bills look like today.

TABLE 31 Average composition of municipal bill by package for the nine cities (in 2021 rands)

SERVICE PACKAGE	A	B	C	D
Property rates	186	237	582	1,270
Electricity charges	789	1,028	1,695	3,310
Electricity basic levy	5	26	214	214
Water charges	528	694	880	1,360
Water basic levy	69	69	69	69
Sanitation	198	269	370	501
Solid waste	146	171	205	236
Total	1,922	2,493	4,015	6,961

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

TABLE 32 Price of item as a percentage of total bill

SERVICE PACKAGE	A	B	C	D
Property rates	10%	10%	14%	18%
Electricity consumption	41%	41%	42%	48%
Electricity basic levy	0%	1%	5%	3%
Water consumption	27%	28%	22%	20%
Water basic levy	4%	3%	2%	1%
Sanitation	10%	11%	9%	7%
Solid waste	8%	7%	5%	3%
Total	100%	100%	100%	100%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

- Electricity charges (including the basic levy) represent between 41% (for Type A) and 48% (for Type D) of the household municipal bill. Types A and B households are assumed to be on prepaid (not credit) electricity meters, which explains their lower electricity basic levies. Buffalo City, Ekurhuleni, Johannesburg and Msunduzi all have a basic electricity levy in their tariff for credit meters, but not for prepaid meters, whereas Cape Town, eThekwini, Tshwane and Mangaung do not have basic electricity levies. Nelson Mandela Bay has a single electricity tariff that applies across all packages and introduced a basic levy only in 2020/21.
- Water charges (including the basic levy) represent between 31% (for Type A) and 21% (for Type D) of the household municipal bill. eThekwini, Mangaung and Msunduzi have had basic water levies since 2015/16, while Cape Town and Tshwane introduced them in 2020/21.
- The portion of the bill going towards property rates and electricity is greater for higher service packages (Types C and D). The reverse is true for water charges, sanitation and solid waste, which make up a smaller proportion of higher service packages.

Cities take different approaches to charging for sanitation and solid waste.

- Cape Town, Ekurhuleni, eThekwini and Tshwane all charge for sanitation based on the volume of water consumed with some return flow applied to estimate which proportion of water consumed is returned to the sewer.
- Buffalo City and Johannesburg levy fixed charges that increase based on property size.
- Mangaung levies a cent-in-the-rand rate based on property value.
- Msunduzi charges a single flat amount for all customers.

For solid waste, Cape Town, Ekurhuleni, eThekwini and Johannesburg levy fixed charges that increase based on property value bands, while Mangaung's fixed charges are based on property size. Tshwane, Msunduzi and Buffalo City charge a single fixed amount for all customers.

There are significant variations between cities, as a comparison of eThekwini and Mangaung shows (Table 33).

TABLE 33 Composition of municipal bills by package for eThekwini and Mangaung (2021)

	ETH				MAN			
	A	B	C	D	A	B	C	D
Property rates	11%	11%	18%	22%	11%	11%	15%	17%
Electricity consumption	39%	40%	42%	44%	49%	49%	51%	53%
Electricity basic levy	0%	0%	0%	0%	0%	0%	0%	0%
Water consumption	28%	29%	24%	23%	27%	28%	21%	17%
Water basic levy	16%	13%	8%	5%	2%	2%	1%	0,6%
Sanitation	5%	5%	4%	4%	7%	7%	8%	9%
Solid waste	2%	2%	4%	3%	4%	4%	4%	3%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

- eThekwini charges no **property taxes** on any property up to R230,000 and zero-rates the first R120,000 of properties valued above R230,000, whereas Mangaung's zero-rates properties up to R80,000 only. However, while eThekwini offers a higher rebate, it also levies a higher cent-in-the-rand rate, which results in property rates being higher in eThekwini than in Mangaung.
- **Electricity** is the largest share of the bill in both cities. Neither eThekwini nor Mangaung charge a basic levy for electricity. In eThekwini, the electricity tariff has a single rate per kWh for all consumption levels, while in Mangaung, tariffs have two blocks, with a higher rate charged for consumption above 350kWh.
- Both cities have a basic **water** levy, which is much higher in eThekwini than in Mangaung. This makes water charges in eThekwini highly regressive[41], comprising 44% of the bill for Type A and only 28% for Type D households.
- eThekwini charges a volumetric fee for **sanitation**, linked to water consumption, while Mangaung calculates sanitation charges based on the property value.
- eThekwini charges for **solid waste** removal based on property value, with no charge for properties valued at R250,000 or less, whereas Mangaung charges based on property size (for all properties).

Increasing prices of municipal bills

As Table 34 shows, the total price of the municipal bill varies significantly across cities and packages, ranging from R1,305 for the Type A package in Johannesburg to R7,448 for the Type D package in Buffalo City (in 2021 rands).

TABLE 34 Price of municipal bill for the service packages, ranked by city (in 2021 rands)

A		B		C		D	
JHB	1,305	MAN	2,132	MAN	3,474	MAN	6,382
MAN	1,670	JHB	2,134	NMB	3,718	EKU	6,645
EKU	1,793	EKU	2,199	EKU	3,863	NMB	6,882
NMB	1,853	NMB	2,323	CPT	3,878	Average	6,958
Average	1,919	Average	2,490	TSH	3,907	MSU	6,965
CPT	1,983	CPT	2,571	ETH	4,009	CPT	6,973
TSH	2,055	TSH	2,580	Average	4,012	TSH	7,009
ETH	2,163	ETH	2,630	JHB	4,227	ETH	7,145
BCM	2,201	BCM	2,752	BCM	4,426	JHB	7,169
MSU	2,250	MSU	3,088	MSU	4,603	BCM	7,448
Highest as % of lowest	172%		145%		132%		117%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

- Type A package is cheapest in Johannesburg.
- Types B, C and D packages are cheapest in Mangaung.
- Types A, B and C packages are most expensive in Msunduzi.
- Type D package is most expensive in Buffalo City.

41 Charging those on lower incomes a proportionally greater amount

Growth in the price of service packages

Table 35 reflects the real growth in the price of the municipal bill for all household packages.

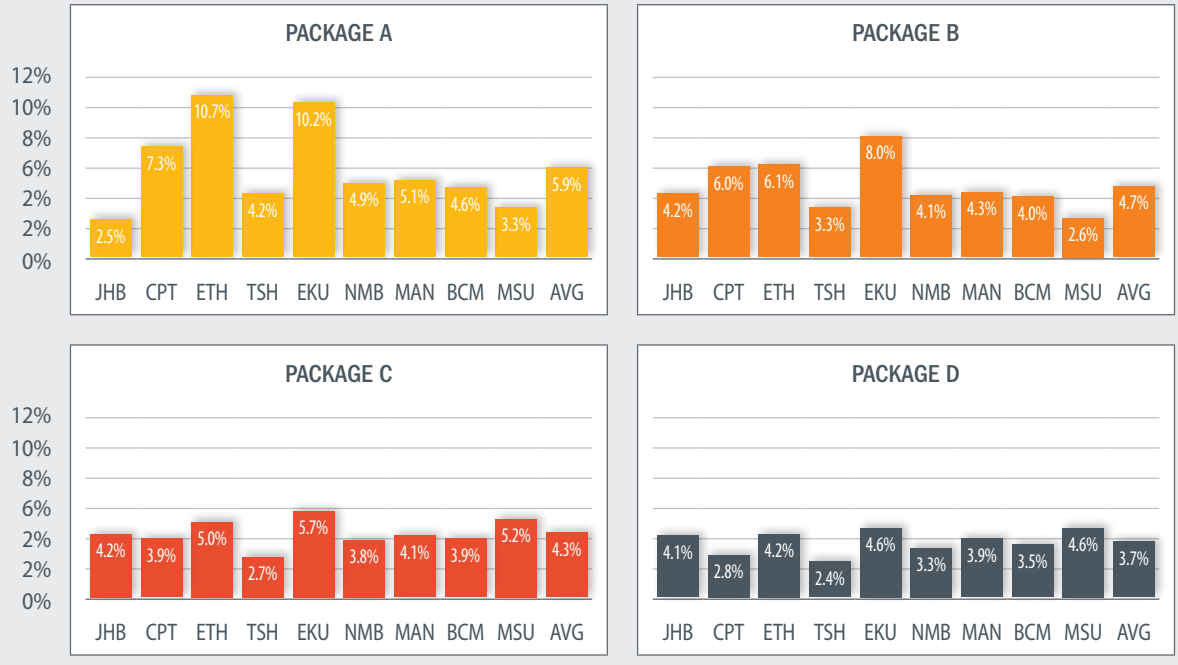
TABLE 35 Average annual real growth in the price of service packages in 2021 rands (2016–2021)

CITY	A	B	C	D
JHB	2.5%	4.2%	4.2%	4.1%
CPT	7.3%	6.0%	3.9%	2.8%
ETH	10.7%	6.1%	5.0%	4.2%
TSH	4.2%	3.3%	2.7%	2.4%
EKU	10.2%	8.0%	5.7%	4.6%
NMB	4.9%	4.1%	3.8%	3.3%
MAN	5.1%	4.3%	4.1%	3.9%
BCM	4.6%	4.0%	3.9%	3.5%
MSU	3.3%	2.6%	5.2%	4.6%
Average	5.9%	4.7%	4.3%	3.7%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

Between 2016 and 2021, Type A packages increased the most in all cities except for Johannesburg and Msunduzi, where Types C and D packages grew at a higher rate than Type A packages. This was because of a significant increase in the zero-rated property value in Johannesburg and to a substantial restructuring of Msunduzi's electricity tariff (discussed below).

FIGURE 11 Average real growth in the price of service packages (2016–2021)



Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

Between 2016 and 2021, the growth in municipal bills was regressive, with lower income households (Type A) experiencing higher growth in their bills than higher income households (Type D).

Sources of growth in the price of service packages

Tables 36 to 39 show the growth in different items of the service packages between 2016 and 2021.

TABLE 36 Average annual growth in property rates bills in 2021 rands (2016–2021)

	A	B	C	D
JHB	–100.0%	–14.5%	–0.4%	0.9%
CPT	22.2%	–9.1%	–5.8%	–5.9%
ETH	17.4%	6.1%	2.8%	1.1%
TSH	3.3%	–2.3%	–1.4%	–1.7%
EKU	25.9%	9.3%	4.9%	3.0%
NMB	7.7%	2.5%	1.1%	–0.1%
MAN	15.7%	8.3%	6.4%	5.0%
BCM	15.3%	9.8%	8.3%	7.0%
MSU	15.9%	6.5%	3.7%	2.0%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

- Johannesburg significantly increased the zero-rated property value, from R200,000 to R350,000, while the cent-in-the-rand property rate increased by approximately the CPI. The result is negative or very low growth in property rates bills across all bands.
- Cape Town also significantly increased the zero-rated property value, from R200,000 to R300,000, but reduced its cent-in-the-rand rate. The result is a decrease in property rate bills, except for Type A packages. The large increase in the zero-rated portion did not keep pace with the assumed increase in property value, and so the bill increased from R9 to R17. While this is a large percentage, it is off a low base and thus small in rand value.
- Tshwane also increased the zero-rated property value over the period, from R75,000 to R100,000, but kept the cent-in-the-rand rate increase below inflation, resulting in low or negative growth in property rates bills.
- Mangaung increased the zero-rated portion from R70,000 to R80,000, but also significantly increased the cent-in-the-rand rate. The result is a relatively large increase in property rates bills compared to the other cities.

INCREASE IN THE ZERO-RATED PROPERTY VALUE

JOHANNESBURG
R200,000
▼
R350,000

CAPE TOWN
R200,000
▼
R300,000

TSHWANE
R75,000
▼
R100,000

MANGAUNG
R70,000
▼
R80,000

Table 37 shows the average rate of growth in electricity bills between 2016 and 2021.

TABLE 37 Average annual growth in electricity bills in 2021 rands (2016–2021)

	A	B	C	D
JHB	2.6%	2.6%	2.6%	3.0%
CPT	2.1%	2.1%	2.1%	2.1%
ETH	2.9%	2.9%	2.9%	2.9%
TSH	2.2%	2.3%	2.5%	2.7%
EKU	3.4%	3.4%	3.0%	3.0%
NMB	4.1%	3.9%	3.6%	3.1%
MAN	2.7%	2.8%	2.7%	2.7%
BCM	1.3%	1.3%	1.2%	1.2%
MSU	–2.5%	–0.9%	5.6%	4.7%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

- Between 2015/16 and 2020/21, Msunduzi restructured their electricity tariffs substantially. In 2015/16, the city applied one domestic electricity tariff to all domestic customers that included a basic charge per month, a per ampere charge and an energy charge per kWh. By 2020/21, a suite of electricity tariffs had been introduced, including some prepaid options with no basic levy. As a result, electricity bills decreased for Types A and B but increased for Types C and D.
- Nelson Mandela Bay introduced a basic electricity levy over the period, which drove the high increases, especially for Types A and B.
- The low increase in Buffalo City was due to relatively small increases in the basic levy and consumption charges applied, not to any tariff restructuring.

Table 38 shows the growth in water and sanitation bills for the period.

TABLE 38 Average annual growth in water and sanitation bills in 2021 rands (2016–2021)

	WATER CHARGES				SANITATION CHARGES			
	A	B	C	D	A	B	C	D
JHB	11.0%	8.8%	7.9%	6.3%	6.6%	6.6%	6.6%	6.6%
CPT	18.9%	13.9%	11.2%	9.9%	10.7%	9.1%	7.5%	6.3%
ETH	16.6%	9.6%	9.5%	9.3%	25.6%	7.9%	7.6%	7.1%
TSH	7.8%	6.4%	5.9%	6.2%	9.2%	7.2%	5.6%	3.4%
EKU	15.0%	13.1%	12.0%	10.6%	20.2%	17.5%	16.4%	14.5%
NMB	5.1%	5.5%	6.9%	8.1%	3.1%	3.1%	3.1%	3.1%
MAN	4.7%	4.9%	5.0%	5.4%	14.4%	8.8%	7.4%	6.2%
BCM	4.8%	4.8%	4.8%	4.8%	6.4%	6.5%	6.5%	6.5%
MSU	6.2%	6.3%	6.4%	7.5%	1.5%	1.5%	1.5%	1.5%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

The highest growths in water charges were in Cape Town, Ekurhuleni and eThekwini, all of which made changes to their provision of free basic water.

- Cape Town and Ekurhuleni withdrew the 6kl allocations of free basic water in the standard domestic tariffs.
- eThekwini reduced the allocation of free water from 9kl to 6kl over the period (but only to properties valued at less than R250,000).
- Cape Town and Tshwane introduced basic water levies, while eThekwini substantially increased the size of its basic water levy.

In Cape Town, Ekurhuleni and eThekwini, sanitation tariffs are based on the volume of water consumed, and so the withdrawal of the free basic water allocation also resulted in increased sanitation charges.

Mangaung introduced a minimum sanitation charge of R123.71, which explains the rapid increase in sanitation tariffs for Types A and B. Previously, sanitation charges were based on property values, which meant that low-value properties paid very little for sanitation.

Table 39 shows the growth in solid waste bills.

TABLE 39 Average annual growth in solid waste bills in 2021 rands (2016–2021)

	A	B	C	D
JHB	–100.0%	–1.2%	6.5%	8.8%
CPT	1.6%	10.2%	1.6%	1.6%
ETH	0.0%	4.5%	4.5%	4.5%
TSH	2.7%	2.7%	2.7%	2.7%
EKU	6.1%	1.7%	1.7%	1.7%
NMB	5.8%	5.8%	5.8%	5.8%
MAN	3.9%	3.9%	4.2%	4.4%
BCM	4.8%	4.8%	4.8%	4.8%
MSU	1.5%	1.5%	1.5%	1.5%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

- Cape Town significantly increased the value of properties eligible for a 100% rebate on solid waste charges from R100,000 to R300,000. In so doing, the city aligned its solid waste rebate to the zero-rated value of property used to calculate property rates.
- Johannesburg also increased the value of properties eligible for zero solid waste charges, from R200,000 to R350,000, to align with the adjusted zero-rated property value.

AFFORDABILITY OF MUNICIPAL BILLS

This section compares the bill as a percentage of income to an affordability threshold across all cities.

Price of service packages relative to household incomes

To measure the change in the affordability of municipal bills, the prices of the four service packages are compared with the benchmark household real incomes in 2021 rands (Tables 40 to 43). In these tables, green indicates growth below and red indicates growth above the average rate for all cities combined, while the 'Change' column shows the increase or decrease between 2016 and 2021. A positive 'change' value shows that affordability worsened because the bill increased as a percentage of income.

TABLE 40 Price of package A as a % of benchmark incomes (2016 and 2021)

A	2016	2021	CHANGE
JHB	12.8%	16.8%	3.9%
MAN	13.7%	18.3%	4.6%
NMB	15.1%	19.7%	4.6%
EKU	12.2%	22.5%	10.3%
BCM	18.2%	22.8%	4.6%
Average	15.8%	23.1%	7.4%
CPT	15.2%	23.9%	8.7%
ETH	13.9%	25.0%	11.1%
TSH	18.3%	25.2%	6.9%
MSU	20.3%	25.8%	5.6%

TABLE 41 Price of package B as a % of benchmark incomes (2016 and 2021)

B	2016	2021	CHANGE
MAN	9.1%	11.7%	2.6%
NMB	9.9%	12.4%	2.5%
JHB	9.7%	13.7%	4.0%
EKU	8.3%	13.8%	5.5%
BCM	11.7%	14.3%	2.5%
Average	10.8%	15.0%	4.2%
ETH	10.4%	15.2%	4.7%
CPT	10.4%	15.5%	5.0%
TSH	12.0%	15.8%	3.8%
MSU	14.4%	17.7%	3.3%

TABLE 42 Price of package C as a % of benchmark incomes (2016 and 2021)

C	2016	2021	CHANGE
MAN	7.5%	9.5%	2.1%
NMB	8.0%	9.9%	1.9%
BCM	9.5%	11.5%	2.0%
ETH	8.4%	11.6%	3.2%
CPT	8.7%	11.7%	2.9%
TSH	9.3%	12.0%	2.6%
EKU	8.0%	12.1%	4.0%
Average	8.8%	12.1%	3.3%
MSU	9.5%	13.2%	3.7%
JHB	9.6%	13.6%	4.0%

TABLE 43 Price of package D as a % of benchmark incomes (2016 and 2021)

D	2016	2021	CHANGE
MAN	6.9%	8.7%	1.8%
NMB	7.6%	9.2%	1.6%
BCM	8.1%	9.7%	1.5%
MSU	7.4%	10.0%	2.6%
ETH	7.8%	10.3%	2.6%
EKU	7.3%	10.4%	3.1%
Average	7.9%	10.5%	2.6%
CPT	8.3%	10.5%	2.2%
TSH	8.5%	10.8%	2.2%
JHB	8.1%	11.5%	3.4%

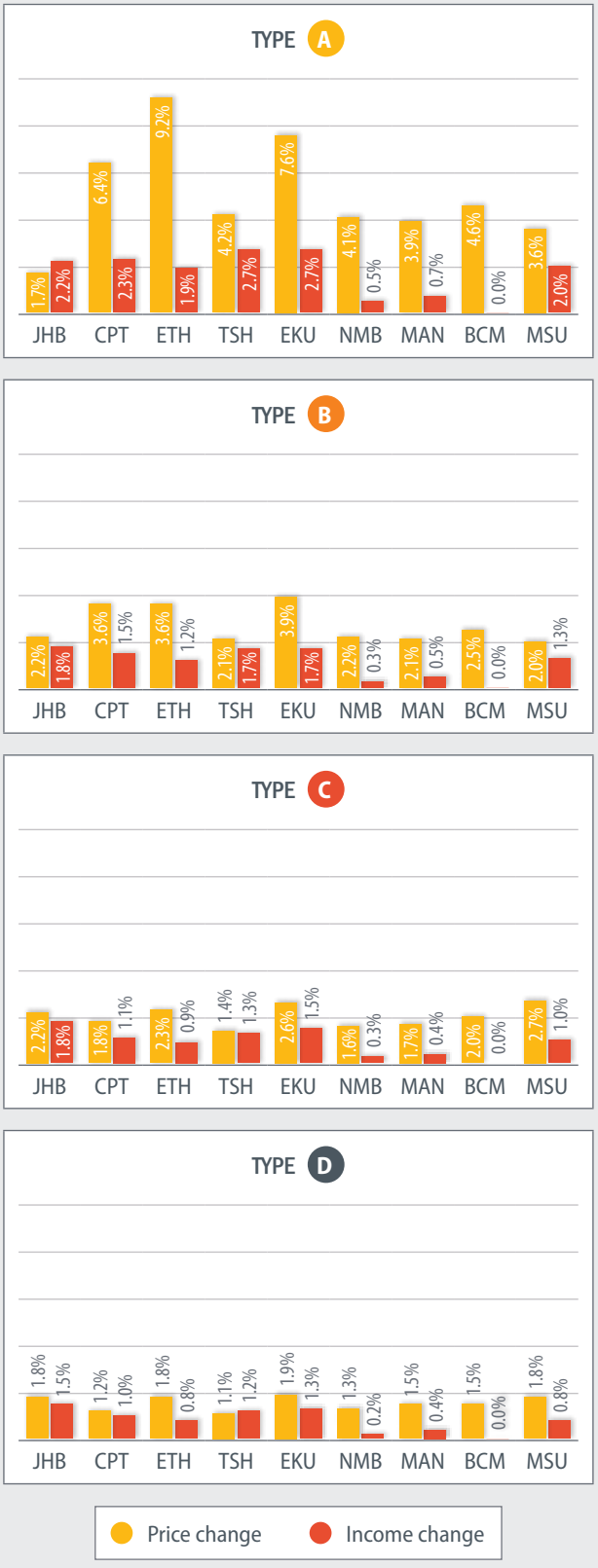
Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

Between 2016 and 2021, municipal bills became less affordable for all packages in all cities, but the impact was greatest on lower-income households. The decline in affordability was most significant for the Type A service packages, i.e., for city customers who have relatively low incomes but do not qualify for indigent support. Between 2016 and 2021, a Type A customer went from spending 15.8% to spending 23.1% on average of their income on their municipal bill, an increase of 7.3%. This compares to increases of 4.2% for Type B, 3.3% for Type C and 2.6% for Type D, respectively.

This decline in affordability is due to a combination of declining household incomes and increasing prices (of the municipal bills). The relative impacts of these two factors differ from city to city, as incomes declined more in some cities than others (see Table 30). Figure 12 shows which proportion of the higher municipal bills was due to changes in income and which to changes in price.

The lower impact of income in Buffalo City, Nelson Mandela Bay and Mangaung compared to other cities aligns to the Quantec estimates, which found incomes declined least rapidly in these three cities.

FIGURE 12 Increase in municipal bills as % of household income due to price and income changes (2016–2021)



Source: City tariff books for 2015/16 and 2020/21. Calculations by authors.

AFFORDABILITY THRESHOLDS ARE SOMEWHAT CONTROVERSIAL, AS THEY ARE NORMATIVE AND MAY DIFFER FROM PLACE TO PLACE, OVER TIME AND FOR DIFFERENT INCOME GROUPS.

Identifying municipal bills that are unaffordable

In previous SoCF reports, the affordability of municipal bills was measured using 10% of household income as an affordability threshold. The 2018 SoCF report used data from the Statistics SA Living Conditions Survey 2014/15[42] to support this 10% threshold, which may be somewhat on the low side. Affordability thresholds are somewhat controversial, as they are normative and may differ from place to place, over time and for different income groups. The South African government has not proposed an affordability threshold to be applied, while good analysis on affordability thresholds in South Africa is not available, particularly for the full municipal bill. However, internationally, a well-accepted rule of thumb is that a combined water and sanitation bill should not exceed 5% of income, while thresholds of 10% of income for electricity alone have been applied (Fankhauser & Tepic, 2007). Given that South Africa's Department of Minerals and Energy uses 10% of income as the threshold for determining energy poverty (DME, 2003), a threshold of 15% seems to be more reasonable than the 10% used previously.

Table 44 organises the data from Table 40 to Table 43 differently, to show the change in affordability of municipal bills between 2016 and 2021 using an affordability threshold of 15%. The service packages across cities are ranked from least to most affordable in 2021.

Highlighted in green

More affordable service packages, i.e., representing less than 10% of household income.

Highlighted in yellow

Moderately unaffordable service packages, i.e., representing 10–15% of household income.

Highlighted in orange

Highly unaffordable service packages, i.e., representing more than 15% of household income.

42 https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/608

TABLE 44 Affordability of municipal bills

CITY	PACKAGE TYPE	MUNICIPAL BILL AS % OF BENCHMARK INCOME IN 2016	MUNICIPAL BILL AS % OF BENCHMARK INCOME IN 2021	CHANGE IN AFFORDABILITY SINCE 2016
MSU	Type A	20.3%	25.8%	5.6%
TSH	Type A	18.3%	25.2%	6.9%
ETH	Type A	13.9%	25.0%	11.1%
CPT	Type A	15.2%	23.9%	8.7%
BCM	Type A	18.2%	22.8%	4.6%
EKU	Type A	12.2%	22.5%	10.3%
NMB	Type A	15.1%	19.7%	4.6%
MAN	Type A	13.7%	18.3%	4.6%
MSU	Type B	14.4%	17.7%	3.3%
JHB	Type A	12.8%	16.8%	3.9%
TSH	Type B	12.0%	15.8%	3.8%
CPT	Type B	10.4%	15.5%	5.0%
ETH	Type B	10.4%	15.2%	4.7%
BCM	Type B	11.7%	14.3%	2.5%
EKU	Type B	8.3%	13.8%	5.5%
JHB	Type B	9.7%	13.7%	4.0%
JHB	Type C	9.6%	13.6%	4.0%
MSU	Type C	9.5%	13.2%	3.7%
NMB	Type B	9.9%	12.4%	2.5%
EKU	Type C	8.0%	12.1%	4.0%
TSH	Type C	9.3%	12.0%	2.6%
MAN	Type B	9.1%	11.7%	2.6%
CPT	Type C	8.7%	11.7%	2.9%
ETH	Type C	8.4%	11.6%	3.2%
JHB	Type D	8.1%	11.5%	3.4%
BCM	Type C	9.5%	11.5%	2.0%
TSH	Type D	8.5%	10.8%	2.2%
CPT	Type D	8.3%	10.5%	2.2%
EKU	Type D	7.3%	10.4%	3.1%
ETH	Type D	7.8%	10.3%	2.6%
MSU	Type D	7.4%	10.0%	2.6%
NMB	Type C	8.0%	9.9%	1.9%
BCM	Type D	8.1%	9.7%	1.5%
MAN	Type C	7.5%	9.5%	2.1%
NMB	Type D	7.6%	9.2%	1.6%
MAN	Type D	6.9%	8.7%	1.8%

Source: City tariff books for 2015/16 and 2020/21. Calculations by authors

> IT SHOULD BE NOTED THAT THE PACKAGES ASSUME GENEROUS CONSUMPTION LEVELS FOR WATER AND ELECTRICITY, WHEREAS HOUSEHOLDS ARE LIKELY TO HAVE REDUCED THEIR WATER AND ELECTRICITY USAGE TO MITIGATE THE IMPACT OF RISING MUNICIPAL BILLS AND DECLINING INCOME.

The decline in affordability since 2016 is starkly apparent in Table 45.

- Every package in every city is less affordable in 2021 than in 2016.
- In 2016, only the Type A packages for Msunduzi, Tshwane, Cape Town, Buffalo City and Nelson Mandela Bay were highly unaffordable.
- By 2021, all the Type A packages and most of the Type B packages had become highly unaffordable.
- In 2021, with the exception of Nelson Mandela Bay and Mangaung, the Type A packages in all cities cost more than 20% of household income.
- In 2016, all Types C and D packages were affordable, but by 2021, even these, wealthier, customers are feeling the affordability pinch, with many bills in these categories exceeding 10% of income.

It should be noted that the packages assume generous consumption levels for water and electricity, whereas households are likely to have reduced their water and electricity usage to mitigate the impact of rising municipal bills and declining income.

Certain cities have taken steps to improve affordability. Johannesburg, Cape Town, Tshwane and Mangaung increased the value at which properties are zero-rated. Msunduzi restructured its electricity tariff, which appears to have made electricity bills cheaper for low-volume consumers. However, cities have also taken steps that have had a negative impact on affordability for low-income customers.

- Cape Town, Ekurhuleni and eThekwini withdrew or reduced their free basic water allocations.
- Nelson Mandela Bay introduced electricity levies.
- Cape Town and Tshwane introduced water levies.
- Mangaung introduced a minimum sanitation charge.

Fixed levies are an important mechanism for recovering the fixed costs incurred in providing services. They also provide cities with some financial stability as electricity and water consumption patterns decrease. The introduction of fixed levies demonstrates the delicate balancing act that cities must perform, between recovering costs and ensuring municipal bills are affordable. This balance is more difficult to achieve in a stagnant economic environment.

THE 10-YEAR STORY OF MUNICIPAL FINANCES

This chapter takes a 10-year view of city finances, looking at the last two municipal political terms (2011–2016 and 2016–2021) and drawing out key themes that tell a story about the overall trajectory of city finances. It is not intended to be an exhaustive presentation of all financial trends over the last decade.

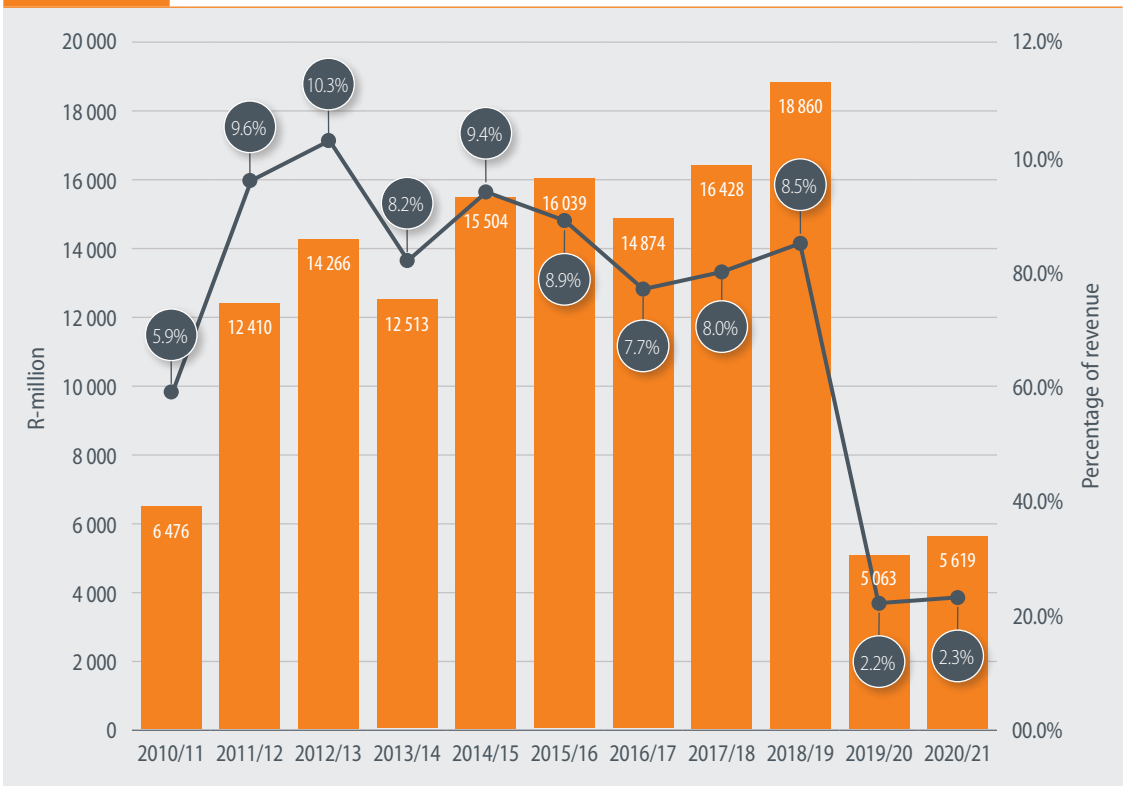
The municipal terms are used as convenient periods for comparison. While some of the differences in performance over the two terms may be as a result of changes in a city's strategic direction, these changes typically take time to have an impact on performance. Therefore, the differences are mostly the result of longer term trends and are unrelated to the political terms of office.

In interpreting financial data over long periods, some caution should be applied. Although the use of a single dataset from National Treasury's local government database provides some consistency in the data, cities may have changed the way in which they report certain data over the years.

OPERATING SURPLUSES

Between 2010/11 and 2015/16, operating surpluses for the cities combined increased from R6.5-billion (5.9% of revenue) to R16.0-billion (8.9% of revenue). However, from 2015/16, surpluses were largely stagnant, reaching R18.9-billion in 2019 (8.5% of revenue) and then, with the impact of COVID-19, collapsing to R5.6-billion (or just 2.3% of revenue) by July 2021 (Figure 13).

FIGURE 13 Operating surpluses for the cities combined (2011–2021)



Source: National Treasury Local Government Database. Calculations by authors.

During the second term, most of the cities displayed a similar pattern of declining operating surpluses, with a significant drop in 2019/20 and 2020/21 (Figure 14). City revenues grew more slowly than city expenditures, which had a negative impact on operating surplus.

FIGURE 14 Operating surpluses as a % of revenue (2010/11–2020/21)

Source: National Treasury Local Government Database. Calculations by authors.

Over the 10 years, several cities were placed under administration in accordance with Section 139 of the Constitution.

- Msunduzi was placed under administration between 2010 and 2011 and again from April 2019, under clause 139(1)(b). A 139(1) intervention occurs when the provincial executive determines that a municipality cannot or does not fulfil an executive obligation in terms of the Constitution or legislation. In such a case, the provincial executive takes over responsibility for the relevant obligation.
- Tshwane was placed under administration in March 2020, under clause 139(1)(c), which requires the municipal council to be dissolved and an administrator to be appointed if exceptional circumstances warrant such a step. The Democratic Alliance (DA) contested the decision and, in October 2021, the Constitutional Court decided that the decision was unlawful and that the MEC should instead appoint a person or a committee to investigate the cause of the deadlock at the municipal council.
- Mangaung was placed under administration in 2019 under clause 139(5)(a) and (c). A 139(5) intervention occurs as a result of a crisis in financial affairs. Mangaung was the only city to be placed under administration explicitly as a result of financial crisis.

Placing these cities under administration did not result in any sustained improvement in financial performance, although audit outcomes did improve (see Chapter 3). This may be because the interventions came too late — once collapse has occurred, it may take 7–10 years to turn around a municipality (Ledger & Rampedi, 2019).

REVENUES

Between 2010/11 and 2020/21, city revenues grew every year but at a slower rate during the second term. Although COVID-19 certainly had an impact in 2019/20 and 2020/21, revenue was growing more slowly prior to COVID-19 (2015/16–2018/19) than between 2010/11 and 2015/16 (Table 45).

TABLE 45 Average annual rates of growth in total city revenues (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	5.2%	7.4%	2.2%	8.6%	5.6%
CPT	9.0%	5.5%	–3.4%	6.8%	3.6%
ETH	6.8%	6.3%	–0.5%	6.3%	6.3%
EKU	7.1%	6.8%	–0.3%	7.4%	6.0%
TSH	6.3%	6.8%	0.6%	9.0%	3.7%
NMB	6.3%	5.7%	–0.6%	5.0%	6.9%
BCM	9.9%	7.5%	–2.4%	3.2%	14.2%
MAN	6.1%	7.3%	1.2%	10.9%	2.0%
MSU	8.0%	7.1%	–0.9%	7.9%	5.9%
All cities	10.4%	6.6%	–3.7%	7.5%	5.3%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

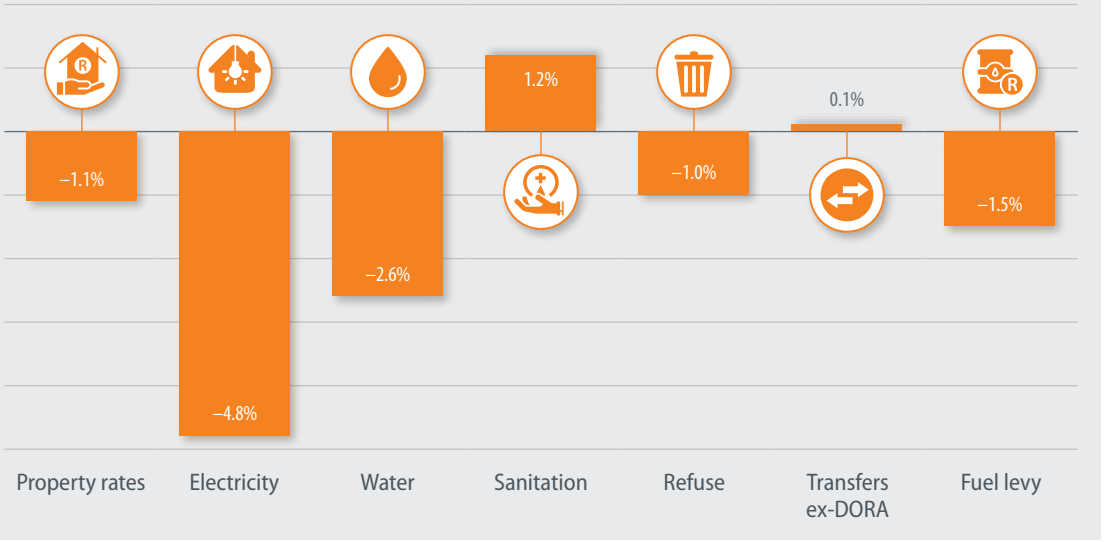
When inflation and population growth are taken into account, city revenues grew more slowly and even declined in some cities. Despite having different sizes and structures, cities converged at a revenue of about R800 per person per month (Figure 15).

FIGURE 15 Total revenue per person per month in 2021 rands (2010/11–2020/21)

Source: National Treasury Local Government Database. Calculations by authors.

Nevertheless, overall city revenues are only just keeping pace with inflation and population growth, with most city revenue streams, especially electricity revenues, coming under pressure during the second term (Figure 16).

FIGURE 16 Change in average annual growth in city revenues between the two terms (all cities combined)



Note: The figure shows the difference in growth between the two periods, and so negative values do not indicate that revenues declined but rather that they grew less rapidly. Positive values indicate that growth was more rapid in the second period.

Source: National Treasury Local Government Database. Calculations by authors.

The following sections unpack the trends in each revenue stream.

Property rates

Property rates revenues grew strongly over the 10 years but slowed during the second term.

TABLE 46 Growth in property rates revenue (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	10.2%	9.9%	−0.3%	15.0%	2.6%
CPT	8.9%	8.3%	−0.6%	11.4%	3.8%
ETH	8.4%	8.2%	−0.2%	10.2%	5.4%
EKU	9.6%	8.5%	−1.1%	11.0%	4.9%
TSH	13.1%	9.3%	−3.7%	9.7%	8.7%
NMB	12.4%	10.8%	−1.6%	12.3%	8.5%
BCM	13.8%	12.9%	−0.9%	14.4%	10.8%
MAN	15.4%	8.0%	−7.4%	14.3%	−0.8%
MSU	9.3%	10.3%	1.0%	8.0%	13.9%
All cities	10.2%	9.1%	−1.1%	11.9%	5.1%
CPI	5.7%	4.2%	−1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

Between 2018/19 and 2020/21, revenues grew very slowly, which could be assumed to be linked to the impact of COVID-19. However, as explained in Chapter 3, rapid growth in property rates revenues is typically linked to the introduction of a new GV roll. Therefore, although COVID-19 may have had some impact, this lower growth is more likely due to the timing of new GV rolls, as none of the cities introduced a new GV in 2020 or 2021. More importantly house prices grow slowly in a sluggish economy, as was the case during Term 2 (Table 47), which affected the property values of the city's rates base.

The slower increase in property values was compounded by decisions taken by city councils to reduce their cent-in-the-rand rate and to expand the zero-rated portion of property values (see Table 36 on page 53). Between 2015/16 and 2020/21, five of the nine cities decreased their cent-in-the-rand rate in real terms (i.e., at a rate below inflation), two cities increased it by the inflation rate, and two (Mangaung and Buffalo City) increased it at a rate above the inflation rate (Table 48).

In general, property rates are a very progressive tax because high-income households, which typically live in high-value properties, pay more rates. Increasing the zero-rated value of properties benefits households living in lower value properties, whereas slow or negative growth in the cent-in-the-rand property rate benefits households living in higher value properties, as property rates make up a larger proportion of their municipal bills.

In Term 2, city councils appear to have taken decisions to protect property owners from high increases in their rates bills in a difficult economic climate, balancing protecting the poor (by increasing the zero-rated portion of property value) and protecting the wealthier revenue base (by keeping cent-in-the-rand increases low). However, it is not possible to quantify accurately the extent to which cities are achieving this balance.

TABLE 47 National GDP and house prices growth (2010/11–2015/16 and 2015/16–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH	
	2010/11–2015/16	2015/16–2020/21
National GDP growth	1.6%	0.1%
House price growth	5.9%	3.7%
CPI growth	5.7%	4.2%

Source: Quantec Easydata for GDP and Lightstone Analytics for house price growth.

TABLE 48 Cent-in-the-rand for residential property rates (2015/16 and 2020/21)

CITY	2015/16	2020/21	AVERAGE ANNUAL GROWTH RATE IN REAL TERMS (2021 RANDS)
JHB	0.904	1.3615	0.0%
CPT	0.688	0.5770	–7.4%
ETH	0.856	1.0520	–1.8%
EKU	0.653	0.8059	0.0%
TSH	1.115	1.2528	–3.5%
NMB	0.613	0.8432	–2.8%
MAN	1.120	1.3200	2.2%
BCM	0.974	1.0416	4.1%
MSU	1.013	1.0440	–0.9%

Note: The table shows the rates for residential properties only, as the rates for other property categories are fixed relative to each other in line with the MPRA, and so the percentage increases introduced in different property categories are the same.

Source: National Treasury Local Government Database. Calculations by authors.

Electricity service charges

During Term 2, the dramatic decline in electricity revenues was the main reason for slower revenue growth in cities (Table 49).

TABLE 49 Growth in revenue from electricity service charges (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	7.5%	3.6%	–3.9%	0.1%	9.1%
CPT	10.4%	4.9%	–5.5%	5.1%	4.6%
ETH	10.0%	4.0%	–6.0%	3.2%	5.1%
EKU	9.3%	5.3%	–4.0%	5.6%	4.9%
TSH	9.0%	6.2%	–2.8%	7.2%	4.7%
NMB	9.7%	1.6%	–8.1%	2.0%	0.9%
BCM	12.9%	2.8%	–10.0%	0.9%	5.8%
MAN	11.7%	6.0%	–5.6%	8.8%	2.0%
MSU	12.0%	5.1%	–6.9%	4.4%	6.1%
All cities	9.4%	4.6%	–4.8%	4.0%	5.4%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

COVID-19 alone is not responsible for the revenue decline in Term 2 because electricity revenues in some cities grew more slowly pre-COVID-19 than post-COVID-19 (Table 49). Other, longer-term factors are at play here. Electricity revenues depend on electricity tariffs and volumes. Eskom's bulk electricity prices increased more slowly during Term 2 than during Term 1, while at the same time, electricity consumption patterns shifted fundamentally, with volumes growing much more slowly. This was due to two reasons:

- Uncertain electricity supply (see Chapter 2) and high Eskom bulk tariff increases, which encouraged customers to become more energy efficient and self-sufficient through reducing their consumption and increasing the uptake of SSEG. Given that this structural, long-term shift in electricity demand is very unlikely to be reversed, what is needed is a fundamental rethink of the role of cities in energy supply and a restructuring of the municipal 'electricity business'.
- Rising levels of non-revenue electricity (NRE), which is the difference between the volume of electricity purchased (from Eskom or other, typically small sources) and the volume of electricity sold to customers. NRE includes technical losses, as a result of, for example, electrical resistance in the network, corona discharge or magnetic forces; and non-technical losses, as a result of unidentified/misallocated electricity use (in particular electricity theft) or inaccurate recording of electricity use.

NERSA provides a benchmark of 10–15% for NRE, but cities have NRE levels that are far above this benchmark and are worsening (Table 50 – red indicates levels above 15%). By 2020/21, only Cape Town, eThekwini and Mangaung were below 15%, while Johannesburg had NRE of close to 30%, an extraordinarily high figure.

Technical losses are inevitable in an electricity distribution system and can be reduced through proper maintenance and renewal of the system. However, reducing non-technical losses requires everyone to be connected to the grid, connections to be metered, billing to be accurate and billed revenues to be collected. In a low-growth economy, the incentives to steal electricity or avoid bills are high. Cities can reduce non-technical electricity losses by locating and removing illegal connections and disconnecting electricity if bills are unpaid. These processes are unpopular but must be supported by city councils, to ensure a culture of payment and the sustainability of the electricity service.

TABLE 50 Non-revenue electricity (2010/11, 2015/16 and 2020/21)

	2010/11	2015/16	2020/21
JHB	20.0%	22.4%	28.9%
CPT	8.9%	11.4%	11.9%
ETH	5.5%	10.7%	11.5%
EKU	3.5%	20.1%	16.2%
TSH	9.3%	19.3%	21.7%
NMB	–	12.5%	20.1%
MAN	7.4%	–	10.0%
BCM	12.4%	14.5%	22.8%
MSU	11.0%	11.8%	22.1%

Note: Municipalities are required to report on levels of electricity and water losses in notes to their AFS, but the format used is very variable. Therefore, the data provided here is the authors' best interpretation of the notes. The blanks in the table indicate where it is not possible to determine the % NRE from the AFS notes.

Source: Notes to city Annual Financial Statements 2010/11, 2015/16 and 2020/21. Calculations by authors.

Water service charges

Revenue from water service charges grew more slowly during Term 2 than during Term 1 for the cities combined, but the picture varies across the cities (Table 51). This is because cities have greater flexibility in setting water tariffs, which are not as strongly regulated as electricity tariffs, while some cities experienced droughts, which affected water demand.

TABLE 51 Growth in revenue from water service charges (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	12.6%	8.6%	–4.0%	12.8%	2.6%
CPT	6.9%	6.8%	–0.1%	10.4%	1.7%
ETH	8.5%	14.8%	6.3%	11.8%	19.5%
EKU	22.1%	8.2%	–13.9%	6.4%	11.1%
TSH	13.7%	6.5%	–7.2%	11.1%	0.0%
NMB	3.0%	17.8%	14.7%	8.8%	32.6%
BCM	16.3%	23.4%	7.1%	5.8%	55.3%
MAN	8.9%	9.7%	0.8%	8.6%	11.4%
MSU	24.5%	5.1%	–19.5%	2.7%	8.7%
All cities	12.3%	9.7%	–2.6%	10.3%	9.0%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

The impact of drought on revenues in Cape Town, Buffalo City and Nelson Mandela Bay has already been discussed in Chapter 3. Water scarcity is undoubtedly leading to some permanent shifts in water demand patterns, especially among high-use domestic customers who are able to reduce water used, for example, for watering gardens or filling swimming pools. However, those who consume lower volumes are less able to reduce water used to meet basic needs. During Cape Town's drought, high-volume consumers were responsible for most of the reductions in water demand, which affected the city's ability to cross-subsidise low-volume consumers who are often charged below the cost-per-kilolitre rate. As explained in Chapter 3, the Department of Water and Sanitation (DWS) requires all cities to use inclining block tariffs (IBTs) for water, which are intended to discourage inefficient water use. Cities use IBTs for cross-subsidisation, charging more per kilolitre for customers that use large volumes. This results in a surplus that can be used to cross-subsidise losses on low-volume consumers.

Although the shift in demand for water has not been as fundamental as for electricity, the trend of households and businesses augmenting their water supplies, primarily through harvesting rainwater and installing boreholes, is likely to continue. In response to this shift, Cape Town has already had to recalibrate its water pricing. Other cities are likely to face similar shifts and, as with their 'electricity business', will need to rethink their 'water business'.

TABLE 52 Non-revenue water levels (2010/11, 2015/16 and 2020/21)

	2010/11	2015/16	2020/21
JHB	39.1%	22.6%	39.4%
CPT	22.2%	12.8%	15.9%
ETH	–	40.7%	48.9%
EKU	29.6%	34.0%	32.7%
TSH	–	–	34.6%
NMB	26.2%	41.4%	40.0%
MAN	–	–	–
BCM	–	41.0%	36.3%
MSU	35.0%	31.0%	29.8%

Note: Municipalities are required to report on levels of electricity and water losses in notes to their AFS, but the format used is very variable. Therefore, the data provided here is the authors' best interpretation of the notes. The blanks in the table indicate where it is not possible to determine the % NRW from the AFS notes.

Source: Notes to city Annual Financial Statements 2010/11, 2015/16 and 2020/21. Calculations by authors.

Cities lose substantial revenue through non-revenue water (NRW). The levels of NRW have been high for decades and do not appear to be reducing, although Cape Town and Msunduzi have reported some improvements. In 2012, "the South African average NRW of 36.8% was similar to the world average", whereas the best performing countries have NRW levels of 7–8% (SACN, 2018: 98).

Unlike NRE, technical losses are often a larger contributor to NRW than non-technical losses. Technical losses include pipe leaks and bursts, reflecting to some extent the declining condition of water infrastructure, while non-technical losses cover incorrect billing and unbilled consumption. Resolving NRW losses requires a sustained programme of pressure management and pipe replacement, alongside improved billing.

Sanitation service charges

For the cities combined, sanitation services charges were the only revenue stream to grow more rapidly during Term 2 than during Term 1. However, as for water charges, the picture varies across cities (Table 53).

TABLE 53 Growth in sanitation service charge revenue (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	7.7%	13.6%	5.9%	14.8%	11.8%
CPT	8.3%	3.0%	–5.3%	5.0%	0.1%
ETH	7.5%	5.3%	–2.2%	4.5%	6.5%
EKU	9.1%	11.3%	2.2%	11.9%	10.4%
TSH	10.7%	11.2%	0.5%	14.5%	6.4%
NMB	8.9%	13.1%	4.2%	10.3%	17.5%
BCM	11.1%	7.1%	–4.0%	3.3%	13.0%
MAN	8.6%	9.4%	0.9%	13.7%	3.4%
MSU*	–	5.7%	–	8.5%	1.5%
All cities	8.8%	10.1%	1.2%	10.9%	8.8%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Note: (*) MSU reported zero sanitation service charges in 2010/11, and so it is not possible to calculate an average annual growth rate for the first term.

Source: National Treasury Local Government Database. Calculations by authors.

These different revenue growth rates are due to cities having greater flexibility in setting sanitation tariffs and taking different decisions related to charging for these services (Table 54).

TABLE 54 Domestic sanitation tariff base and driver of growth in revenue base

	SANITATION TARIFF BASE	DRIVER OF GROWTH IN REVENUE BASE
JHB	Fixed charge in property size bands	Number of properties
CPT	Water volume	Water volumes
ETH	Water volume	Water volumes
EKU	Water volume	Water volumes
TSH	Fixed charge plus water volume	Water volumes + number of customers
NMB	Water volume	Water volumes
MAN	Fixed charge in property size bands	Number of properties
BCM	Cent-in-the-rand on property value	Number of properties and property value
MSU	Single flat rate to all	Number of customers

The city's overall growth and roll-out of services determine the number of properties or customers that can be charged sanitation levies. Sanitation tariffs based on water volumes have a sound rationale (water volumes returned to the sewerage system vary with the water volumes consumed) but are vulnerable to changes in water demand. Therefore, to ensure a more stable revenue base, cities may begin to move towards fixed charges for sanitation.

Refuse removal service charges

The picture for refuse removal service charges differs from city to city (Table 55) because cities take different approaches to tariff increases and have different customer bases.

TABLE 55 Growth in refuse service charge revenue (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	8.5%	12.5%	4.0%	10.6%	15.4%
CPT	2.6%	6.7%	4.1%	9.4%	2.8%
ETH	8.2%	6.8%	–1.4%	9.2%	3.3%
EKU	9.5%	7.6%	–1.9%	11.1%	2.4%
TSH	22.0%	5.8%	–16.2%	14.1%	–5.6%
NMB	3.7%	12.4%	8.8%	10.1%	16.1%
BCM	12.8%	4.3%	–8.6%	–4.3%	18.5%
MAN	73.8%	10.7%	–63.1%	12.6%	8.0%
MSU	–12.9%	5.3%	18.2%	5.7%	4.6%
All cities	9.2%	8.2%	–1.0%	10.4%	5.1%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

Cities do not charge for refuse removal based on waste volumes but on the number of bins removed. All cities levy a fixed charge to domestic customers for refuse removal, with some cities basing the fixed charge on the property value or size.

TABLE 56 Bases for domestic refuse removal tariffs

REFUSE TARIFF BASE	CITIES
Fixed charges in different property value bands	CPT, EKU, ETH, JHB
Fixed charges in different property size bands	MAN
Same fixed charge for all customers	BCM, MSU, NMB, TSH

Operating grants and transfers

For the cities combined, operating grants and transfers grew at a similar rate in Term 1 and Term 2 (Table 57).

TABLE 57 Growth in operating grants and transfers (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	10.8%	12.2%	1.4%	13.4%	10.4%
CPT	16.0%	10.9%	–5.0%	12.0%	9.4%
ETH	8.9%	10.0%	1.1%	10.9%	8.7%
EKU	8.6%	11.6%	3.0%	12.7%	10.0%
TSH	17.9%	11.5%	–6.3%	12.8%	9.7%
NMB	5.4%	6.8%	1.3%	5.7%	8.5%
BCM	6.1%	6.2%	0.2%	5.2%	7.8%
MAN	4.8%	6.5%	1.8%	5.4%	8.2%
MSU	8.4%	8.3%	–0.1%	8.3%	8.4%
All cities	10.4%	10.5%	0.1%	11.2%	9.5%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

Even when adjusted for inflation and population growth, operating grants and transfers grew (Table 58).

TABLE 58 Operating grants and transfers per person (2010/11, 2015/16 and 2020/21)

	TRANSFERS PER PERSON PER YEAR IN 2021 RANDS			AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS
	2010/11	2015/16	2020/21	2010/11–2015/16	2015/16–2020/21	
JHB	667	714	888	1.9%	4.5%	2.5%
CPT	391	553	681	8.9%	4.3%	–4.6%
ETH	679	734	894	1.2%	4.0%	2.9%
EKU	772	776	967	–0.6%	4.5%	5.1%
TSH	429	642	788	6.3%	4.2%	–2.1%
NMB	885	843	930	–0.9%	2.0%	2.9%
BCM	1,052	1,055	1,164	–1.8%	2.0%	3.8%
MAN	1,100	996	1,054	–3.3%	1.1%	4.4%
MSU	728	773	863	–0.1%	2.2%	2.3%
All cities	6,703	7,086	8,230	0.4%	3.0%	2.7%

Source: National Treasury Local Government Database. Calculations by authors.

The Local Government Equitable Share (LGES) dominates the operating grants and transfers.[43] LGES allocations are based on a formula that takes into account the estimated growth in the number of households and changes in the cost-of-service provision. While allocations have grown ahead of inflation, largely due to increases in the estimated costs of providing basic services, the proportion of poor households has remained the same since the 2011 Census. Yet most cities indicate that poor households have grown more rapidly than non-poor households, which means that the LGES allocations may have grown in real terms but not kept up with the need. However, this will not be confirmed until data from Census 2022 becomes available. The inadequacy of the LGES remains the subject of much debate, but the data shows that operating grants and transfers continued to grow strongly even as the national economy and city own revenues slowed down.

Fuel levies

As discussed previously, since 2009/10, the cities (except for Msunduzi) receive a share of fuel levies, based on fuel sales in their municipal areas (Table 59). As data disaggregated by city could only be sourced from 2013/14, no disaggregated growth rate is shown for the first term.

TABLE 59 Growth in fuel levies for various periods between 2010/11 and 2020/21

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	*Disaggregated data by city unavailable*	8.3%	–	6.1%	11.9%
CPT		4.7%	–	7.5%	0.7%
ETH		6.3%	–	3.6%	10.5%
EKU		3.1%	–	4.3%	1.3%
TSH		1.3%	–	1.3%	1.5%
NMB		8.4%	–	9.7%	6.5%
BCM		9.9%	–	11.5%	7.5%
MAN		4.2%	–	5.7%	1.9%
MSU	–	–	–	–	–
All cities	7.2%	5.6%	–1.5%	5.4%	6.1%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Note: Data disaggregated by city was available from 2013/14 only.

Source: Taxation Laws Amendment Acts for various years. Calculations by authors.

The higher growth in Term 1 is mainly due to the fuel levy increasing by 13.7% in 2011/12. In Term 2, slower economic growth would have been expected to lead to a decline in this revenue source because fuel sales are fairly closely linked to economic activity. However, the sluggish economy and COVID-19 do not appear to have negatively affected the growth in fuel levy revenues. In fact, fuel revenues grew at a higher rate post-COVID-19 (2018/19–2020/21) than pre-COVID-19 (2015/16–2018/19).

43 For a detailed analysis of the LGES and how allocations to cities are determined, see the 2020 State of City Finances Report (SACN, 2018).

Other revenues

Cities collect revenue from other sources, including traffic fines, licence fees and interest income. Other revenues are calculated as the difference between total revenue and revenue from property rates, service charges, operating grants and transfers, and fuel levies. Term 1 only shows growth for all the cities combined because fuel levies can only be disaggregated from 2013/14. Other revenues grew very rapidly in Term 1 but declined in Term 2, contracting from 2019/20.

TABLE 60 Growth in other revenues (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	–	2.4%	2.4%	9.8%	–7.8%
CPT	–	1.5%	1.5%	1.3%	1.8%
ETH	–	–2.9%	–2.9%	1.8%	–9.5%
EKU	–	4.6%	4.6%	4.7%	4.5%
TSH	–	2.5%	2.5%	8.3%	–5.5%
NMB	–	–5.3%	–5.3%	–3.6%	–7.7%
BCM	–	–0.7%	–0.7%	–11.1%	17.2%
MAN	–	8.9%	8.9%	26.5%	–13.0%
MSU	–	13.5%	13.5%	33.9%	–11.5%
All cities	14.9%	1.6%	–13.3%	4.9%	–3.2%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

REVENUES IN BRIEF

- Over the two administrative terms, operating revenues came under increasing pressure.
- The changing patterns in electricity demand led to significantly slower growth in revenue from electricity charges.
- Only two revenue streams (for the cities combined) did not decline in growth between the two terms: sanitation service charges and operating grants and transfers.
- Operating revenues were influenced by the factors described in Chapter 2, i.e., a stagnant economy that typically results in property prices increasing more slowly, dampening growth in property rates revenue; and instability at Eskom and droughts in certain cities shifting patterns of demand for electricity and water respectively.
- City council decisions about increases in rates and tariffs also affected revenues. Most councils have chosen to keep the cent-in-the-rand increases low for property rates, recognising the impact of a stagnant economy on households and being unwilling to upset their voter base.
- Cities are performing a delicate balancing act between keeping bills affordable for households and collecting enough income for the city.

OPERATING EXPENDITURE

Total operating expenditures grew more slowly in Term 2 than in Term 1 (Table 61).

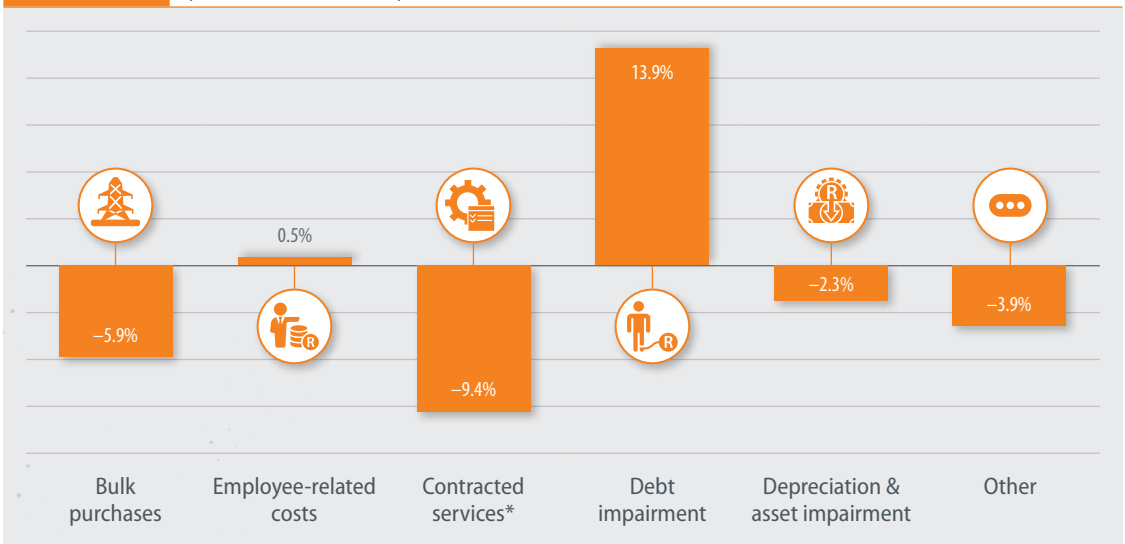
TABLE 61 Growth in total operating expenditure (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	8.6%	7.4%	–1.2%	6.2%	9.1%
CPT	10.2%	7.5%	–2.7%	6.1%	9.5%
ETH	10.2%	8.0%	–2.1%	7.7%	8.5%
EKU	9.1%	8.2%	–0.9%	10.6%	4.7%
TSH	13.4%	6.6%	–6.7%	6.3%	7.1%
NMB	6.7%	6.6%	0.0%	5.1%	9.0%
BCM	11.2%	8.4%	–2.7%	7.5%	10.0%
MAN	12.9%	7.8%	–5.1%	12.8%	0.7%
MSU	13.1%	6.6%	–6.5%	10.0%	1.7%
All cities	10.0%	7.5%	–2.5%	7.4%	7.6%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

Only two expenditure categories grew more rapidly in Term 2 than in Term 1: employee-related costs and debt impairment (Figure 17).

FIGURE 17 Change in average annual growth in operating expenditures between the two terms (all cities combined)



Note: (*) Johannesburg is excluded from contracted services because the city did not report separately on this item in 2020 or 2021, and so calculating the change was not possible.

Source: National Treasury Local Government Database. Calculations by authors.

The following sections unpack the trends in each expenditure category.

Bulk purchases

Expenditures on bulk purchases grew much more slowly in Term 2 than in Term 1 (Table 62). Bulk purchases include both bulk electricity and the purchase of bulk water from water boards and raw water from the DWS.

TABLE 62 Growth in bulk purchases expenditure (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	11.0%	5.9%	–5.1%	6.3%	5.3%
CPT	11.8%	3.8%	–8.0%	2.3%	6.1%
ETH	11.5%	8.4%	–3.1%	6.6%	11.1%
EKU	12.6%	6.2%	–6.5%	4.6%	8.5%
TSH	13.8%	8.0%	–5.8%	7.4%	8.9%
NMB	12.4%	5.6%	–6.9%	4.7%	7.0%
BCM	13.1%	2.7%	–10.4%	4.5%	0.1%
MAN	9.9%	3.7%	–6.2%	14.6%	–10.8%
MSU	12.6%	1.4%	–11.2%	3.8%	–2.1%
All cities	12.0%	6.1%	–5.9%	5.7%	6.8%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

The changes in Eskom's bulk electricity price are the main reason for the different growth rates between terms. In 2012, the bulk electricity price increased by 26.7%, which contributed to the high average annual increase in Term 1, while in 2018, bulk prices increased by just 0.3%, which brought down the annual average for Term 2. However, cities cannot rely on bulk electricity prices continuing to grow more slowly, as Eskom has applied for a 20.5% increase in 2022. Water bulk tariffs will also increase in 2022/23, by between 3.6% (Umgeni Water Board which supplies eThekwini and Msunduzi) and 8.8% (Rand Water which supplies Gauteng metros), despite SALGA recommending lower increases than those proposed by the water boards. This comes after the DWS stipulated a 0% increase in water board tariffs for one year in 2020/21. However, following a court case that found that the DWS minister has no right to reduce water tariffs, the DWS had to approve the 2022/23 tariffs.[44]

TABLE 63 Eskom bulk electricity price increase to municipalities (2012–2021)

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
26.7%	13.5%	8.0%	8.1%	12.7%	9.4%	0.3%	7.3%	15.6%	6.9%
Average 2012–2016				**13.8%**	**Average 2017–2020**				**7.9%**

Source: National Treasury MFMA Budget Circulars for the various years.

44 https://pmg.org.za/committee-meeting/34727/

Employee-related costs

Employee-related costs grew by an annual average of 9.9% during Term 2, compared to 9.4% in Term 1. The continued growth in employee-related costs is a key issue for city sustainability going forward.

TABLE 64 Growth in employee-related costs (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	6.8%	11.2%	4.4%	12.1%	9.9%
CPT	9.0%	10.0%	1.0%	9.8%	10.4%
ETH	10.9%	8.9%	–2.0%	8.3%	9.8%
EKU	10.8%	8.2%	–2.5%	10.3%	5.2%
TSH	12.1%	10.0%	–2.1%	6.5%	15.5%
NMB	4.2%	9.5%	5.4%	11.5%	6.7%
BCM	10.4%	12.1%	1.8%	13.2%	10.5%
MAN	11.0%	12.4%	1.4%	17.5%	5.2%
MSU	8.2%	8.8%	0.6%	10.4%	6.4%
All cities	9.4%	9.9%	0.5%	10.0%	9.8%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

TABLE 65 City headcounts and employee-related costs per employee (2010/11–2020/21)

	HEADCOUNT			EMPLOYEE-RELATED COSTS PER EMPLOYEE (2021 RANDS)			AVERAGE ANNUAL RATE OF REAL GROWTH IN PER-EMPLOYEE COSTS	
	2010/11	2015/16	2020/21	2010/11	2015/16	2020/21	2010/11–2015/16	2020/21–2015/16
JHB	38 605	32 487	39 932	22,688	28,416	31,929	4.6%	2.4%
CPT	25 166	26 441	29 237	32,947	36,521	43,265	2.1%	3.4%
ETH	21 219	26 597	26 768	31,358	31,826	39,305	0.3%	4.3%
EKU	18 033	19 304	21 097	28,535	33,682	37,180	3.4%	2.0%
TSH	23 052	30 024	18 834	24,886	25,679	53,651	0.6%	15.9%
NMB	6 889	7 016	6 970	37,584	34,268	44,192	–1.8%	5.2%
MAN	5 048	5 728	6 011	23,105	25,273	34,675	1.8%	6.5%
BCM	3 591	6 013	5 014	28,248	21,519	37,625	–5.3%	11.8%
MSU	2 995	2 759	5 880	28,769	35,056	20,364	4.0%	–10.3%
All	144 598	156 369	159 743	27,814	30,490	38,886	1.9%	5.0%
Excl. TSH*	121 546	126 345	140 909	28,396	31,634	36,912	2.2%	3.1%

Note: (*) The decrease in headcount in Tshwane in 2020/21 appears very large and the data may not be credible. The totals are therefore calculated both with and without Tshwane.

Source: National Treasury Local Government Database. Calculations by authors.

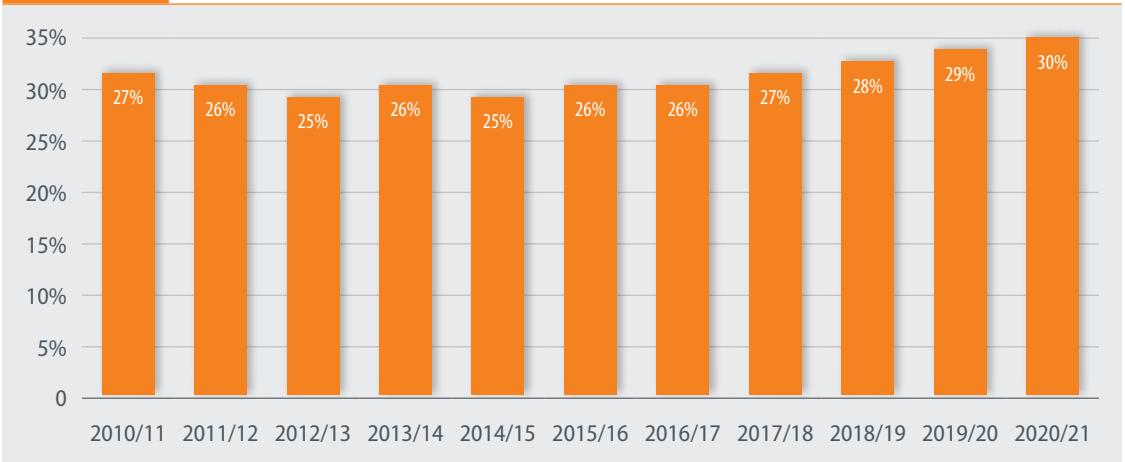
As discussed in Chapter 3, the growth in employee-related costs cannot be explained simply by the above-inflation salary increases negotiated through the collective bargaining process, or by the growth in number of employees. The picture of employee-related costs is complex. The data on headcounts reported to National Treasury also seems to lack credibility in some cases. On aggregate, based on the data available:

- The staff headcount in Johannesburg, Ekurhuleni and Msunduzi grew more rapidly over Term 2 than Term 1, as did their employee-related costs, but the net effect was slower growth in per-employee costs in Term 2.
- In eThekwini and Buffalo City, the staff headcounts grew more slowly but the per-employee costs grew more rapidly in Term 2 compared to Term 1.
- In Term 2, Tshwane, Nelson Mandela Bay and Mangaung reduced their staff headcounts but continued to see increased growth in employee-related costs. This resulted in some of the highest average annual rates of increase in per-employee costs. The very large decrease in staff complement reported in Tshwane in 2007 suggests that this data may not be credible.

The rapid growth in employee-related costs is driven in part by the above-inflation salary increases negotiated by SALGA and in part by decisions within the control of cities; for example, insourcing (which no doubt contributed to Johannesburg's increased staff headcount in Term 2, although Nelson Mandela also implemented insourcing but did not have a similar increase), salary benchmarking (e.g., Tshwane), and standardisation of salaries (e.g., Buffalo City when it became a metro).[45] In addition, employee-related costs include not only salaries, but also overtime costs and scarce skills allowances. Poor management of overtime costs and an unwillingness to withdraw scarce skills allowances also contributed to the growth in employee-related costs.[46]

These increases in employee-related costs are not sustainable, particularly at a time when revenue growth has come under pressure. Between 2015/16 and 2020/21, these costs grew by an annual average of 9.9% compared to 6.7% for city revenues (Table 46). The result was that in 2020/21, the cities combined spent 30% of their revenues on employee-related costs, up from 25% in 2014/15 (Figure 18).

FIGURE 18 Employee-related costs as a % of total revenues for the cities combined (2010/11–2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

45 See Chapter 3 for more details.
46 Interviews conducted as part of the research (see Chapter 1).

Contracted services

Contracted services grew more slowly in Term 2 compared to Term 1, which may be due in part to insourcing in Nelson Mandela Bay and Johannesburg, although growth was slower or declined in most cities during the COVID-19 years. A possible explanation is that contracted services are an easy budget item to cut when times are tight, but these cuts may result in undesirable implications. For example, in 2020/21, eThekwini cut back largely on maintenance contracts and Nelson Mandela Bay cut back on equipment maintenance.

TABLE 66 Growth in contracted services for various periods (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB*	–0.2%	–	4.2%	4.0%	–
CPT	19.3%	8.4%	–10.9%	8.8%	7.7%
ETH	11.6%	4.4%	–7.2%	8.7%	–1.8%
EKU	6.9%	24.7%	17.9%	42.3%	2.3%
TSH	26.6%	–0.1%	–26.6%	–6.8%	10.9%
NMB	27.0%	8.9%	–18.1%	29.5%	–16.0%
BCM**	–	–	–	–	–
MAN	23.5%	15.7%	–7.8%	35.9%	–9.1%
MSU	61.3%	26.1%	–35.2%	58.0%	–10.0%
All cities	13.7%	4.3%	–9.4%	9.2%	–2.6%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

*Notes: *Johannesburg did not report on contracted services as a separate expenditure item in 2019/20 or 2020/21; **Buffalo City data is excluded due to certain anomalies.*

Source: National Treasury Local Government Database. Calculations by authors.

Debt impairment

Debt impairment grew significantly faster in Term 2 than in Term 1, largely due to the impact of COVID-19 that resulted in an 'explosion' of debt impairment in 2020 and 2021.

TABLE 67 Growth in debt impairment for various periods (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	–2.2%	20.8%	23.1%	22.6%	18.2%
CPT	18.2%	10.3%	–7.9%	–3.8%	35.5%
ETH	17.2%	9.9%	–7.3%	–4.7%	36.2%
EKU	–0.2%	24.0%	24.2%	42.5%	0.7%
TSH	–7.0%	23.1%	30.0%	59.4%	–16.5%
NMB	3.7%	23.2%	19.6%	7.4%	51.4%
BCM	–0.1%	34.6%	34.6%	21.1%	57.6%
MAN	22.8%	5.8%	–16.9%	8.1%	2.5%
MSU	1.8%	40.3%	38.5%	96.1%	–15.0%
All cities	4.4%	18.3%	13.9%	20.6%	14.8%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

As explained in Chapter 3, declining cash collection rates and rising numbers of consumer debtors result in high levels of debt impairment. The impact of COVID-19 on cash collection rates was felt in all cities and was exacerbated by the water restriction tariffs in Buffalo City and Nelson Mandela Bay, which inflated water bills and resulted in higher levels of non-payment. Between 2019/20 and 2020/21, debt impairment declined in most cities,[47] as the country emerged from COVID-19 and related lockdowns.

Going forward, the extent to which cities are able to restore cash collection rates, thereby bringing down debt impairment, will be crucial for their viability. A city's ability to collect revenues is also affected by external factors, such as a stagnant or declining economy that puts pressure on the affordability of municipal bills for both households and businesses. Internal factors, such as political instability and perceptions of corruption, weaken trust in local government, affecting the willingness of customers to pay their bills. Cities need to have the political will and administrative capability to ensure that services are metered, properties are included on the GV roll, billing is accurate, debts are collected and credit control processes are in place. In brief, while external factors may place pressure on city revenues, city choices and management also need to be strengthened.

Depreciation and asset impairment

Depreciation is a non-cash expenditure that accounts for the fact that asset life is depleted over time. Ideally, it results in the generation of a cash surplus that can be set aside for asset replacement in future. This expenditure category grew more slowly in Term 2 than in Term 1 for the cities combined (Table 68).

TABLE 68 Growth in depreciation and asset impairment (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	11.3%	7.8%	–3.4%	5.0%	12.2%
CPT	11.0%	6.5%	–4.6%	10.4%	0.8%
ETH	6.1%	7.7%	1.6%	7.0%	8.6%
EKU	0.7%	4.4%	3.6%	6.4%	1.4%
TSH	11.5%	11.7%	0.2%	14.4%	7.8%
NMB	14.3%	–2.1%	–16.4%	–3.9%	0.7%
BCM	14.4%	10.3%	–4.1%	14.8%	4.0%
MAN	9.1%	6.8%	–2.3%	13.5%	–2.6%
MSU	17.1%	–7.2%	–24.3%	–5.6%	–9.7%
All cities	8.8%	6.5%	–2.3%	7.5%	5.0%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

47 See Chapter 2 for data on debt impairment levels per year between 2016/17 and 2020/21.

The level of depreciation expenditure depends on the value and composition of the asset base, and the basis used for depreciation. The main reason for depreciation expenditure growing more slowly in Term 2 than in Term 1 was the slower growth in the value of property, plant and equipment (PPE) in cities (Table 69).

TABLE 69 Growth in property, plant and equipment values (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS
	2010/11–2015/16	2015/16–2020/21	
JHB	11.1%	5.1%	–5.9%
CPT	11.8%	7.1%	–4.7%
ETH	6.5%	4.0%	–2.5%
EKU	2.0%	5.5%	3.5%
TSH	14.5%	5.9%	–8.7%
NMB	4.0%	4.4%	0.4%
BCM	2.3%	10.6%	8.3%
MAN	9.3%	4.0%	–5.3%
MSU	2.1%	–0.9%	–2.9%
All cities	7.6%	4.3%	–3.3%

Source: National Treasury Local Government Database. Calculations by authors.

Although slower growth in depreciation expenditure relieves pressure on city budgets, slower growth in the value of PPE is a cause for concern and is discussed later (page 90).

Other expenditure

Other expenditure here is calculated as the difference between total operating expenditure and the expenditure items discussed previously in this section. For the cities combined, other expenditures grew more slowly in Term 2 than in Term 1.

TABLE 70 Growth in other expenditure (2010/11–2020/21)

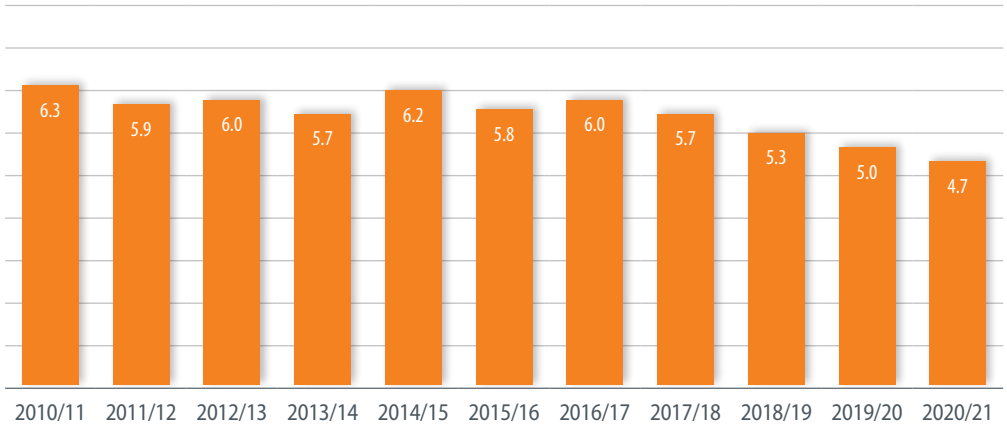
	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	14.0%	6.8%	–7.2%	–4.8%	26.9%
CPT	0.7%	6.2%	5.5%	2.8%	11.5%
ETH	4.5%	7.9%	3.4%	12.6%	1.2%
EKU	8.2%	4.5%	–3.7%	6.9%	0.9%
TSH	10.9%	–1.4%	–12.2%	3.2%	–7.9%
NMB	–3.0%	–3.1%	–0.1%	–13.9%	15.5%
BM	11.0%	–7.5%	–18.4%	–2.6%	–14.4%
MAN	16.8%	7.0%	–9.8%	–3.4%	24.7%
MSU	17.2%	9.0%	–8.2%	–7.1%	38.5%
All cities	8.3%	4.5%	–3.9%	1.3%	9.4%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

OPERATING EXPENDITURE IN BRIEF

- Bulk purchase expenditures grew more slowly in Term 2 than in Term 1, largely as a result of lower Eskom bulk price increases. However, cities cannot rely on this continuing, as Eskom is likely to increase bulk prices in the future.
- Depreciation and asset impairment, and contracted services grew more slowly in Term 2 than in Term 1.
- Two expenditure items grew faster in Term 2 than in Term 1: debt impairment, which rose dramatically during the COVID-19 years, and employee-related costs.
- Employee-related costs must be better controlled, through both stronger government negotiation in the bargaining process and prudent management of these costs going forward. This will require strong political will to make difficult decisions about overtime and allowances, as well as cooperation from labour.
- The extent to which cities are able to restore cash collection rates and, therefore, bring down debt impairment going forward will be crucial for their future viability.
- City productivity, as measured by the value of PPE divided by employee-related expenditure, appears to have declined rapidly since 2016/17 (Figure 19). This is cause for concern because "cities are capital-intensive, not labour-intensive",[48] as they run infrastructure that is used to provide services to citizens and businesses.

FIGURE 19 City productivity for all cities combined (2010/11–2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

- The slower growth in contracted services did not compensate for the higher growth in employee-related costs, as productivity (measured by the value of PPE divided by employee-related costs plus contracted services) also declined, from 5.5 in 2010/11 to 4.0 in 2015/16 and 3.4 in 2020/21 for the cities combined (excluding Johannesburg).
- Cities are unlikely to be effective engines of growth if these trends continue: rapid growth in employee-related costs, and inadequate capital investment leading to slow growth in the value of PPE.

48 Interviews conducted as part of the research (see Chapter 1).

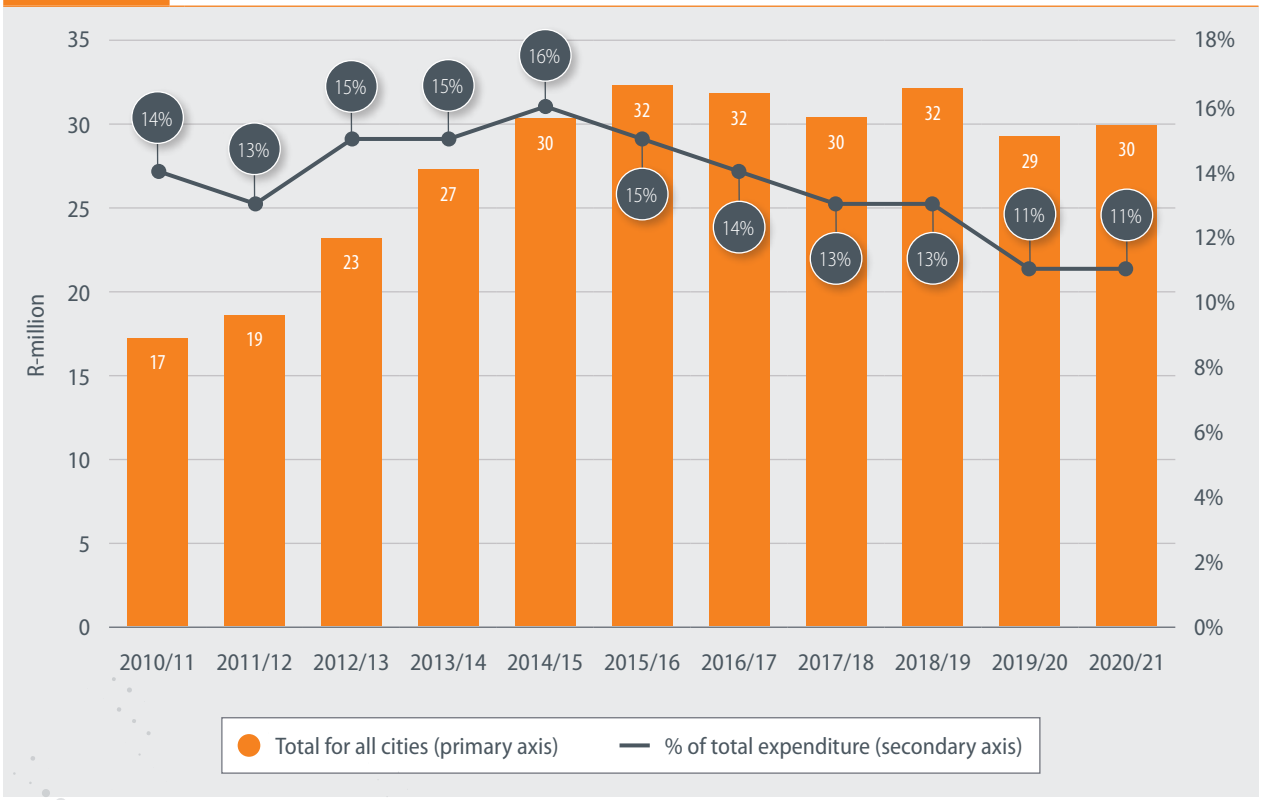
CAPITAL EXPENDITURE AND CAPITAL FINANCE ARE INEXTRICABLY LINKED BECAUSE ACCESS TO CAPITAL FINANCE IS A KEY CONSTRAINT ON CAPITAL EXPENDITURE PROGRAMMES IN CITIES.

CAPITAL EXPENDITURE AND CAPITAL FINANCE

Capital expenditure and capital finance are inextricably linked because access to capital finance is a key constraint on capital expenditure programmes in cities. Technical constraints include the capacity to prepare projects, but some cities lack the number of engineers and other professionals needed to run an effective capital programme, and/or the ability to put in place an effective pipeline of implementable projects. Without such a pipeline, any portion of the capital programme that is not linked to multi-year projects comes to a halt at the end of each financial year and must be ramped up once again in the new financial year.

Between 2011 and 2016, capital expenditure for the cities combined grew from R17.2-billion (14% of total expenditure) to R32.4-billion (15% of total expenditure). In 2020, capital expenditure declined to a low of R29.3-billion (11% of total expenditure) before recovering somewhat in 2021 (Figure 20).

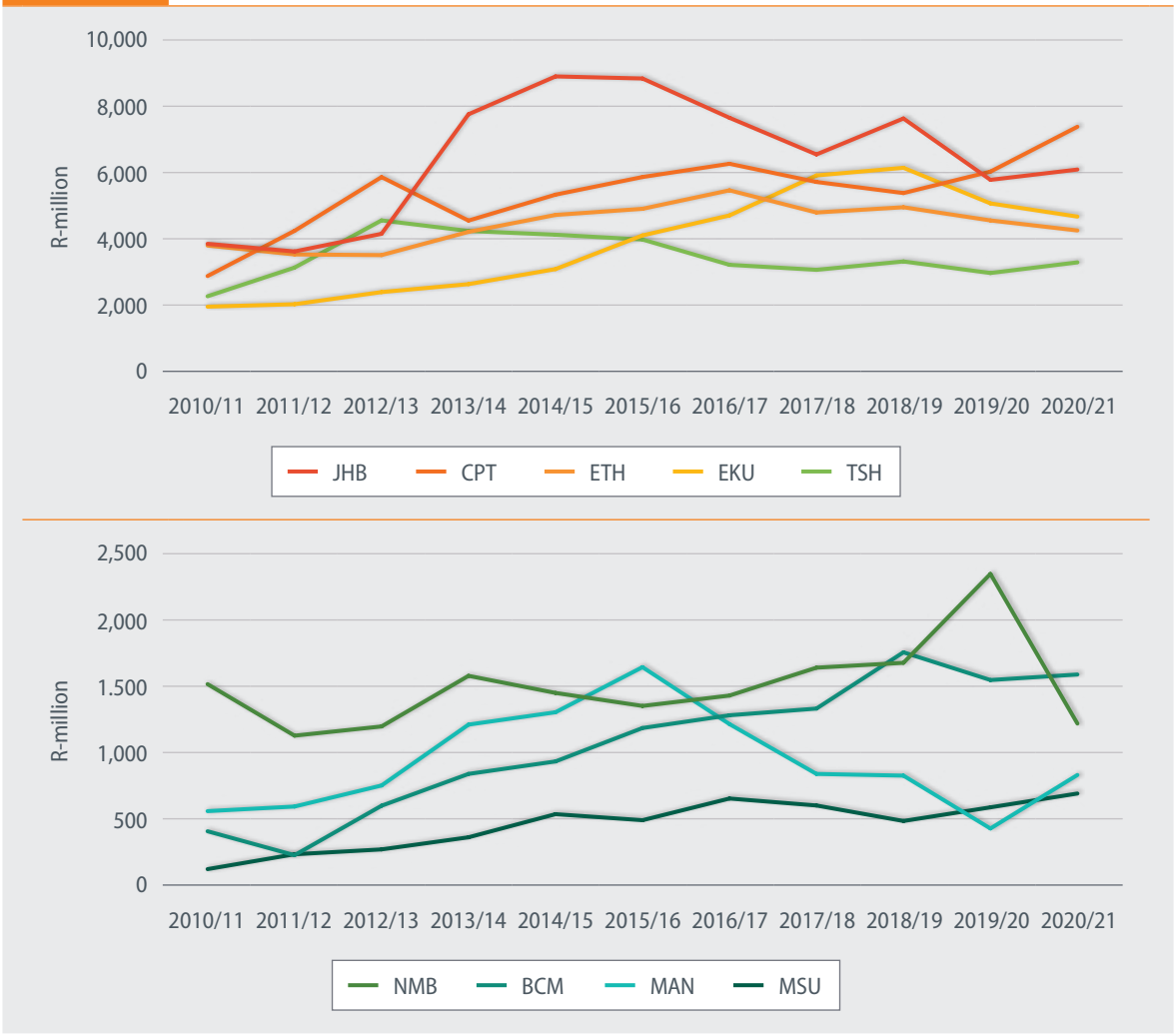
FIGURE 20 Capital expenditure for the cities combined (2011–2021)



Source: National Treasury Local Government Database. Calculations by authors.

The growth in capital expenditure during Term 1 was dominated by Johannesburg, which ramped up its capital programme significantly (Figure 21).

FIGURE 21 Capital expenditure per city (2011–2021)*



Note (*): The axes (R-million) on the two graphs are different.

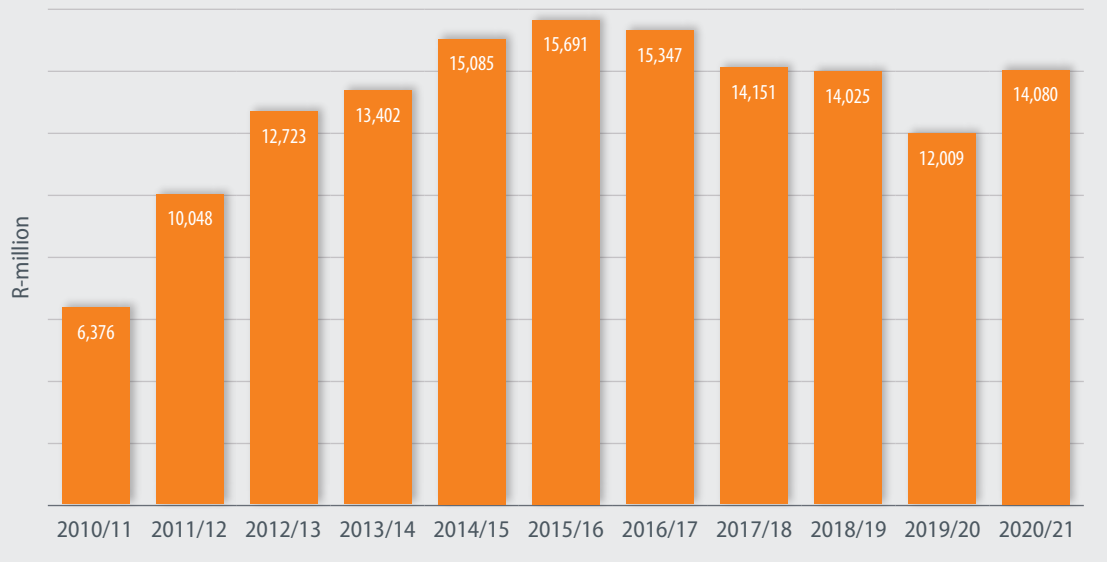
Source: National Treasury Local Government Database.

- Between 2010/11 and 2015/16, both Johannesburg and Mangaung significantly increased their capital expenditure, which then declined (except for a slight increase in 2019 for Johannesburg). Both cities reported an improvement in capital expenditure in 2021.
- Cape Town's capital programme grew steadily across the full period.
- After slow but steady growth (to 2017), eThekwini's capital expenditure stagnated and then declined.
- Between 2010 and 2019, Ekurhuleni and Buffalo City saw substantial, fairly steady growth in capital expenditure.
- Tshwane increased capital expenditure in 2012 and 2013, followed by a decline until 2017, before stagnating at a new, lower level.
- Nelson Mandela Bay's capital expenditure fluctuated throughout the period, with no clear sign of sustained increase or decline.
- Msunduzi increased capital expenditure from 2010 to 2016, after which it stagnated until 2019, with some signs of growth in recent years.

In 2020, several cities reported a decline in their capital programmes, which was due in part to the impact of COVID-19 (see Chapter 3) and in part to more constrained own funding. In 2021, capital expenditure recovered somewhat in most cities but remained below previous levels.

The lower growth in capital expenditure in Term 2 compared to Term 1 appears to be largely linked to the uptake of finance. As noted in Chapter 3, growth in capital transfers declined in Term 2 (Figure 22).

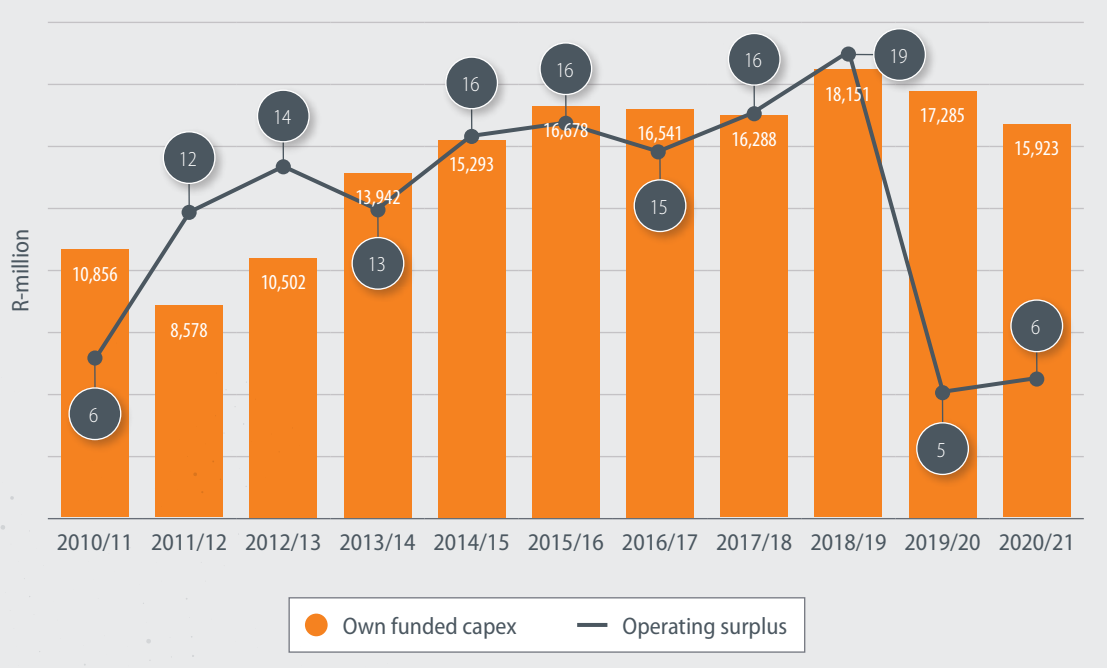
FIGURE 22 Capital transfers recognised by the cities combined (2010/11–2020/21)



Source: National Treasury Local Government Database.

Own-funded capital finance includes internally generated funds and borrowing, which must ultimately be repaid out of internally generated funds. Figure 23 clearly shows the link between levels of own-funded capital finance and operating surpluses, which both grew from 2011 to 2015 and then largely stagnated from 2015 to 2019. Uptake of own-funded capital finance declined somewhat in 2020 and 2021, in part due to the decline in operating surpluses, although cities continued to draw on reserves to implement capital programmes in these years.

FIGURE 23 Own-funded capital expenditure and operating surpluses for the cities combined (2010/11–2020/21)



Source: National Treasury Local Government Database.

Cities have on the whole been hesitant to take up borrowing, with most cities substantially under geared. In general, chief financial officers favour funding through internally generated funds where possible and appear to view borrowing as a last resort. National Treasury uses debt as a percentage of revenue as an indicator of debt levels, recommending a benchmark of 45% maximum. As Table 71 shows, as at 30 June 2019, Johannesburg was above and Tshwane was close to this 45% benchmark, while the other cities were all well below the benchmark, suggesting substantial capacity to increase borrowing.

Although ultimately debt must be repaid out of internally generated funds, borrowing allows cities to access finance earlier than through internal funds. Increased borrowing, within prudent financial limits, is key for accelerating a capital programme. While the reasons for hesitancy around borrowing are not entirely clear, they are likely to be linked to cities being doubtful about being able to convert the capital borrowed into revenue and thus to repay debt in future. Cities need to get better at identifying and prioritising projects that boost city revenue streams and are appropriate for funding through borrowing. National Treasury is working on a long-term financial strategy modelling tool, intended to model the long-term impacts on city finances of catalytic or other large capital projects or programmes. Such analyses may help to create more certainty about the ability to repay debt on projects and, therefore, increase the appetite for borrowing by the cities.

Johannesburg has borrowed fairly steadily in recent years, whereas since 2018/19, Cape Town has reduced its borrowing and Ekurhuleni has increased its borrowing. Compared to these cities, Tshwane's borrowing may appear small but it represents one of the largest proportions of total own funding. Of the larger five cities, eThekwini relies least on borrowing, whereas the smaller cities have taken up almost no borrowing (Figure 24).

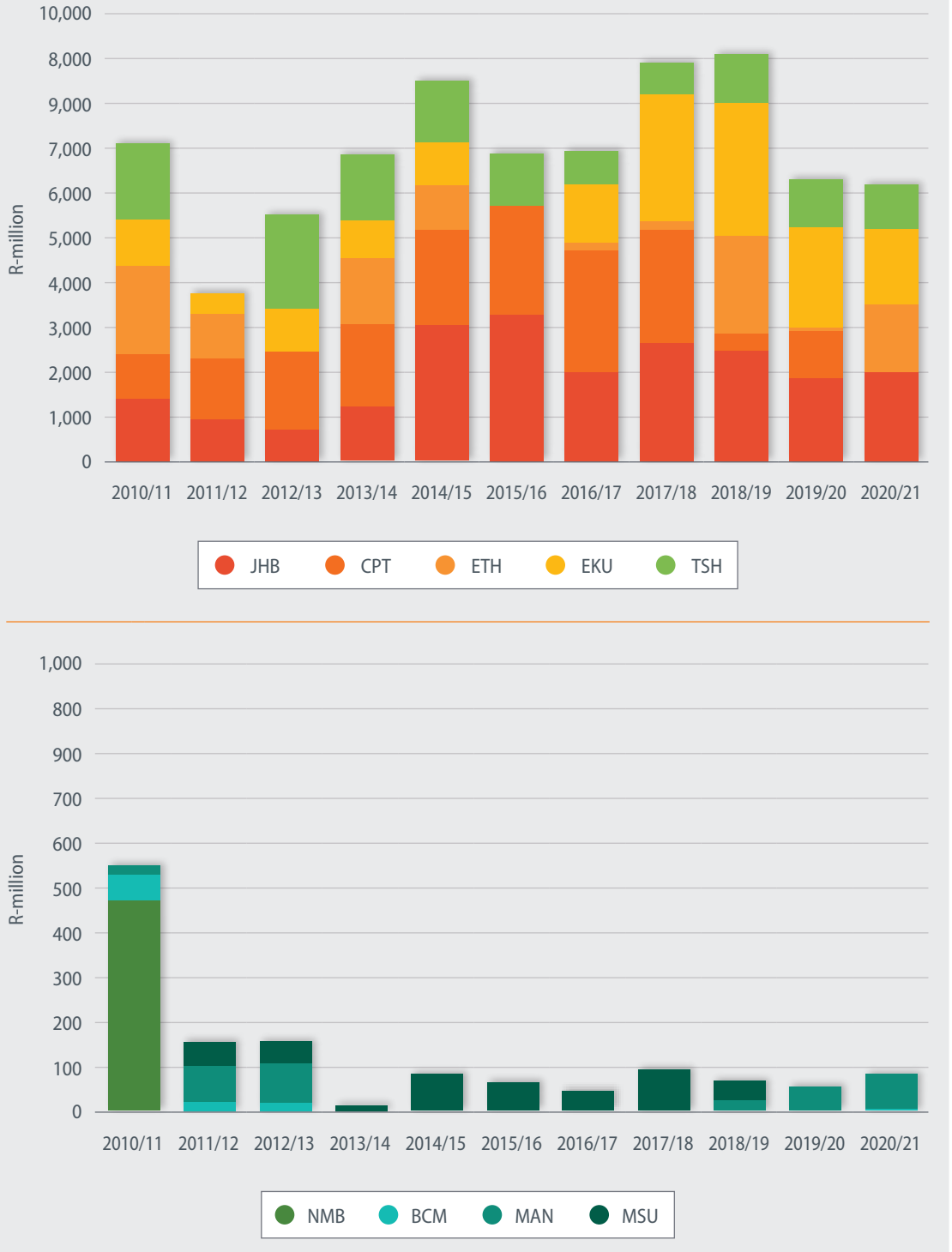
TABLE 71 Debt as a percentage of operating revenue

	30 JUNE 2019
JHB	53.0%
CPT	16.4%
ETH	27.0%
EKU	26.5%
TSH	44.1%
NMB	12.0%
BCM	5.6%
MAN	26.6%
MSU	9.6%
All cities	32.0%

Source: National Treasury (2019).

CITIES NEED TO GET BETTER AT IDENTIFYING AND PRIORITISING PROJECTS THAT BOOST CITY REVENUE STREAMS AND ARE APPROPRIATE FOR FUNDING THROUGH BORROWING.

FIGURE 24 City borrowing (2010/11–2020/21)*

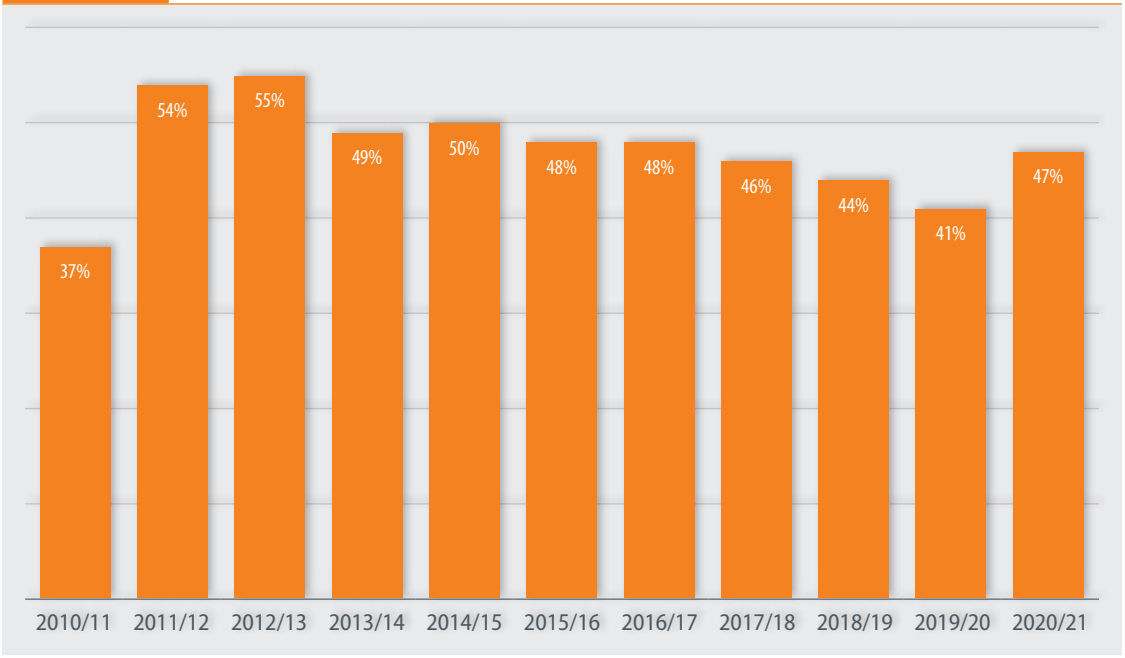


Note (*): The axes (R-million) on the two graphs are different.

Source: National Treasury Local Government Database.

With the introduction of the USDG in 2012, cities became more reliant on grants for capital expenditure, although grant dependency declined between 2012 and 2019 before increasing again in 2021. The dependence on transfers varies across cities (see Chapter 3). Of concern is that grants represent easy access to capital finance and are 'crowding out' private sector funding in cities (Figure 25).

FIGURE 25 Capital programmes funded by capital transfers for cities combined (2010/11–2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

City investment in infrastructure has three broad goals:

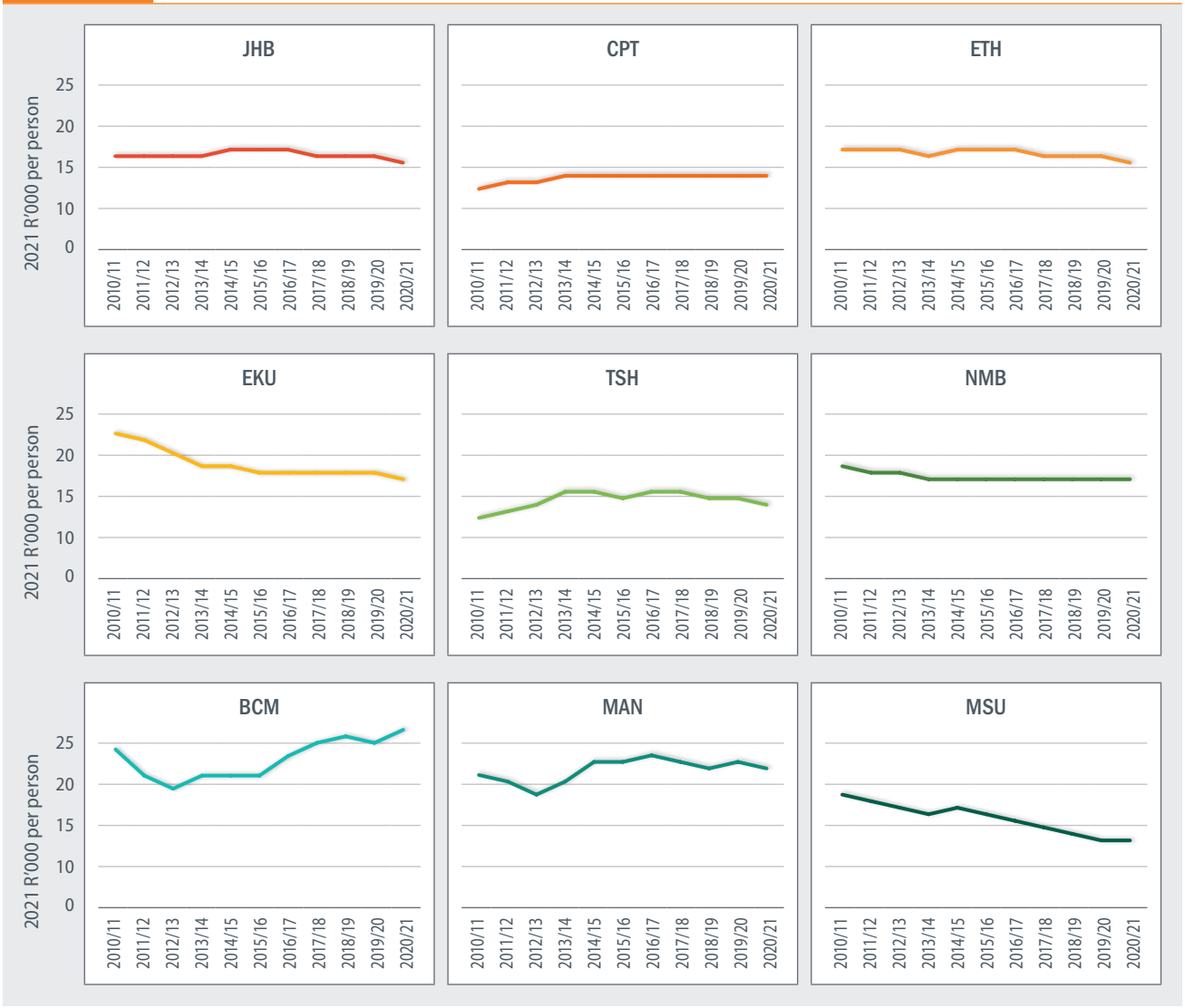
- To eradicate existing backlogs and to allow for growth in poor households, as part of the city's social mandate. Grants are targeted at this expenditure and usually come with the condition that the grants can be spent on infrastructure for the poor only. Rolling out such infrastructure is vital for social reasons but does not grow a city's revenue base because many of the households receiving this infrastructure cannot afford to pay the full costs of the services provided and must be subsidised in future.
- To allow for growth in their economic base,[49] serving higher income households and businesses. Such infrastructure is largely revenue-generating and is well suited to being financed through borrowing or through other private sector financing. The overall stagnation in capital expenditure, as grants have stagnated, suggests that cities are underinvesting in economic infrastructure, which limits the potential for cities to support economic growth going forward.
- To renew and maintain existing infrastructure, as it ages. Without such investment, existing infrastructure declines and starts to fail, and is particularly vulnerable to disasters linked to climate change, as was seen in eThekwini during the 2022 floods. Often this expenditure is financed by internally generated funds.

A significant concern is the overall stagnation in own-funded infrastructure between 2015 and 2019, even prior to the decline in 2020 and 2021. It suggests that cities are underinvesting in both economic infrastructure (a platform for future growth) and its renewal. This puts them in a tenuous position going forward should economic growth accelerate and climate-related disasters increase.

49 It is important to note that this distinction between infrastructure to serve the poor and infrastructure to serve non-poor households and businesses is somewhat artificial. Much infrastructure serves both and should be financed through a blend of grants and other sources of finance.

The underinvestment in infrastructure is reflected in the change in PPE value per person, which assesses the extent to which cities are growing their infrastructure bases, controlling for population growth and inflation (Figure 26).

FIGURE 26 Value of PPE per person in 2021 rands (2010/11–2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

Figure 26 shows that the value of infrastructure is declining relative to population growth in most of the cities. Despite capital transfers growing more slowly, cities have become more dependent on grants, which means that they are continuing to roll out infrastructure to serve poor communities but are failing to invest in infrastructure to serve their economic base or to take care of infrastructure already in place. The very slow uptake of public-private partnerships (PPPs) is worth mentioning here. PPPs are so-called 'off-budget' financing, through which a private sector partner constructs and/or operates infrastructure in return for payments from the public sector partner. National Treasury currently lists 22 PPPs in various stages of finalisation, all of which were registered before 2017 (Theobald, 2021). This is partly a result of the complexity and lack of clarity in the legislation and regulations relating to PPPs, some of which are currently under review.

CASH AND CASH EQUIVALENTS

The availability of cash and cash equivalents is a key indicator of a city's short-term resilience. A city with sufficient cash is better able to weather temporary setbacks to its collection rate and so will not, for example, cease paying key creditors or halt a capital programme.

Cash balances are often an indication of looming financial difficulties but should not be interpreted in isolation. A city's strong cash balance may be the result of underspending of budgets, particularly capital budgets, rather than a sign of sound financial management. Nevertheless, the size of cash balances and cash coverage is a useful litmus test for the resilience of cities to survive shocks.

Cash grew strongly for the cities combined during Term 1 but then declined during Term 2 (Table 72). Although this decline was certainly greater during the COVID-19 years of 2020 and 2021, it had commenced for most cities prior to COVID-19.

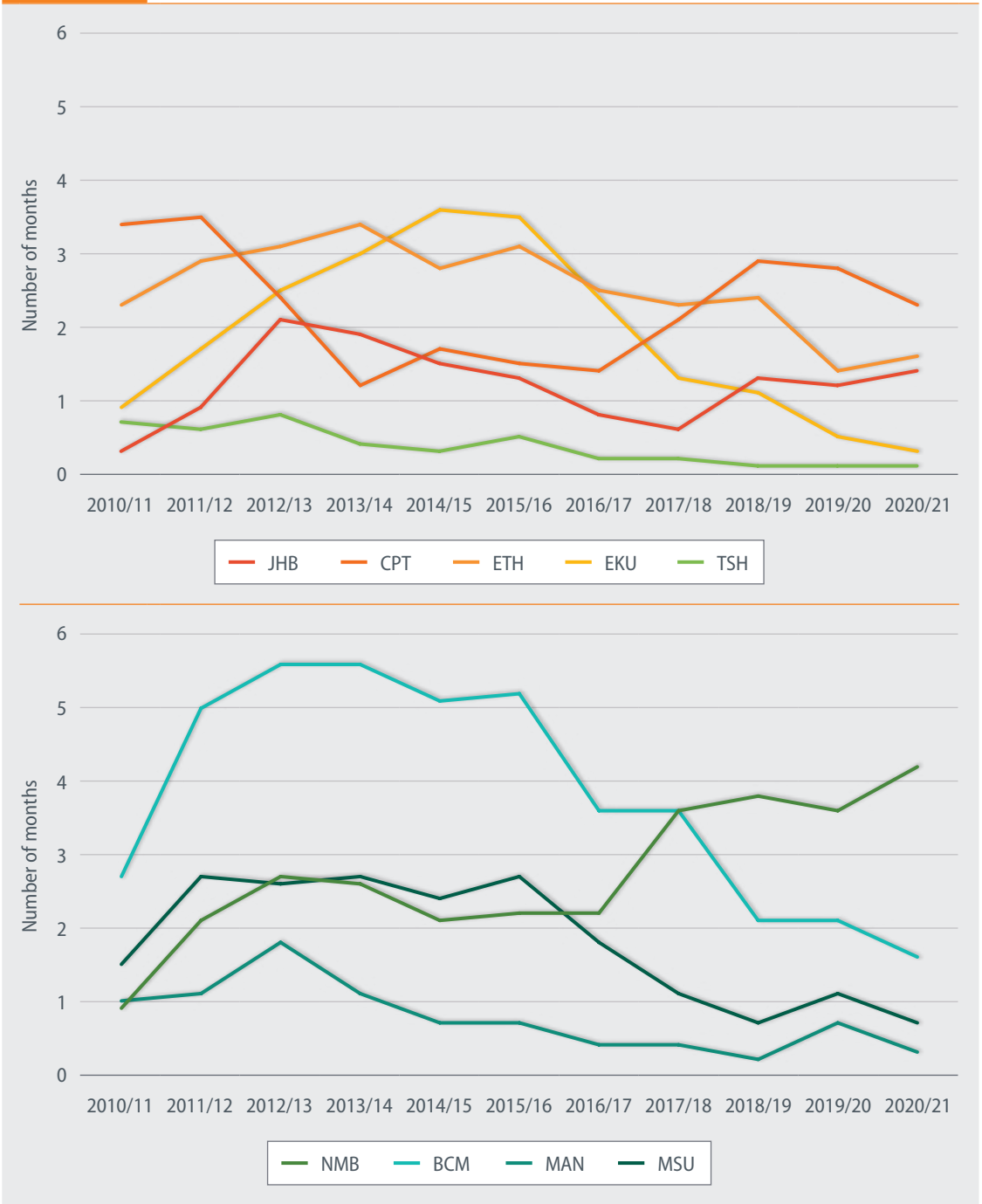
TABLE 72 Growth in cash and cash equivalents (2010/11–2020/21)

	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: TERM 1 AND TERM 2		CHANGE IN GROWTH BETWEEN TERMS	AVERAGE ANNUAL RATE OF GROWTH PER ANNUM: PRE- AND POST-COVID-19 IN TERM 2	
	2010/11–2015/16	2015/16–2020/21		2015/16–2018/19	2018/19–2020/21
JHB	44.5%	8.7%	–35.7%	6.9%	11.6%
CPT	–6.2%	16.5%	22.7%	31.8%	–3.3%
ETH	17.1%	–5.4%	–22.6%	–1.4%	–11.3%
EKU	42.9%	–32.2%	–75.1%	–23.8%	–43.2%
TSH	6.7%	–29.3%	–36.0%	–34.4%	–20.8%
NMB	27.1%	14.8%	–12.3%	25.8%	0.1%
BCM	26.2%	–13.9%	–40.1%	–21.0%	–2.0%
MAN	5.7%	–8.3%	–14.0%	–26.8%	28.6%
MSU	26.9%	–17.9%	–44.9%	–31.8%	8.3%
All cities	17.7%	–2.3%	–20.1%	–0.2%	–5.5%
CPI	5.7%	4.2%	–1.5%	4.7%	3.5%

Source: National Treasury Local Government Database. Calculations by authors.

A cash-coverage ratio is somewhat easier to interpret than the overall cash balance. This ratio shows the number of months of operating expenditure that can be covered out of cash at the end of the financial year. The cash-coverage ratios for each of the cities over the 10 years are shown in Figure 27.

FIGURE 27 Cash-coverage ratio (2010/11–2020/21)



Source: National Treasury Local Government Database. Calculations by authors.

Since 2012/13, cash coverage declined for the cities combined, but the picture differs across the cities. Of note is the improved cash coverage in Cape Town (2017/18–2019/20), in Ekurhuleni (until 2015/16) and in Nelson Mandela (in 2018).

For most cities, cash reserves increased during Term 1 and then declined during Term 2, especially during the COVID-19 years of 2020 and 2021. This leaves cities in a far more vulnerable position to future shocks.

THE 10 YEARS IN SUMMARY

The 10-year story of South African cities was told over two five-year periods, each aligned with a municipal administrative term. Most of the observations are related to longer term trends across the 10 years rather than an administrative term.

During Term 1 (2011/12–2015/16), economic growth rates were declining and unemployment levels were starting to rise, but the cities combined managed to improve their financial performance. Expenditure on bulk purchases, employee-related costs and contracted services were rising but remained largely affordable because property rates and service charge revenues were growing strongly despite the economic slowdown. Transfers were also growing well ahead of inflation. As a result, during this period most cities generated annual operating surpluses of between 6% and 10% of their revenues. These surpluses were used to finance increased capital expenditure and also reduced dependency on grants for the cities as a group. However, this growth was not sufficient to expand the value of city infrastructure beyond keeping pace with population growth and inflation. Over Term 1, most cities improved their cash coverage ratios, a key measure of resilience to shocks.

[IN TERM 1] EXPENDITURE ON BULK PURCHASES, EMPLOYEE-RELATED COSTS AND CONTRACTED SERVICES WERE RISING BUT REMAINED LARGELY AFFORDABLE BECAUSE PROPERTY RATES AND SERVICE CHARGE REVENUES WERE GROWING STRONGLY DESPITE THE ECONOMIC SLOWDOWN.

In short, Term 1 was largely a story of improvement but with underinvestment in infrastructure. Term 2 is sadly one of steady decline with COVID-19 delivering a major shock to an already weakened system in 2020 and 2021.

During Term 2 (2016/17–2020/21), economic growth continued to decline, and unemployment rates began to increase more rapidly. Although bulk purchase expenditures grew more slowly, mainly because of Eskom's lower bulk electricity price increases, employee-related costs grew more rapidly than in Term 1. Salary increases negotiated through collective bargaining processes were higher than inflation, driving above-average increases in employee-related costs, but decisions made by the cities also led to increases in Term 2. These decisions included insourcing previously contracted services, expanding staff complements, benchmarking or standardising salaries, and failing to control overtime expenditures.

[IN TERM 2] ALTHOUGH BULK PURCHASE EXPENDITURES GREW MORE SLOWLY, [...] EMPLOYEE-RELATED COSTS GREW MORE RAPIDLY THAN IN TERM 1.

Revenue streams began to come under pressure, as the slower economy began to affect the growth in house prices, resulting in slower growth in the property rates base. In addition, cities took decisions to keep the cent-in-the-rand property rates low or even reduce them, and to expand the values of properties that were zero-rated to protect property owners from high increases in property rates bills. Electricity revenues began to grow less rapidly as demand patterns changed, with high-income households and businesses investing in alternative, distributed energy supply, while rising NRE levels also affected revenues. Some cities began to see changes in water demand patterns due to the effects of droughts and continued to struggle with high NRW levels. Luckily, operating transfers continued to grow strongly and more rapidly than in Term 1. Nevertheless, the net result was stagnating operating surpluses for the cities as a group between 2016 and 2019, which then led to stagnating capital expenditure programmes.

The growth in cash balances did not keep pace with the growth in operating expenditures, and between 2016 and 2019, the cities combined experienced declining cash coverage. This put some of them in a vulnerable position when the COVID-19 crisis hit. During 2020 and 2021, revenue growth declined further, as a result of lower growth in property revenues, which does not appear to be linked to COVID-19 but rather to the introduction of new GV rolls. In 2020, cash collection rates dropped sharply and expenditure on debt impairment increased by 42%. To accommodate this, cities cut their expenditure on contracted services, but the net effect was still a sharp decline in operating surpluses, while cash coverage ratios declined in most cities. Capital expenditure dropped in 2020 although it recovered somewhat in 2021.

This story is over-simplified, as each city's story is slightly different. However, the overall trends are clear from the data. Of most concern is the impact of stagnating capital investment on city infrastructure. If cities are the engines of growth in South Africa, they need to invest in infrastructure that supports a robust and vibrant economy. Instead, evidence points to infrastructure that is worsening in condition and at a greater risk of failure, which is particularly ominous given the increased likelihood of climate-related natural disasters in future. As one interviewee put it bluntly:

> The appalling consequences of low investment levels, and poor investment planning, go beyond the hardships to individuals and families. They also strangle the entrepreneur and investor, from small cottage industry to big exporters. No one can do business in an environment with failing water and electric services, [and] potholed roads.[50]

As cities embark on a new municipal term, it is important to pause, take stock and consider what needs to happen to re-ignite city economies and put their finances on a more sustainable trajectory, to allow them to upscale their infrastructure programmes more rapidly.

50 Interviews conducted as part of the research (see Chapter 1).

TAKING STOCK AND LOOKING FORWARD

This chapter examines the issues that need to be resolved if South African cities are to move forward on a more sustainable trajectory. Its content is largely synthesised from the approximately 30 interviews conducted with current and past municipal officials, including chief financial officers, municipal managers, and budget and revenue staff, as well as researchers and advisors on municipal finances to National Treasury. Many interviewees struggled to give inputs that were related specifically to city finances, demonstrating that it is almost impossible to disentangle city finance from city governance and politics. The chapter focuses on the major issues and so excludes many small successes or blockages relating to city finances.

SUCCESSES OF THE PAST 10 YEARS

The past 10 years can be summed up as having islands of progress but general decline, with many interviewees struggling to identify successes. Most of the successes that follow demonstrate partial steps forward; in other words, improvements have been made, but further work will be needed.

Financial systems and reporting

Over the past decade, most cities have put in place adequate financial systems and improved financial management. Municipal financial reporting has become more comparable and transparent, as a result of the Municipal Budget Reporting Reforms, the roll-out of *m*SCOA and the introduction of platforms such as Municipal Money.[51] Many cities now prepare more meaningful budgets, although some remain unfunded, and make clearer connections in the planning–budgeting–transacting–reporting process. However, the focus needs to shift from expenditures and outputs to the desired outcomes and impacts. This shift is needed to improve not only financial systems and reporting but also performance management, intergovernmental relations and grant management. An important step in this direction is the current MFMA Circular 88 process, which rationalises planning and reporting requirements and focuses on a set of key indicators related to outcomes and impacts. However, levels of participation and reporting ability vary across cities.

Support and oversight

Administrative oversight structures, processes and systems have improved in some cities, and city internal audit units are generally better capacitated, leading to improved reporting to Municipal Public Accounts Committees. External oversight and support are provided by the National Treasury's bi-annual budget engagements, and the Cities Support Programme (CSP) has done some good work over the decade. On the whole, the system is better able to identify problems, but responses to failures require stronger, quicker and more decisive interventions. Section 139 interventions have not been effective and need improving (Ledger & Rampedi, 2019) — the current Section 139(5) intervention in Mangaung may provide important lessons for future interventions.

Strategic planning and linkages to budgets

Over the past decade, several cities have steadily improved the quality of their strategic planning. Service Delivery and Budget Implementation Plans (SDBIPs) have improved the link between planning and budgeting, which means that oversight committees are better able to connect indicators to budgets and annual performance. Cities have better data on future infrastructure, as a result of improved national sector plans, and the role of cities is better aligned in policy. Nevertheless, city plans need to focus more on outcomes and impacts, and be implemented to a higher standard, otherwise, "strategic planning is just government talking to itself"[52].

51 https://municipalmoney.gov.za/
52 Comment from an interviewee (see Chapter 1)

City voice

All those interviewed acknowledged the importance of a strong city voice and of cities having a say in policy decisions and intergovernmental processes. The introduction of the quarterly City Budget Forum (CBF) convened by the National Treasury Intergovernmental Relations Directorate has elevated the city voice, by providing metropolitan municipalities (metros) with direct access to national sector departments and other stakeholders. The quality of engagement in the CBF is strong, although some believe that metros need to be more strategic in using this platform to elevate their own priorities. Others believe that more reform is needed and that SALGA should not represent cities. There is a feeling that city priorities are diluted when SALGA speaks on their behalf, as SALGA represents 257 municipalities with vastly different contexts and challenges. The metros should have a clear, separate voice in policies and negotiations that affect them, and should be more forceful in asserting or defending their interests.

Technology and data-driven intelligence

Some cities are starting to make better use of technology and data-driven intelligence, through assessing city datasets, ensuring that they are credible and using them to inform planning and policy. Several cities are also making city data available to researchers and the public through platforms such as Durban Edge. In this regard, the SACN has been supporting cities with the roll-out of the South African Cities Open Data Almanac (SCODA), in partnership with the CSP and the South African Council on City Data (SACCD). However, the use of technology and data-driven intelligence is currently concentrated in a small number of cities and needs to be stepped up across all cities, as data and alternative technological solutions will be a crucial part of running an effective future city.

Lessons from the successes

The main lesson is that change is difficult and takes time. It requires champions, change management processes and a commitment to see the change through. The biggest predictors of success are a solid political-administrative interface and strong, stable leadership. This input from the interviews is supported by the literature. Stable leadership in a municipality is positively correlated with effective leadership, which in turn is correlated with achieving strategic objectives and performance (Manganye, 2019), whereas "unstable and poor performance" is the result of "constantly shifting political leadership dynamics, which, in turn, affect administrative stability" (Motebang, 2021: 261). Good service delivery requires "political stability, and giving merit-based administrators the space to implement the political mandate of Integrated Development Plans (without too much political interference)" (ibid).

Senior management instability leads to uncertainty and low morale among mid-ranking officials, driving out those with transferrable skills (SACN, 2019). High levels of instability and vacant management positions are characteristics of municipalities that achieve poor audit outcomes (AGSA, 2021). Table 73 shows the impact of a stable leadership on audit outcomes.

TABLE 73 Average number of months in position compared to audit outcomes

	CLEAN AUDIT	UNQUALIFIED WITH FINDINGS	QUALIFIED WITH FINDINGS	ADVERSE/ DISCLAIMED WITH FINDINGS
Municipal manager	71	36	41	22
Chief financial officer	60	45	37	21

Source: AGSA (2021: 60)

CITIES ARE A HIGHLY HETEROGENOUS GROUP WITH DIFFERENT GEOGRAPHIES, HISTORIES, STRATEGIC LOCATIONS, ABILITIES TO ATTRACT INVESTMENT, MANAGEMENT SKILLS AND FINANCIAL PERFORMANCE, ETC.

KEY UNRESOLVED ISSUES

Interviewees generally agreed on the unresolved issues. Again, this is not an exhaustive list but rather an identification of the higher-level, strategic issues.

Differentiation between cities

Although policy and practice differentiate cities from other local government, the differences among cities are still not adequately recognised. Cities are a highly heterogenous group with different geographies, histories, strategic locations, abilities to attract investment, management skills and financial performance, etc. Therefore, what works in one city may not work in another, and yet policy treats the cities identically. Differentiation needs to be applied to cities both in policy and practice in order to unblock other unresolved issues and free cities from a cycle of constrained performance.

Powers, functions and city autonomy

For decades, issues related to city powers and functions have remained unresolved. Cities assume certain provincial competencies, such as libraries, museums and primary health care, without associated funding streams, resulting in unfunded or underfunded mandates. Some functions, such as roads, transport and public housing, are by nature concurrent to the government spheres, while others are undertaken jointly by all three spheres. The Constitution and Municipal Systems Act No. 32 of 2000 (MSA) allow for the transfer of national and provincial functions to local government under certain circumstances. However, the assignment of these functions (e.g., the assignment of the housing function to cities) requires reviewing or expediting, and the funding issues for those provincial competencies which are currently undertaken by municipalities must be resolved. Assignment of functions should be based on sound policy and clear strategic intent, focusing on the outcomes and impacts that cities want to achieve — and cities must have demonstrated both the capacity and the appetite to take on these functions These changes will assist in overcoming barriers, such as a lack of political will or the contention for control over mandates.

Vertical integration among spheres of government

Vertical integration between cities, state-owned entities, national departments and provincial departments remains problematic, in part because of a lack of shared outcomes, especially related to performance and results. When it comes to cities, other role players are not held accountable for their contributions to city outcomes. This played out clearly in the Cape Town drought, where a key learning was the need to build more effective systems and relationships of mutual accountability among government spheres (Ziervogel, 2018). Intergovernmental coordination needs to

improve, especially in cases where powers and functions are not assigned to cities. The District Development Model (DDM) may resolve this issue, depending on how it is implemented and how great a voice or role cities will have in developing and implementing the DDM One Plans in their spaces.[53] One of the initial pilot sites for the DDM was eThekwini.

Horizontal integration within cities

Integration problems are also found within cities, where departments work in silos instead of collaborating with one another. Examples include the lack of effective communication and coordination between infrastructure planning and procurement; and between land use management (zoning, rezoning, township establishment), technical services (metering installation, connections) and finance (billing, disconnections, credit control, debt collection), all resulting in lost revenue. Improving horizontal integration is entirely within the control of the cities and is a matter of effective management of cities as organisations.

Relationship with the private sector

The private sector can be a source of capacity and finance for local government, but the relationship between cities and the private sector in South Africa is contested. Although clear boundaries are needed to prevent undue influence, stronger partnerships and collaboration are also needed with the private sector, based on shared goals. Processes for accessing private sector finance need to be streamlined, including making PPP processes less onerous, while cities need to improve their understanding of what private sector investors are looking for. Some progress has been made through, for example, National Treasury convening role players in financial markets to talk to cities and CSP working on accessing climate finance.

Capacity and the need for professionalisation

One story not yet told in this report is the loss of skills across all spheres of government, which affects cities both directly and indirectly. To date, capacity-building efforts have not delivered the desired results. According to city data reported to the National Treasury, between 2015/16 and 2019/20, the number of professionals employed in the metros declined from 8000 to just 6600, and yet employee-related costs in cities continue to increase rapidly. For decades, the South African Institute of Civil Engineers (SAICE) has raised concerns about technical capacity (engineers and engineering professionals) and the implications particularly for infrastructure investment and adequate management (Lawless, 2017). The capacity-development blockages and responses are complex, but clearly improvement is needed in all government spheres.

Linked to the capacity issue is the professionalisation of the local government sector. People occupying key positions in cities must be appropriately qualified and trained. One interviewee identified the need for a college of civil servants, led by a professional organisation with government as a stakeholder. However, professionalisation of the public sector will be good for cities only if it results in increased productivity, not in further inflated local government sector salaries. The administration also needs to be protected from political influence. The high turnover rate among senior managers in cities, which is often linked to changes in political leadership, has a detrimental effect on the culture and organisational discipline within cities.

53 See SACN (2022) for comment on the DDM.

> Mechanisms need to be established to encourage stability and professionalism in senior management, particularly the city manager positions in cities. These mechanisms need to be open and transparent, and ideally cross-party and set at a national level, above local and provincial politics. Senior management should be removed if it is incompetent, rather than if the contract has expired, or if the mayor has changed. A national recommending body on the appointment of city managers may be appropriate (SACN, 2019: 18).

Given that leadership stability is crucial for strong performance, the five-year term for municipal managers and other senior staff in contract positions should be reviewed.

Some recent legislative changes may support improvements in capacity and professionalisation, in particular the Municipal Systems Amendment Bill that passed into law in August 2022. Senior managers (managers directly accountable to the municipal manager) may be appointed permanently and, together with municipal managers, must be appointed based on certain procedures and competency criteria — failure to do so will have consequences. The bill also "prohibits all municipal employees from holding positions in political parties, whether in a permanent, temporary or acting capacity", and provides a grace period of one year for employees to either resign or relinquish their political party positions. (In the 2011 Act, this prohibition was limited to the municipal manager and managers who reported directly to the municipal manager only.)[54]

Lack of accountability, consequence management and enforcement

The lack of accountability, consequence management and enforcement remains an issue across government, from an ineffective and slow criminal justice system to a failure to hold officials implicated in corruption properly to account. This issue needs to be resolved in order to restore the trust of communities and businesses in government, to protect the legitimacy of cities to collect tax and levy surcharges, and to improve investor perceptions of cities as good places in which to invest. The recent Public Audit Amendment Act (No. 5 of 2018) is a step in the right direction, as it allows the Auditor-General to issue a certificate of debt against senior management, holding them personally responsible for failing to implement remedial action if financial losses were incurred due to material irregularities. Ngaka Modiri Molema District Municipality in the North West Province may become the first municipality where such a certificate is issued.[55]

What about the fiscal framework?

For years, there have been calls for the fiscal framework to be reviewed. Now is perhaps the time to do this, as the ability of cities to remain viable through cross-subsidisation is under pressure. However, in a stagnant national economy, allocating more funds to cities would mean diverting funds from national and provincial functions, including education and health, or from other municipalities that are also calling for additional funds. Ultimately, fiscal constraints will be resolved only through economic growth that increases the nationally raised revenues available for distribution. Cities need to be aware that any review of the fiscal framework would be limited and any gains (additional allocations) for cities would come at a cost to other parts of the government system.

54 Chigwata T and de Visser J. 'Municipal Systems Amendment of 2022: Will it depoliticise municipal administration?' Local Government Bulletin, Volume 17(2), June 2022. https://dullahomarinstitute.org.za/multilevel-govt/local-government-bulletin/archives/volume-17-issue-2-june-2022/municipal-systems-amendment-of-2022-will-it-depoliticise-municipal-administration

55 Harper P. 'Municipal manager can be held responsible for losses', *Mail & Guardian*. https://www.pressreader.com/south-africa/mail-guardian/20220617/281509344850321

EMERGING ISSUES

Most of these issues have existed for a long time, but their impacts are emerging more clearly now. Again, this is not an exhaustive list but rather a description of the most important issues.

Climate change impacts

For almost every interviewee, the impacts of climate change are foremost. Droughts in the Western and Eastern Cape Provinces and the recent flooding in KZN have shown that the time for talking about and planning for climate change is over. The impacts are already being felt, and cities cannot wait for climate change to test their infrastructure but need to act urgently to strengthen and invest in its resilience, including through proper asset management. Cities also need to introduce effective monitoring of other environmental issues, including pollution and the degradation of natural systems, and invest in safeguarding and restoring ecologies.

Sustained underinvestment in infrastructure

As discussed in Chapter 5, cities have not invested adequately in the infrastructure required to support higher growth, nor maintained existing infrastructure in good condition. As one interviewee stated bluntly, "If we get into a high growth environment, cities are going to fail to function". This underinvestment is in part due to the lack of technical capacity and inadequate project preparation and pipelines, and in part due to financial constraints. Cities need to diversify their mix of capital finance and access new finance sources. Agility is needed, as cities cannot wait another 10 years (the time it took to introduce policy related to development charges) for regulation related to other sources of finance, such as new land value capture instruments. This will require national government to create the right regulatory frameworks as fast as possible, and cities to be more creative and ambitious in their approach to finance, within prudent financial limits.

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ALTHOUGH LESS DRAMATIC THAN ELECTRICITY, WATER DEMAND PATTERNS ARE SHIFTING IN MOST CITIES, DUE TO DROUGHT AND CLIMATE CHANGE, AND DIVERSIFIED SOURCES OF WATER SUPPLY ARE BECOMING INCREASINGLY APPEALING TO HOUSEHOLDS AND BUSINESSES.

Increased energy independence and rethinking electricity businesses

Probably the key factor affecting local economies is the lack of sustainable and predictable electricity. Given the continued poor performance by Eskom, cities have to diversify their energy supply and have begun to rethink their electricity businesses in the face of changing patterns of energy demand (SACN, 2018). However, despite some steps taken in the right direction, the regulatory framework remains onerous and unclear.

Shifts in the water business

Although less dramatic than electricity, water demand patterns are shifting in most cities, due to drought and climate change, and diversified sources of water supply are becoming increasingly appealing to households and businesses. Cities need to rethink their water businesses to ensure that they remain a supplier of choice and continue to supply water in a financially sustainable manner.

Digital infrastructure

The role of cities in digital infrastructure remains uncertain and must be clarified. Equitable, reliable access to information is a key enabler for growth in 21st century economies, but leaving digital infrastructure to the private sector is likely to result in inequity. The relevant role players need to develop an enabling framework and appropriate funding model before the current window of opportunity closes.

New revenue streams

Finding alternative revenue streams is becoming increasingly important, as changing electricity demand patterns have a fundamental impact on the city financial model. One possibility is digital infrastructure, or a local business tax that brings new money into the system (SACN & City of Tshwane, 2017). National Treasury has done further work on alternative funding or financing tools for cities, but this work needs to be accelerated.

WHAT NEEDS TO CHANGE?

A fairly bleak picture of city finances has emerged in this report. Growing employee-related costs and bulk purchases are increasingly squeezing out other city expenditures and cannot be covered by service charges and property taxes, which are becoming increasingly unaffordable. As a consequence, operating surpluses are constrained, which (alongside other factors) has led to cities underinvesting in infrastructure. Making cities more sustainable will require making changes that are not all directly related to city finances. Indeed the most significant shifts are needed in governance and local politics, which are inextricably linked to city finances.

Reignite the national economy

A reignited national economy would improve city finances, but cities are not passive recipients. While issues such as industrial policy and labour law may be outside of city control, cities can contribute to economic development in three areas (CSP, 2018).

- *Foundation*: infrastructure services, regulatory and administrative services, and control of the use of land
- *Activation:* collaboration and partnering internally, with private sector and other spheres of government
- *Promotion:* investment retention and promotion; township economic activities; public employment innovation; and well-considered economic development initiatives

National government must act to boost the national economy, while cities must act with urgency to reignite their local economies. This means having more ambitious city capital programmes, including investing in infrastructure needed to support future growth, and addressing the procedural complexity and costs of regulatory processes, such as those related to construction permits, connecting to electricity, registering property and enforcing contracts.

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RESTORING TRUST IS CRUCIAL AND WILL REQUIRE POLITICAL MATURITY, ESPECIALLY (AS IS INCREASINGLY THE CASE) WHEN POLITICAL LEADERSHIP IS DIFFERENT ACROSS THE SPHERES OF GOVERNMENT BECAUSE, AS ONE INTERVIEWEE POINTED OUT, "YOU CANNOT SOLVE A POLITICAL PROBLEM WITH AN ADMINISTRATIVE SOLUTION".

Stabilise politics and sanitise the political/ administrative interface

South African cities have always been sites of political contestation, but the impact of this contestation is more apparent and severe under coalition governments. The negative impacts of contested coalitions are immediate (cities unable to pass budgets or function on a day-to-day basis), medium term (senior managers replaced whenever political leaders change, resulting in instability among senior management) and long term (lack of commitment to plans and strategies that are longer than a five-year term). However, political contestation and interference in the administration have a more pernicious impact, that of eroding the trust of communities and business, reducing city legitimacy to impose service charges and taxes, and affecting investor sentiments. Restoring trust is crucial and will require political maturity, especially (as is increasingly the case) when political leadership is different across the spheres of government because, as one interviewee pointed out, "you cannot solve a political problem with an administrative solution".

Councillors and political principals need to understand and be accountable for the long-term consequences of their actions. Councils take decisions that have an impact on financial performance, such as keeping rate and tariff increases lower than the rising costs of providing services. Other actions include being unwilling to enforce payment for services or to disconnect electricity in response to rising NRE, or to take hard decisions on controlling overtime or other internal drivers of employee-related costs. City officials also need to provide councillors with information that allows them to make better decisions.

Put strong, stable leadership in place and improve organisational culture

Many of the problems in South African cities can be traced to "a convenient failure of leadership", as one interviewee stated. Strong, stable leadership is a key metric of success in any organisation, including cities. Leaders in cities must have the appropriate qualifications and experience and be protected from undue political interference in their appointments and their management of a city. They also need to be strong enough to take the hard decisions required for cities to remain viable, and to put sound systems and internal structures in place. Although many cities are performing well in difficult circumstances, others are showing signs of performance failure. These cities need to get the basics

STRONG, STABLE LEADERSHIP IS A KEY METRIC OF SUCCESS IN ANY ORGANISATION, INCLUDING CITIES.

right before they can innovate — by spending existing funds more efficiently, making better use of existing revenue sources and improving day-to-day financial management (SACN, 2015). A culture of good governance, service and pride in being a city employee is needed. This starts at the top and requires eliminating corruption and improving accountability, and consequence management and enforcement. Cities also need to restore trust and improve their relationships with business and communities, including through meaningful public participation.

Improve agility and create space for innovation

The regulatory reform process in South Africa is painfully slow and increasingly constrained. This is due in part to the lack of differentiation, which means that the regulatory environment is geared towards the lowest performing elements in the system and burdens more capable cities. Greater agility is needed, which may require revising legislation and systems, although there is always the need to "be careful of grand, systemic reforms", as one interviewee warned. What is needed is space for piloting ideas. Capable, high performing cities can be used as sites for innovation, testing and experimentation, with successful innovations being rolled out to other cities or municipalities only if appropriate (what works in one city may not always work in another). Examples of piloting include Cape Town's feasibility study into taking over the rail service, and eThekwini's potential testing of land value capture instruments. However, for such an approach to work will require improving the ability to share learnings and good practices among cities — here, the SACN has an important role to play.

THE LAST WORD

Over the past decade, South African cities have functioned in a difficult environment, with a stagnant and declining economy, emerging climate change impact, a continuing energy crisis, rising political contestation in coalition governments, increasing attention on embedded corruption, and declining good local governance. The COVID-19 crisis further destabilised the system. These factors have contributed to a decline in city finances, which in some cases has been aggravated by decisions taken by city councils and officials, and by poor management.

Despite some successes, the problems facing South African cities are deeply entrenched. The priorities that emerge are not new but are the result of not addressing ongoing issues. Shifting the trajectory of cities will require complex and difficult actions, including reigniting the national economy, stabilising politics, putting strong city leadership in place, reforming organisational culture within cities, and improving the agility and ability to innovate. Politicians and officials across all spheres of government, and indeed all of society, need to act urgently to address these issues. Cities are the core of South Africa's economy and home to most of its population, and cannot be allowed to fail.

ABBREVIATIONS

AFS	Audited Financial Statements
AGSA	Auditor-General of South Africa
CBF	City Budget Forum
CFO	Chief Financial Officer
COGTA	Department of Cooperative Governance and Traditional Affairs
CPI	Consumer Price Index
CSP	Cities Support Programme
DBSA	Development Bank of South Africa
DDM	District Development Model
DORA	Division of Revenue Act
DWS	National Department of Water and Sanitation
EEDSM	Energy Efficiency and Demand Side Management Programme
EPWP	Expanded Public Works Programme
ESKOM	Electricity Supply Commission
GCF	Green Climate Fund
GDP	Gross Domestic Product
GV	General Valuation
GWH	Gigawatt Hours
IBT	Inclining Block Tariff
IDP	Integrated Development Plan
IPP	Independent Power Producer
ISDG	Infrastructure Skills Development Grant
IUDF	The Integrated Urban Development Framework
JSB	Joint Services Board
KL	kilolitre
KWH	Kilowatt Hour
LGES	Local Government Equitable Share

MBRR	Municipal Budget and Reporting Regulations
METRO	Metropolitan Municipality
MFMA	Municipal Finance Management Act
MPRA	Municipal Property Rates Act
MSA	Municipal Systems Act
MSCOA	Municipal Standard Chart of Accounts
NDP	National Development Plan
NERSA	National Energy Regulator of South Africa
NEWGEN	New (Electricity) Generation
NRE	Non-revenue Electricity
NRW	Non-revenue Water
PPE	Property, Plant and Equipment
PPP	Public-private Partnership
PV	Photovoltaic
RSC	Regional Services Council
SACCD	South African Council on City Data
SACN	South African Cities Network
SAICE	South African Institute of Civil Engineers
SALGA	South African Local Government Association
SCODA	South African Cities Open Data Almanac
SDBIP	Service Delivery and Budget Implementation Plan
SOCF	State of City Finances
SOCR	Sate of Cities Report
SSEG	Small-Scale Embedded Generation
STATS SA	Statistics South Africa
UIFW	Unauthorised, Irregular, Fruitless and Wasteful (expenditure)
USDG	Urban Settlements Development Grant

REFERENCES

AGSA. 2021. Consolidated General Report on the Local Government Audit Outcomes MFMA 2019/20. Available online: https://www.agsa.co.za/Portals/0/Reports/MFMA/201920/2019%20-%2020%20MFMA%20Consolidated%20GR.pdf

Ajam T, Burger J, Quinot G, Botha M and Douglas J. 2021. Towards a Municipal Financial and Operational Sustainability Strategy for the Western Cape: A report for the Western Cape Department of Local Government. Stellenbosch: Stellenbosch University, School for Public Leadership.

Booysen MJ, Visser M and Burger R. 2019. Temporal case study of household behavioural response to Cape Town's 'Day Zero' using smart meter data, *Water Research,* 149: 414–20. doi:10.1016/j.watres.2018.11.035

Brick K and Visser M. 2018. Green nudges in the DSM toolkit: Evidence from drought-strickenCape Town. *Draft working paper. Available online:* https://doi.org/10.13140/RG.2.2.16413.00489

Corruption Watch. 2021. South Africa Needs Clean Hands Report. Johannesburg: Corruption Watch. Available online: https://www.corruptionwatch.org.za/wp-content/uploads/2021/08/CW-local-govt-sectoral-report-August2021.pdf

CSP (City Support Programme, National Treasury). 2018. Cities Support Programme: What the Cape Town Drought Taught Us: 4 focus areas for local governments. *Climate Resilience Briefing Note*. Available online: https://www.csag.uct.ac.za/wp-content/uploads/2018/12/CSP_climate_policy-brief_2018_11_26.pdf

DME (Department of Minerals and Energy). (2003). Electricity Basic Support Tariff (Free Basic Electricity) Policy. *Government Gazette*, *457*(25088), 1–25.

DPWI (Department of Public Works and Infrastructure). 2022. South Africa's National Infrastructure Plan 2050. Pretoria: DPWI. Aavailable online: https://www.gov.za/sites/default/files/gcis_document/202203/46033gon1874.pdf

Fankhauser S and Tepic S. 2007. Can poor consumers pay for energy and water? An affordability analysis for transition countries. *Energy Policy*, 35(2): 1038–1049. Available online: https://doi.org/10.1016/j.enpol.2006.02.003

FFC (Financial and Fiscal Commission). 2021. *Submission for the 2022/23 Division of Revenue*. Available online: www.ffc.co.za

Lawless A. 2017. Numbers and needs in local government. *SAICE Civil Engineering*, *2017*(1): 1–12. Available online: https://journals.co.za/doi/10.10520/EJC-5f26e7380

Ledger T and Rampedi M. 2019. Mind the Gap: Section 139 inverventions in theory and in practice. Johannesburg: Public Affairs Research Institute (PARI).

Manganye FM. 2019. A framework for organisational perfomance in local government focusing on effective leadership consistency: A case study of Tshwane Municipality. A thesis submitted to the University of South Africa (UNISA) in fulfilment of the requirements for the degree of Doctor of Business Leadership.

Matikinca P, Ziervogel G and Enqvist JP. 2020. Drought response impacts on household water use practices in Cape Town, South Africa, *Water Policy*, *22*(3): 483–500. Available online: https://doi.org/10.2166/wp.2020.169

Motebang SM. 2021. Challenges related to capacity in local government administration: The continuing tussle between insulated and non-insulated local government public service leadership. Paper presented at the *Sixth Annual International Conference on Public Administration and Development Alternatives,* held virtually, 6–10 October 2021. Available online: https://univendspace.univen.ac.za/bitstream/handle/11602/1881/Article - Motebang%2C s. m.-.pdf?sequence=1&isAllowed=y

Olver C. 2021. The impact of coalitions on South Africa's metropolitan administrations. In MISTRA. 2021. Booysen S. (ed.) Marriages of Inconvenience: The politics of coalitions in South Africa. Johannesburg: Mapungubwe Institute for Strategic Reflection.

PMG (Parliamentary Monitoring Group). 2021. *Eskom: Update on thr unbundling process*. https://pmg.org.za/committee-meeting/33068/

SACN (South African Cities Network). 2011. State of City Finances 2011. Johannesburg: SACN. Available online: https://www.sacities.net/wpcontent/uploads/2020/02/State_of_City_Finances_Report_2011.pdf

SACN. 2013. State of City Finances 2013. Johannesburg: SACN. Available online: https://www.sacities.net/wpcontent/uploads/2020/02/state_of_city_finances_report_2013.pdf

SACN. 2015. Citizen's Guide to the State of City Finances. http://www.sacities.net/wp-content/uploads/2016/PDF/CitizensGuide_to_SOCF2015-web.pdf

SACN. 2015. State of City Finances 2015. Johannesburg: SACN. Available online: https://www.sacities.net/wp-content/uploads/2020/02/State-of-City-Finances-Report-2015_FINAL.pdf

SACN. 2016. State of Cities Report 2016. Johannesburg: SACN. Available online: http://www.sacities.net/state-of-cities-reporting/socr-2016

SACN. 2018. State of City Finances Report 2018. Johannesburg: SACN. Available online: https://www.sacities.net/wp-content/uploads/2020/07/State-of-City-Finances-Report-2018.pdf

SACN. 2019. Cities Political Administrative Interface in the Built Environment. Report by the Built Environment Integrated Task Team (BEITT). Johannesburg: SACN. Available online: https://www.sacities.net/publication/political-administrative-interface-in-the-built-environment/

SACN. 2020. State of City Finances Report 2020. Johannesburg: SACN. Available online: https://www.sacities.net/wp-content/uploads/2021/06/WEB_SACN-SOCF-V-2020-v2_144dpi.pdf

SACN. 2022. State of Cities Report 2022. Johannesburg: SACN. Available online: https://www.sacities.net/socr-2021/

SACN and City of Tshwane. 2017. AMFM Report: Towards an Alternative Financing Model for Metropolitan Cities. Pretoria: SACN.

South Africa. 1998. Local Government White Paper. http://www.cogta.gov.za/cgta_2016/wp-content/uploads/2016/06/whitepaper_on_Local-Gov_1998.pdf

South Africa. 2003. Municipal Finance Management Act (MFMA) 56 of 2003. http://www.energy.gov.za/files/policies/act_municipalfinancemanagement_56of2003_2004.pdf

South Africa. 2018. Public Audit Amendment Act 5 of 2018. https://www.agsa.co.za/Portals/0/Legislation/Public_Audit_Amendment_Act__No__5_of_2018.pdf

South Africa. 2022. Municipal Systems Amendment Bill 3 of 2022. https://www.gov.za/documents/local-government-municipal-systems-amendment-act-3-2022-english-afrikaans-17-aug-2022-0000

South Africa. Taxation Laws Amendment Act No. 17 of 2009. https://www.sars.gov.za/lapd-lprim-aa-2009-01-taxation-laws-amendment-act-2009/

Theobald S. 2021. Infrastructure for South Africa: An assessment of the obstacles and solutions to greater infrastructure investment. Johannesburg: Intellidex. Available online: https://hub.blsa.org.za/wp-content/uploads/2021/03/BLSA-Intellidex-Infrastructure-Report.pdf

UNFCCC (United Nations Framework Convention on Climate Change). 2014. Biennial Assessment and Overview of Climate Finance Flows. Bonn, Germany: UNFCCC, Standing Committee on Finance.

Ziervogel G. 2018. 'Climate adaptation and water scarcity in Southern Africa', *Current History* 117(799): 181–186.

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