

NOVEMBER 2020

# The Public Sector Wage Bill – an evidence-based assessment and how to address the challenge

PREPARED FOR BUSINESS UNITY SOUTH AFRICA

## About Intellidex

Intellidex was founded in 2008 by Stuart Theobald and is a leading research and consulting firm that specialises in financial services and capital markets as well as studying South Africa's political economy and policy environment. Its analysis is used by companies, investors, stockbrokers, regulators, lawyers and companies in South Africa and around the world. It has offices in Johannesburg, London and Boston.

Intellidex is independent and not affiliated with any financial services company or media house. It takes pride in the integrity and independence of its research.

## Disclaimer

This research report was issued by Intellidex (Pty) Ltd.

Intellidex aims to deliver impartial and objective assessments of securities, companies, and other subjects. The information contained in this report is based on sources that Intellidex believes to be reliable, but Intellidex makes no representations or warranties regarding the completeness, accuracy or reliability of any information, facts, estimates, forecasts or opinions contained in this document. The information and opinions could change at any time without prior notice. Intellidex is under no obligation to inform any recipient of this document of any such changes.

No part of this report should be considered as a credit rating or ratings product, nor as ratings advice. Intellidex does not provide ratings on any sovereign or corporate entity for any client.

Intellidex, its directors, officers, staff, agents, or associates shall have no liability for any loss or damage of any nature arising from the use of this document.

### Disclosure

***This research was commissioned by Business Unity South Africa but was conducted independently by Intellidex. Intellidex retained full editorial control and is solely responsible for the content of this report.***

***The lead analyst responsible for this report was Peter Attard Montalto, Head of Capital Markets Research***

The opinions or recommendations contained in this report represent the true views of the analyst(s) responsible for preparing the report. The analyst's remuneration is not affected by the opinions or recommendations contained in this report, although his/her remuneration may be affected by the overall quality of their research, feedback from clients and the financial performance of Intellidex group entities.

Intellidex staff may hold positions in financial instruments or derivatives thereof which are discussed in this document. Trades by staff are subject to Intellidex's securities trading policy which can be obtained by emailing [mail@intellidex.co.za](mailto:mail@intellidex.co.za).

Intellidex may have, or be seeking to have, a consulting or other professional relationship with the companies, sovereigns or individuals mentioned in this report. A copy of Intellidex's conflicts of interest policy is available on request by emailing [mail@intellidex.co.za](mailto:mail@intellidex.co.za).

### Copyright

© 2020. All rights reserved. This document is copyrighted to Intellidex (Pty) Ltd. Prior written permission must be obtained before using the content of this report in other forms including for media, commercial or non-commercial benefit, aside from quotations in line with fair use provisions.

---

## Executive Summary

*There is no a priori "optimal" size of the public service. The key question is one of affordability. SA's public service is bound to be larger than the international norm because of high levels of poverty and inequality but its size and, in particular its growth, have to be sustainable. This is not currently the case.*

- Between 2006 and 2018, there was a near-70% increase in real, inflation-adjusted spending on compensation, with 78% of the increase attributable to increased real wages and 22% to the increase in personnel. The result is a real increase in average remuneration of 44% (or 3.1% per year).
- The calculation of average increases actually understates the pace of remuneration growth because it is affected by changes in the composition of the public service when older, better-remunerated staff depart and younger, less-expensive staff are recruited. For those staff who remained in the employ of the state between 2006 and 2018, real remuneration increased at over 4% a year.
- Despite claims to the contrary by some commentators and unions, the increase in average real remuneration is not explained by regressive wage increases or by dramatic growth in the number of administrators and policy-makers (though these numbers have increased). Given a staff complement of 1.3 million, the overall number of senior administrators does not seem especially worrisome, though concerns about their low productivity are real.
- Remuneration increases have continued to rise quickly in real terms over the past 15 years – in excess of 4% a year for officials who remained in the public service throughout the period 2006-2019.
- The increases are broad-based but progressive: increases have been recorded across the public service, but the fastest increases have been at the bottom of the distribution.
- There is no indication that productivity increases justify the increase in average remuneration.
- Critically, the increase in payroll costs has outstripped the rate of growth of the economy, with the result that these costs consume a larger and larger share of GDP.
- The extent to which the increase in remuneration has had an impact on the rest of government's budget is obscured by Treasury presenting compensation spending as a share of total spending, rather than as a share of revenue. The former approach tends to understate the extent of the impact of compensation spending growth because debt service costs spending has grown even faster, while the latter is a better measure of sustainability.

Comparison with international experience suggests:

- Whether measured as a percentage of GDP, of public spending or of tax revenues, payroll costs in SA are higher than the global norm.
- The main driver of high payroll costs is that average remuneration of public servants is high by international standards and when compared to private sector employees and per capita GDP. Teachers' salaries measured in purchasing power-adjusted US dollars are nearly 50% higher than the OECD average.

SA must address three interlinked but distinguishable problems with respect to the public sector payroll:

- Payroll costs are too high.
- Payroll costs are rising too quickly.
- Public sector employment is increasingly unproductive.

SA needs a "social compact" relating to the trajectory of public payroll costs. The target should be central government payroll costs falling from 12.2% of GDP in 2019/20 (or 14% of GDP in 2020/21) to 10.5% of GDP, but precisely how quickly this can be achieved depends on growth rates.

## Table of contents

Executive Summary .....	2
Table of contents .....	3
List of figures .....	3
List of tables .....	3
Introduction .....	4
How large is the public sector wage bill? .....	5
Trends in the public sector wage bill .....	9
What is the right size for the public service? .....	20
Public servants' remuneration .....	22
Insights and commentary .....	25
How might we make progress? .....	36
Appendix – What would a productivity review look like? .....	37

## List of figures

Figure 1: Data availability for compensation spending on the public sector .....	5
Figure 2: Compensation of employees of national and provincial governments as % of GDP; latest available, SA = 2017 .....	5
Figure 3: Spending on compensation as a % of public spending; latest available, SA = 2017 .....	7
Figure 4: Spending on compensation as a % of GDP and as a % of public spending; latest available, SA = 2017 .....	7
Figure 5: Payroll costs as a % of spending and as a % of revenues .....	8
Figure 6: Changes in government's payroll between 2006/07 and 2018/19 .....	9
Figure 7: Nominal GDP and payroll cost growth, % YoY .....	10
Figure 8: Changes in headcount (%) by function and province .....	10
Figure 9: Nominal average remuneration for different categories of public servant .....	11
Figure 10: YoY increases in average inflation-adjusted remuneration (2018 rands) .....	12
Figure 11: Distribution of staff across income bands using monthly income in 2018 rands .....	13
Figure 12: Composition of staff earning more than R1m per year, 2018 rands .....	13
Figure 13: Employment in the public sector and the formal, non-agricultural sector (2009Q3 to 2020Q1) .....	15
Figure 14: Changes in employment across the public sector (2010Q1 to 2020Q1) .....	16
Figure 15: Public sector employment, aggregate payroll costs and average salaries (2010Q1 = 100) .....	16
Figure 16: Average monthly wages in public sector and average annual growth from 2010Q1 to 2020Q1 .....	17
Figure 17: Public sector payroll costs as a % of GDP by sector, four-quarter moving average .....	18
Figure 18: Compensation spending growth over the 2020/21 MTEF .....	19
Figure 19: Employment in national and provincial government as a % of total employment, 2017 or latest .....	20
Figure 20: Public and private sector employment, YoY growth .....	21
Figure 21: Public servants as a % of the population .....	21
Figure 22: Average monthly wages in the public and private sectors, smoothed .....	23
Figure 23: Distribution of public servants' income compared to all taxpayers (2014) .....	23
Figure 24: Compensation of senior managers (LHS) and teachers (RHS) in USD, PPP (2015) .....	24
Figure 25: Compensation of top management (LHS) and senior professionals (RHS) as ratio of GDP per capita (2015) .....	25
Figure 26: Public sector remuneration compared to GDP per capita .....	27
Figure 27: Projecting NGDP and government payrolls .....	28
Figure 28: Revenue underperformance by fiscal year (ZARbn) .....	32

## List of tables

Table 1: Public servants as a % of population .....	22
Table 2: Adjusting payrolls to 10.5% of GDP: status quo v. a two-year adjustment .....	33
Table 3: Post-Covid adjustments of payroll .....	34

## Introduction

This report describes and analyses how government's payroll costs have increased over the past decade. These costs, which are the product of trends in headcounts and in remuneration, have become increasingly unsustainable, driven largely by inflation-adjusted average increases of over 3% a year for more than a decade. Given the performance of the economy over that period, it is little wonder that government's payroll has been identified by all analysts and ratings agencies as a key driver of the increasing precariousness of public finances.

The report provides evidence to the effect that:

- SA's public service is not large in per capita terms, but it is unusually well remunerated.
- Levels of remuneration have been growing very rapidly and much faster than productivity.
- Claims made by unions that the growth in remuneration is driven by increases of remuneration at the top are incorrect.

The report concludes with recommendations aimed at returning payroll costs to affordable levels, although doing so is bound to be politically and managerially challenging. The report, however, begins by describing the size of the public sector compensation budget.

### Post-MTBPS update

This report was produced just prior to the MTBPS on 28 October. However, that event has now put significant focus on the public sector wage bill – given it forms such a large part of the cuts envisioned.

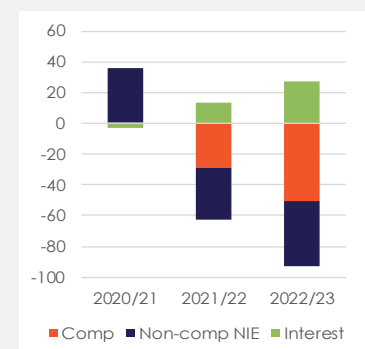
The MTBPS outlines what “must” happen on wages but not what “will” happen, given that we still await wage agreements between unions and the government (or for government to impose a wage decision) as well as the huge risk that emanates from the wage bill court case. Still, it sees the level of compensation dropping to 11% of GDP by the end of the 2023/24 fiscal year but that occurs through an unrealistic nominal wage freeze for the full horizon (including this year).

The mixture of an inability to place the full burden on other expenditure (goods and services and capital/infrastructure spending), the rapidly rising debt service costs bill and the closeness of the fiscal cliff and what is fundable with debt issuance, all mean there are few other options for Treasury, so increasing the importance of its choice here.

Yet, equally, the ability politically to take unions with government into a compact will rest, we think, on similar ideas to the suggestions laid out in this paper – including productivity reviews, coming to an agreement on the pace and scope of wage bill restraint vs the alternatives and an understanding by all sides on what is affordable.

With an intense focus on the wage bill between now and the budget in February and on into the new fiscal year in April, so this report is timely and hopefully a useful contribution to the debate.

### Changes in expenditure by type from Budget 2020 to MTBPS (ZARbn)



Source: National Treasury  
Non-comp NIE= Non-interest expenditure excluding compensation

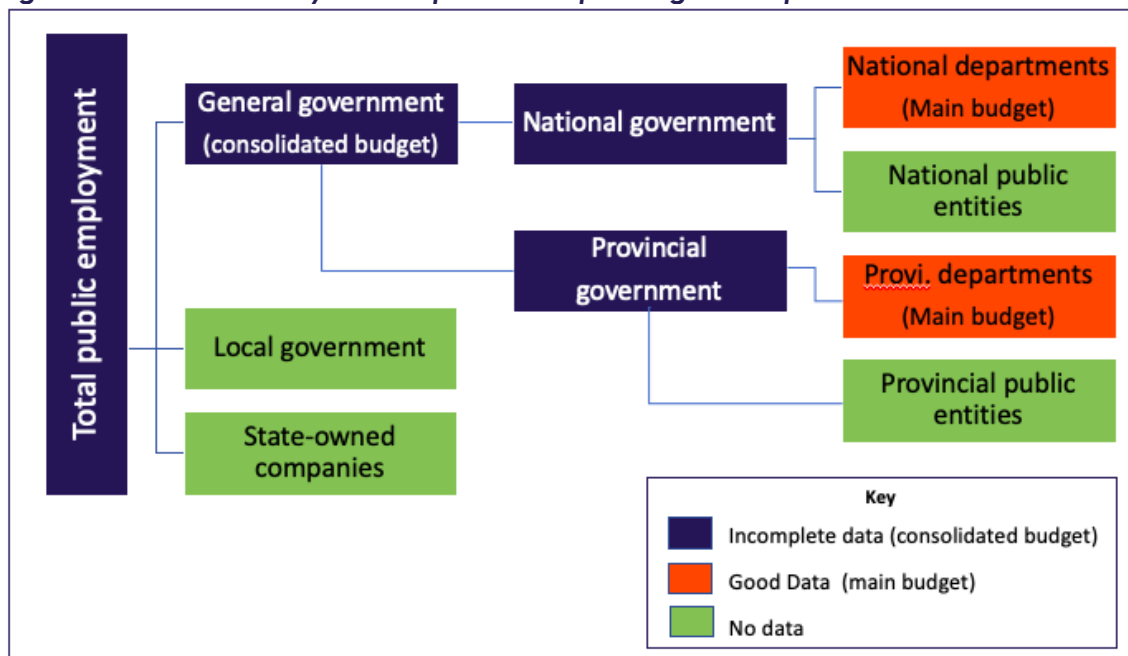
### How large is the public sector wage bill?

The public sector wage bill accounts for a significant fraction of SA's GDP. Precisely how large depends on the definition of "the public sector".

National Treasury reports that compensation spending on the consolidated budget accounts for about 12% of GDP. The consolidated budget, however, is not the sum total of the public sector because, though it includes national and provincial government as well as the public entities, it excludes local government (except insofar as local government receives fiscal transfers from national and provincial government) and the state-owned companies (Eskom and Transnet being the largest of these).

While National Treasury has made available considerable information on spending on compensation in national and provincial government departments, no such data have been compiled, much less made available, for local government, state-owned companies and (except in aggregate terms) the public entities (Figure 1).

Figure 1: Data availability for compensation spending on the public sector



Source: Own analysis based on IMF (2010)

Treasury has published high-quality payroll data for national and provincial departments that permits meaningful analysis of trends over time and the disaggregation of the effects of changes in headcounts, average remuneration and in the distribution of income among employees. The data covered in the published material account for 90% of spending by general government and nearly 75% of the broader public sector (including SOCs and local government).

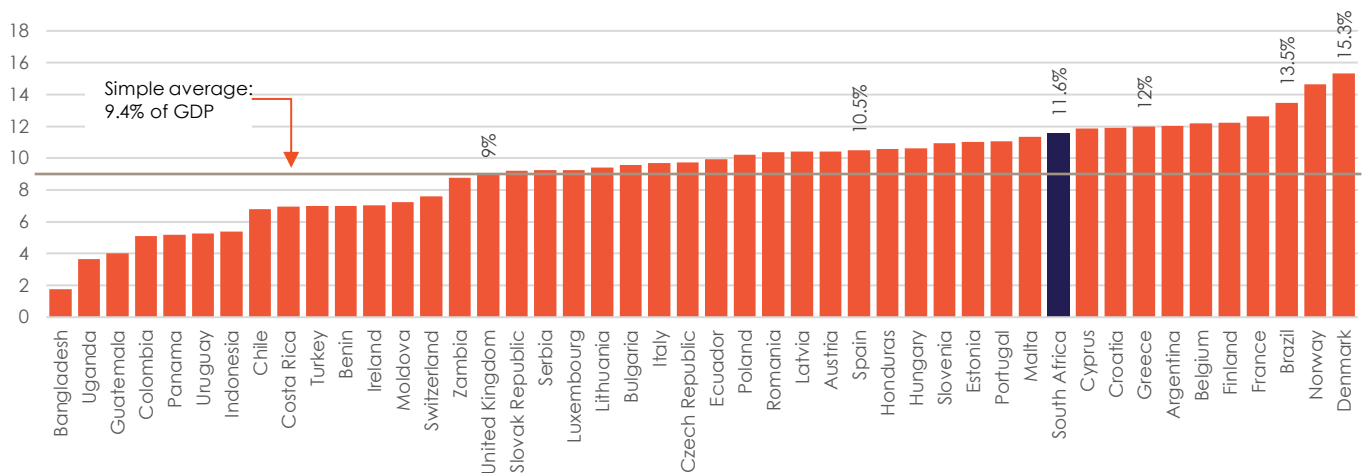
The data released by Treasury provide much less granularity for the rest of the compensation spending on the consolidated budget – i.e., spending on compensation in the public entities. This accounts for 10% of consolidated compensation spending, but there is little granularity in the data we have. Our understanding is that, apart from aggregate spending figures and some data on employment numbers, Treasury also has little or no insight into the underlying trends in compensation spending in the public entities since these entities use their own payroll systems which do not interface with Persal (the



system used to pay employees of national and provincial government). Beyond that, data quality diminishes further: there is no consolidated payroll data for local government, while state-owned companies' annual reports provide aggregate compensation spending, but often do not include meaningful or consistent detail about the number of people employed, much less about how the distribution of compensation spending among employees has changed over time.

Precisely how one defines the public sector (Figure 1) will have a material impact on the calculation of the ratio of compensation to GDP. In Figure 2, we report data from the IMF on public sector compensation as a share of GDP for a range of countries. These data apply only to what the IMF defines as “general government”, which would correspond to SA's national and provincial departments and public entities, but exclude local government and state-owned companies. For the 46 countries for which data are available, compensation accounted for an average of 9.4% of GDP. The figure for SA (for 2017) was 11.6%. This was in the top quarter of reported countries and is nearly 25% larger than the international average. (And, as we shall see below, if we include the rest of the public sector, payroll spending in 2019 was over 15% of GDP – see Figure 17, below).

Figure 2: Compensation of employees of national and provincial governments as % of GDP; latest available, SA = 2017



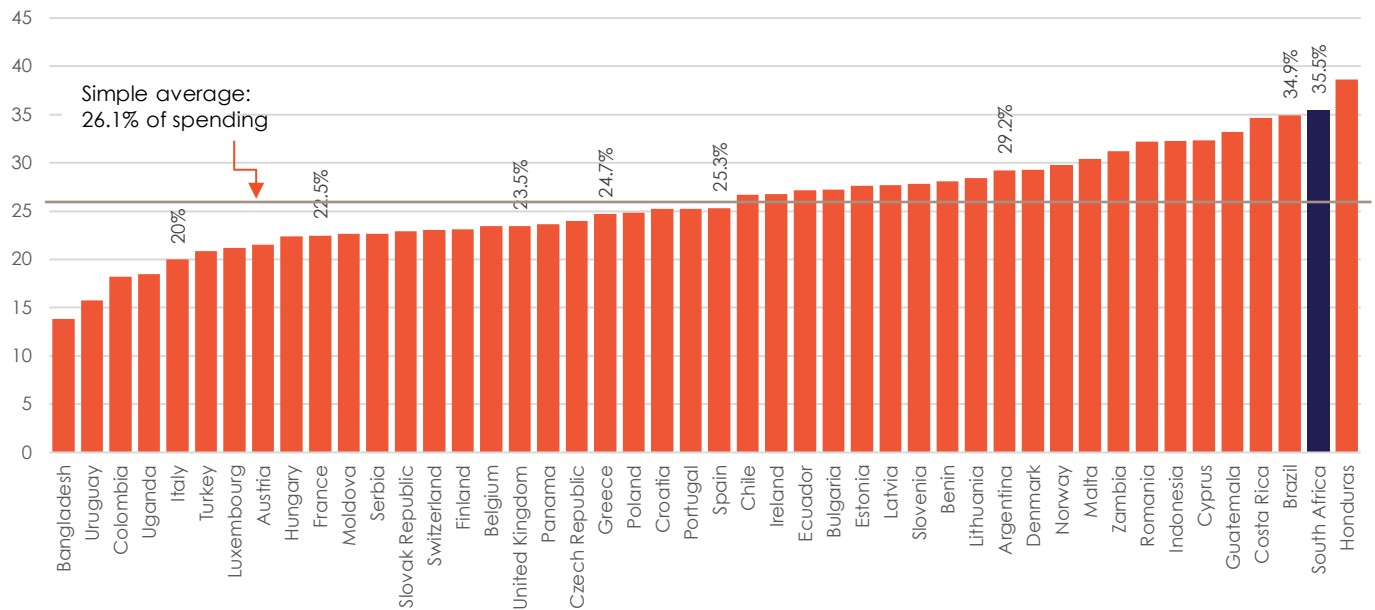
Source: IMF WWBI database

Some care is needed in interpretation because the figures are heavily influenced by countries' particular constitutional models. In the United States, for example, responsibility for most functions relating to law enforcement and education fall on local governments, so most police officers, prosecutors and correctional officials, along with all school teachers, would not be included in central government employment there, but are included in SA's data. There are also issues relating to funding arrangements: in the United Kingdom, the NHS is the country's largest employer and is part of the public service; in the Netherlands, which also has universal healthcare, government purchases healthcare services from entities outside of government itself, the employees of which are not counted as part of the public service. These are not trivial differences and the result is that comparison across countries needs to be handled with care.

Those concerns notwithstanding, and irrespective of the distribution of functions across the structures of government, it is notable that SA has among the highest ratio of compensation to public spending among

countries for which the IMF has secured data (Figure 3), with over 35% of spending devoted to compensation. This is more than a third higher than the average of these countries of 26.1%.

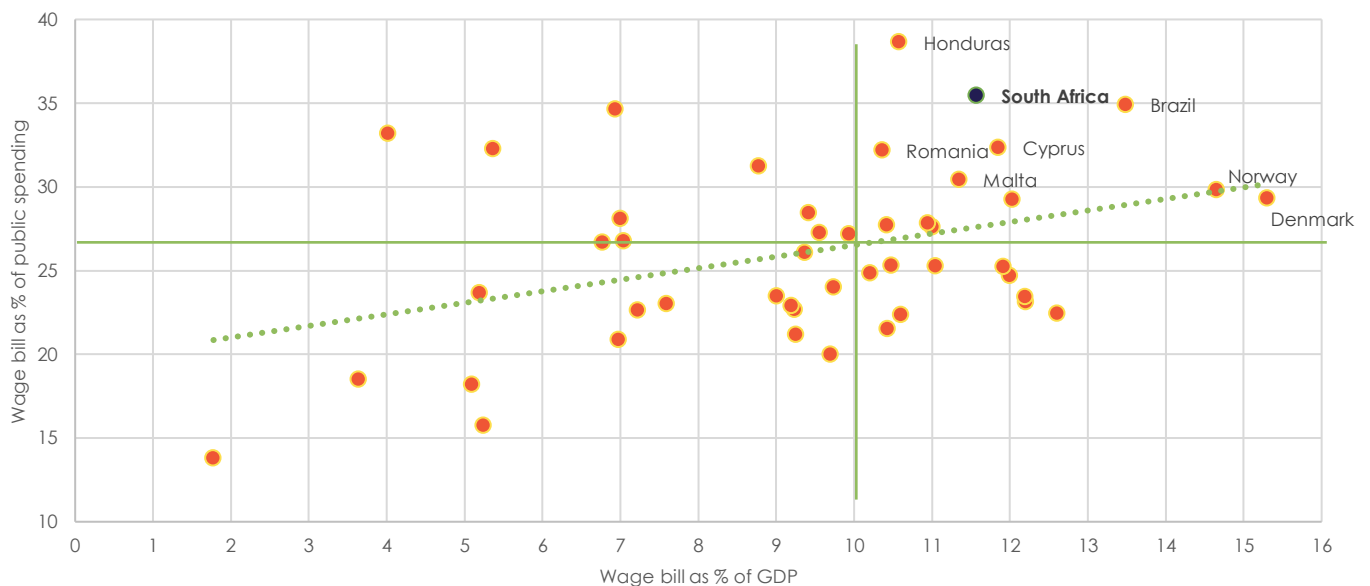
Figure 3: Spending on compensation as a % of public spending; latest available, SA = 2017



Source: IMF WWBI database

These data suggest that the general impression – that SA spends a larger proportion of its national income on the compensation of public servants than is the norm – is correct. This conforms with the data presented in Figure 4, where SA sits in the top right quadrant of countries when we compare compensation spending to GDP and to total public spending, and far above the fitted-line that reflects the average relationship between these two variables. This implies that government's wage bill is unusually large both because a large fraction of GDP is spent on it and because that spending is, to some extent, to the exclusion of other kinds of public spending.

Figure 4: Spending on compensation as a % of GDP and as a % of public spending; latest available, SA = 2017

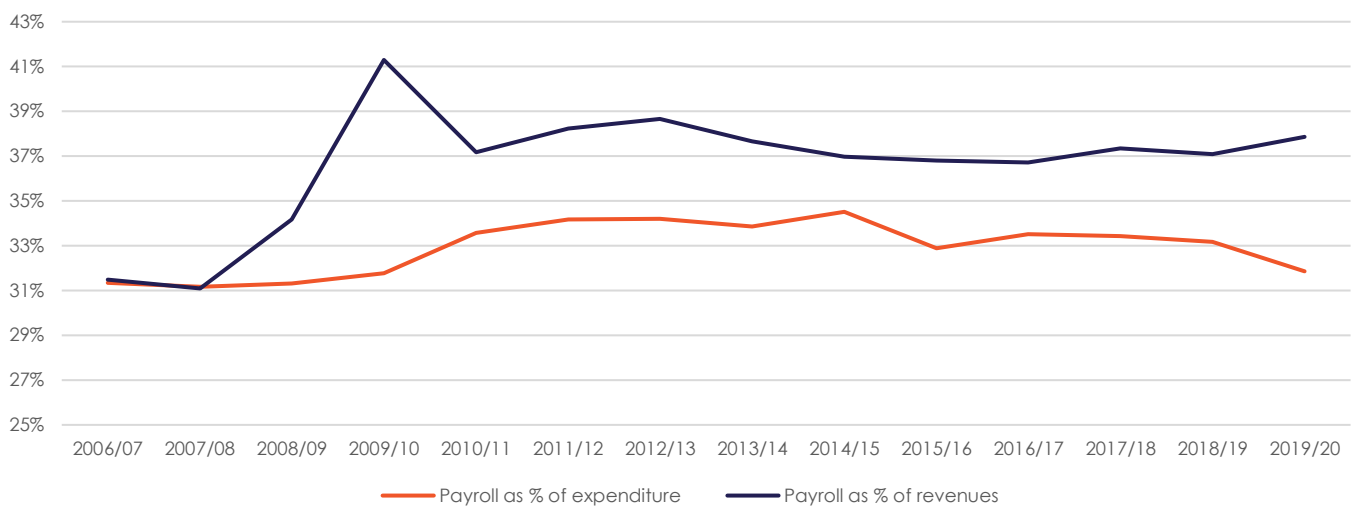


Source: IMF WWBI database



As a percentage of spending, payroll costs have been relatively stable over a long period, hovering around 33 or 34% of consolidated spending. But a key reason for this is that the rapid acceleration of debt service costs has meant that increased spending on compensation has not resulted in payroll costs consuming a larger share of spending. It is for this reason at least arguable that the proportion of spending that is accounted for by payroll costs is less revealing than the proportion of tax revenues that those costs consume. In this regard, SA has seen a marked and prolonged deterioration in the ratio of compensation spending to tax revenues. Before the global financial crisis, this ratio hovered around 31% of all revenues (taxes and departmental receipts). In 2009/10, in the face of the global slowdown, this ballooned to 41% and has stabilised at around 37%.

**Figure 5: Payroll costs as a % of spending and as a % of revenues**



Source: National Treasury

Importantly, given the collapse of revenues as a result of the economic effects of Covid-19, the Supplementary Budget Review published in June implies that payroll costs are expected to exceed 50% of revenues this year, 47% next year and 45% in 2022/23.

To understand how we got to this position and what can be done, it's necessary to understand the dynamics that drive the public sector's payroll costs.

These data, it must be emphasised, reflect only the compensation costs for national and provincial government, and much less is known about the extent to which these costs have absorbed a larger share of revenues/income of local government and the SOCs. Below, we present data that show that compensation spending has risen in local government (as has the number of employees). Because that increase is faster than the rate of growth of the economy, it is likely – but uncertain – that it has exceeded the rate of growth of both local government spending and local government revenues, but it is not clear by how much. In the case of the SOCs, the relationship is less certain: while payroll costs have risen at Eskom, for example, so too have non-wage spending and revenues, so the relationship of compensation spending to other spending and to revenues is unclear.

### Trends in the public sector wage bill

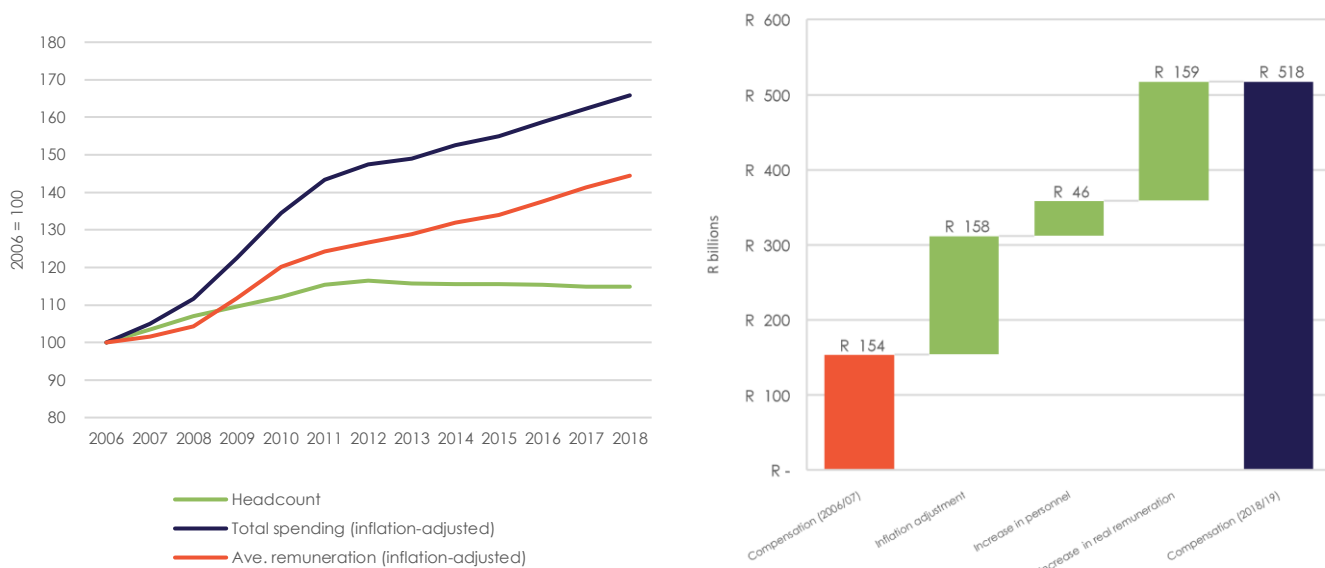
Over the past four years, National Treasury has released into the public domain data reflecting trends in the public sector payroll. To a large extent, the picture painted by NT reflects only the dynamics of the wage bill in national and provincial departments of government. Much less data have been presented on public entities and state-owned companies, with even less data relating to payroll costs in local government. In the next section, we will seek to rectify some of this by examining data from Statistics SA's Quarterly Employment Survey (QES), though this is (a) available only in high-level aggregates and (b) subject to a variety of data-quality issues which make it less reliable than the very high quality payroll data on which the National Treasury's analyses are based. These are summarised here, but, because they are reasonably well known, we will repeat only the most important trends.

#### Payroll data for national and provincial government<sup>1</sup>

The core facts about trends in compensation spending in national and provincial government can be summarised as:

- Payroll costs have risen on aggregate by nearly 70% in real terms over the past 12 years. This is a combination of a 15% increase in headcount and a 44% increase in inflation-adjusted average remuneration (**Error! Reference source not found.**, LHS). Add in the effect of inflation, and spending on compensation has increased from R154 billion in 2006/07 to R518 billion in 2018/19 (**Error! Reference source not found.**, RHS). If one ignores the adjustments made for inflation, real, inflation-adjusted increases account for 78% of the increase in payroll costs, while increases in headcount account for 22%

Figure 6: Changes in government's payroll between 2006/07 and 2018/19

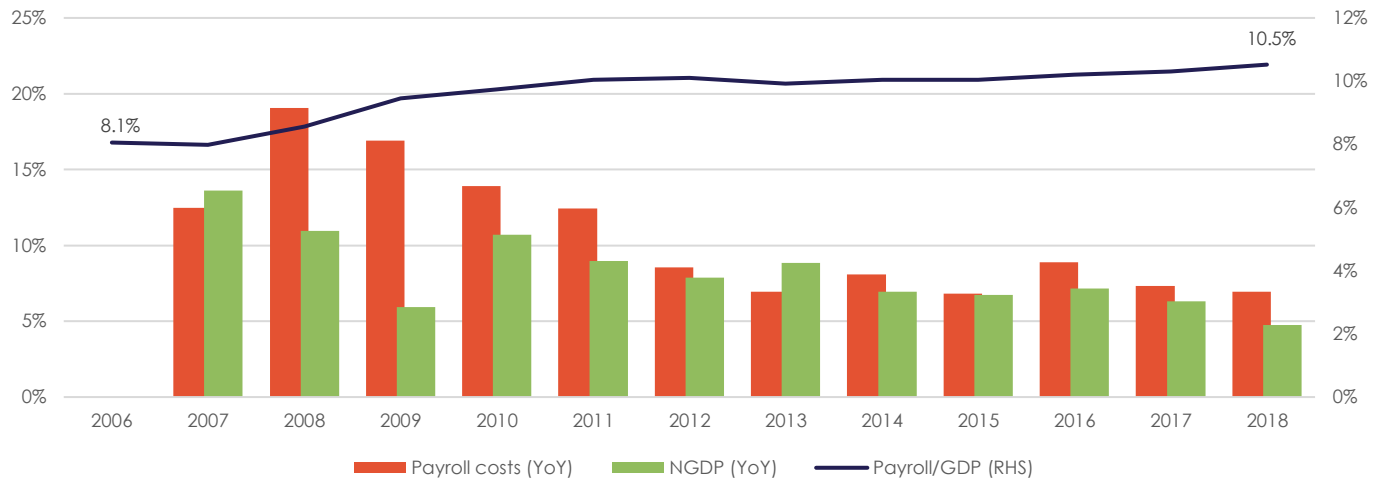


Source: National Treasury, MTBPS (various years)

<sup>1</sup> Note that this section assesses public spending on the Main Budget, which excludes public entities, SOCs and local government.

- The increase in spending has exceeded the rate of growth of the economy. Since 2006/07, payroll costs have increased by a compound average growth rate of 10.5% compared to the average growth of nominal GDP of 8.2%. The result is that payroll costs (for national and provincial government departments only) have risen from just over 8% of GDP in 2006/7 to 10.5% in 2018/19 (Figure 7).

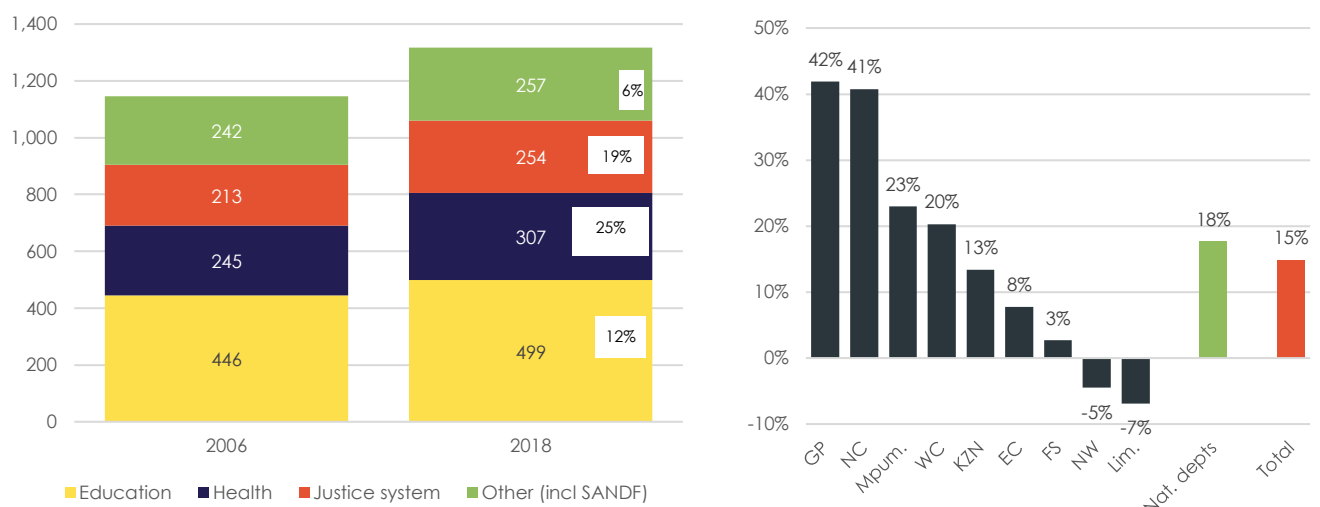
Figure 7: Nominal GDP and payroll cost growth, % YoY



Source: National Treasury, Budget Reviews

- The increase in staff numbers is broad-based, with headcounts increasing across all major sectors. Health, however, led the way with a 25% increase in headcount, followed by the justice system (19%) and the education system (12%). Growth was also reasonably similar at provincial and national levels, with average headcount over the period growing 14% at provincial government level and 18% at national level. Growth rates among provinces, however, varied considerably (Figure 8, rhs).

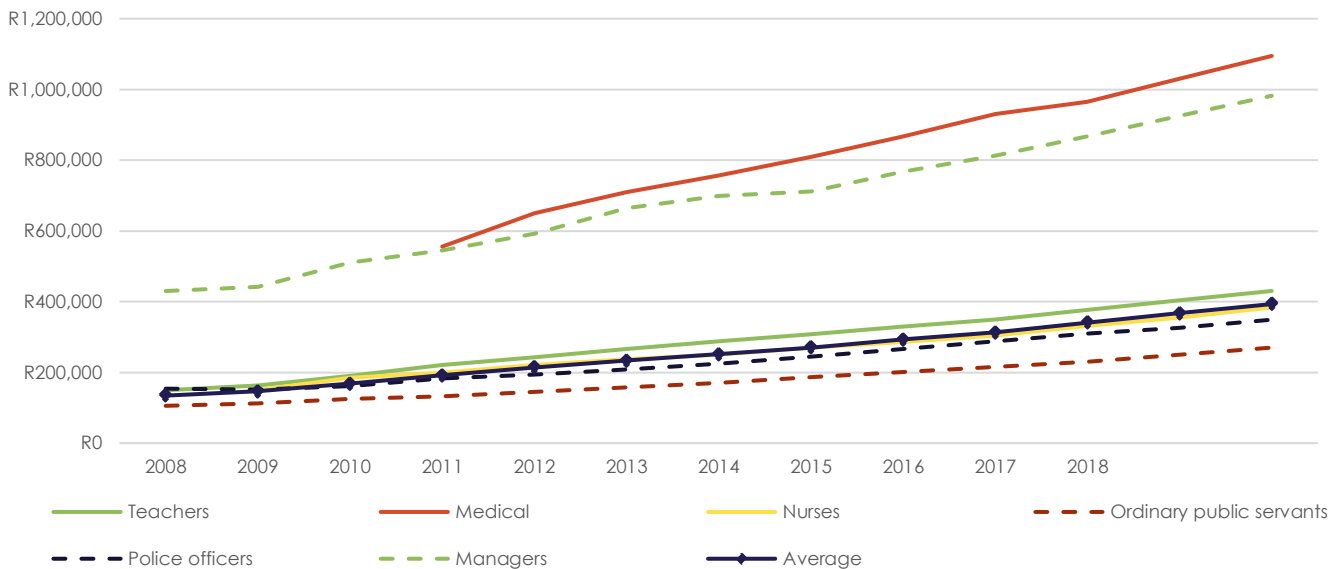
Figure 8: Changes in headcount (%) by function and province



Source: National Treasury

- The increase in remuneration since 2006/07 has been driven by five factors:
  - A once-off step change in remuneration in 2008/09 when occupational specific wage dispensations (OSDs) were introduced for a wide range of more skilled public servants (doctors, lawyers, nurses, teachers), with the introductions accompanied by significant once-off increases in basic pay.

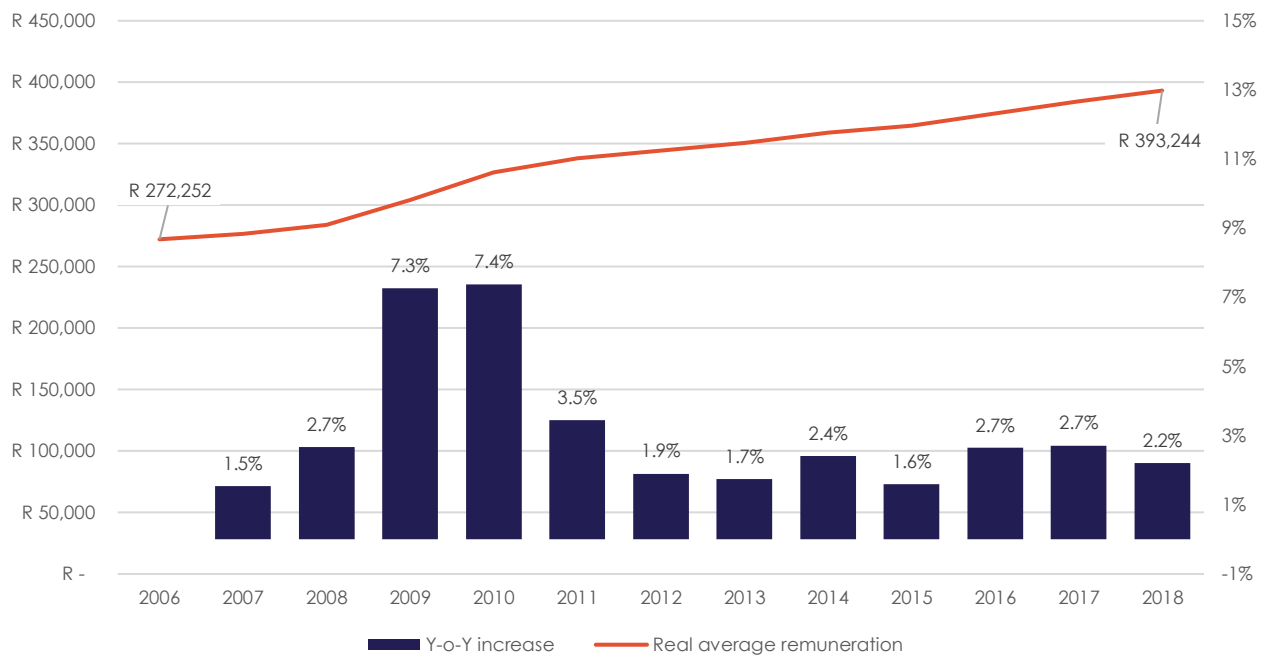
**Figure 9: Nominal average remuneration for different categories of public servant**



Source: National Treasury

- An extended series of wage agreements in which basic pay was adjusted at a rate greater than inflation.
  - Cost-of-living adjustments are applied to wages paid at each of the 16 wage levels in the public service, each of which is divided into a number of distinct notches. Over time, there has been a degree of grade inflation, which has resulted in the upward regrading of posts.
  - A system of “notch progression” in which public servants are entitled to incremental increases in basic pay over and above the cost-of-living adjustment provided they achieve a minimum score on their performance evaluation. In the past, different systems of pay progression applied in different parts of government, but the 2018 wage agreement provided that all public servants would qualify for a 1.5% pay progression increment each year.
  - Faster-than-inflation growth of non-wage employment benefits, especially medical aid and a range of allowances, the largest of which is the housing allowance to which all home-owning public servants are entitled.
- The combined effect is that these factors force a faster-than-inflation rise in average remuneration, with inflation adjusted average remuneration rising 44% in the past 12 years from R272 000 in 2006/07 to R393 000 in 2018/19 (all figures in 2018 rands, **Figure 10**).

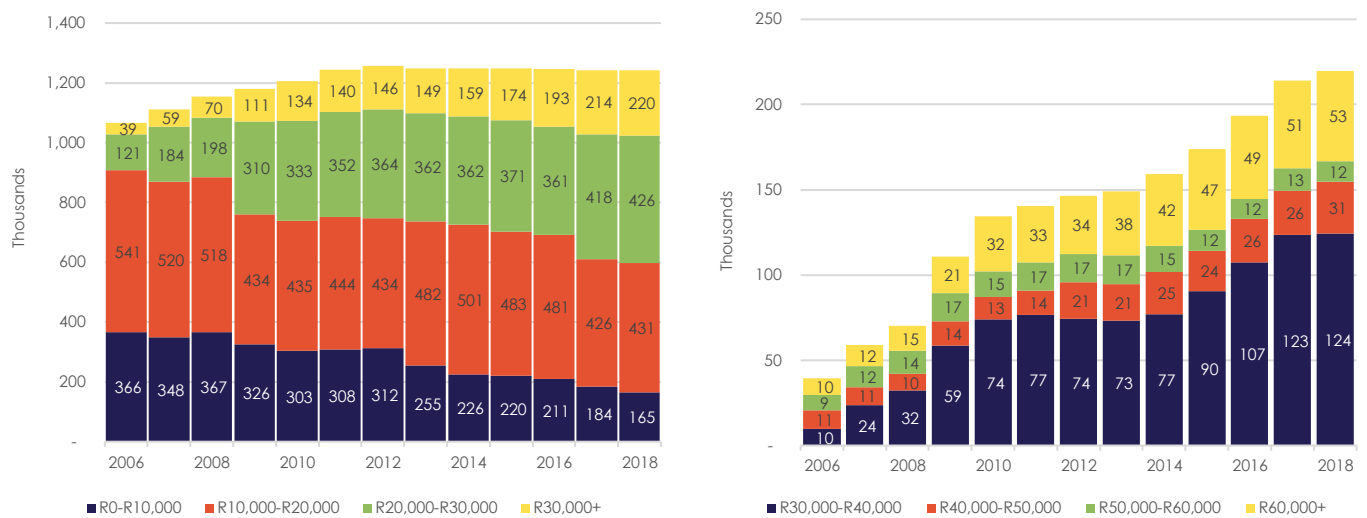
Figure 10: YoY increases in average inflation-adjusted remuneration (2018 rands)



Source: National Treasury

- The increase in remuneration has been fastest for officials on the lowest salary levels and has been progressively slower higher up the hierarchy. The result is a dramatic shift in the distribution of personnel across various income levels. Using inflation-adjusted income bands, **Figure 11** (LHS) reflects the declining share of personnel earning less than an inflation-adjusted R20,000 per month – from 85% of staff in 2006/07 to 48% in 2018/19 – and the rising share of staff earning above that figure. The fastest-growing income band consists of staff earning above an inflation-adjusted monthly salary of R30,000, the number of whom has increased over fivefold in 12 years. **Figure 11** (RHS) shows the distribution of staff in income bands above R30,000 per month. It reflects a twelvefold increase in staff earning between R30,000 and R40,000 per month and a fivefold increase in the number of staff earning above R60,000 per month.

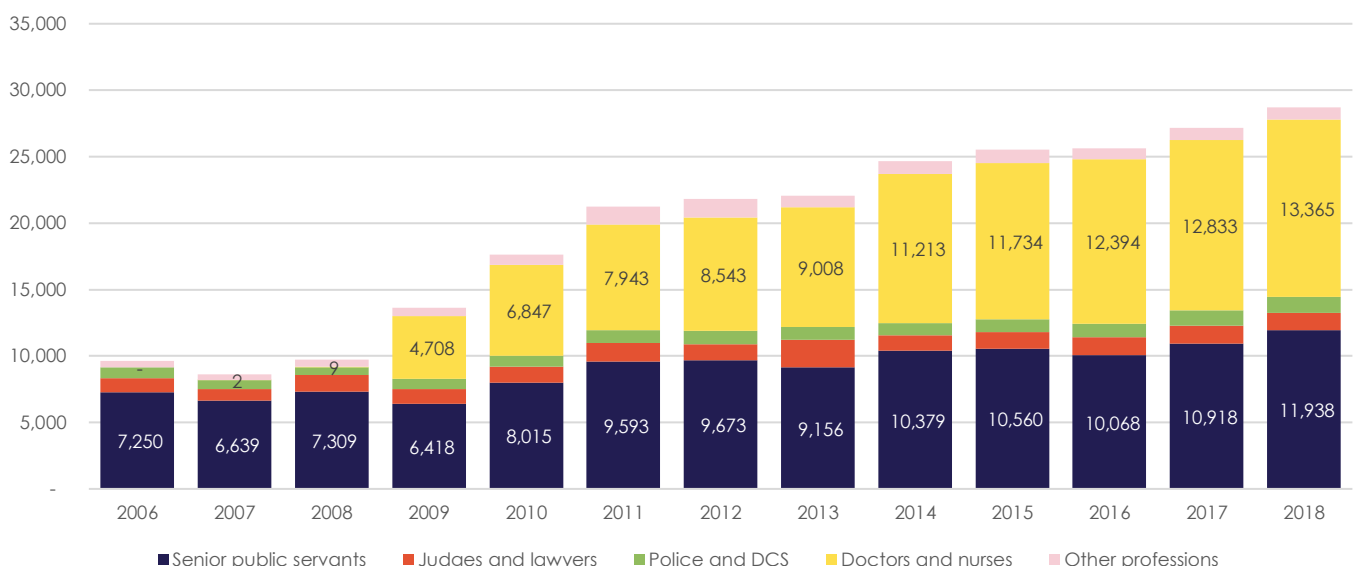
Figure 11: Distribution of staff across income bands using monthly income in 2018 rands



Source: National Treasury

- The increase in top-earners in the public service has been driven by a dramatic rise in the number of medical professionals – overwhelmingly doctors – rather than ordinary public servants, administrators and policy makers. The population of the latter increased by 65% (4,700) between 2006/07 and 2018/19, but the number of medical personnel at the top end of the income distribution in government has increased far more quickly --- from under 5,000 in 2009/10 to over 13,000 in 2018/19.

Figure 12: Composition of staff earning more than R1m per year, 2018 rands



Source: National Treasury

### **Summary and key insights from National Treasury data**

The key takeaways from the above are:

- Between 2006 and 2018, there was a near-70% increase in real, inflation-adjusted spending on compensation. Of that, 78% is attributable to increased real wages and 22% to the increase in personnel. The result is a real increase in average remuneration of 44% (or 3.1% per year).
- The calculation of average increases actually understates the pace of remuneration growth because it is affected by changes in the composition of the public service when older, better-remunerated staff depart and younger, less-expensive staff are recruited. For those staff who remained in the employ of the state between 2006 and 2018, real remuneration increased at more than 4% a year.
- Despite claims to the contrary by some, the increase in average real remuneration is not explained by regressive wage increases or by dramatic growth in the number of administrators and policy makers (though these numbers have increased). Given a staff complement of 1.3-million, the overall number of senior administrators does not seem especially worrisome (at around 5%, increasing by only 1pp in 12 years), though concerns about their low productivity are valid.
- Apart from their rapidity, remuneration increases have been broad-based and they have been progressive, in the sense that remuneration has increased more quickly for lower-ranked staff than for senior staff.
- Critically, the increase in payroll costs has outstripped the rate of growth of the economy, with the result that these costs consume a larger and larger share of GDP. The extent to which the increase in remuneration has had an impact on the rest of government's budget is somewhat obscured by Treasury's habit of reflecting compensation as a share of total spending. While this has grown, the rate of growth is slower than the rate of growth of debt service costs.

These trends, it must be reiterated, reflect dynamics in national and provincial government departments (ie, the main budget), and exclude public entities (which are included in the consolidated budget) as well as state-owned companies and local government (most of whose funding is not provided through the national budget).<sup>2</sup>

---

<sup>2</sup> Both local government and the SOCs receive some funding from national government. Having said that, in the case of local and district municipalities (ie, all municipalities apart from the metros), most of their funding comes from the equitable share of national revenue (some of which is also directed to the metros). In the case of the public entities, many receive transfers from national or provincial government departments. The transfers fund compensation spending in local government and the public entities, but there is no way to calculate what proportion of these funds covers payroll costs.

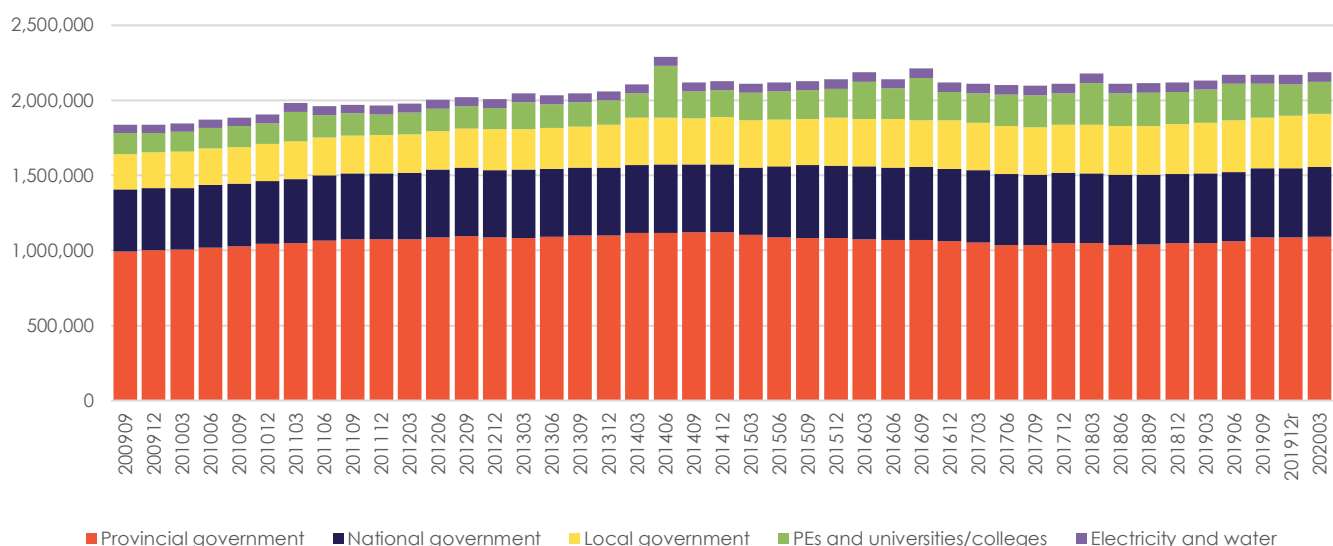


*Public sector headcount and payroll data from the Quarterly Employment Survey*

In the absence of high-quality payroll data for public employment as a whole, an estimate of total employment and payroll costs in the public sector must rely on the Quarterly Employment Survey (QES) compiled by StatsSA. This is a survey of employers in the formal, non-agriculture sectors of the economy. The survey is of 20 000 employers, including government agencies at all levels. The critical facts and trends that emerge from its data are:

- The public sector<sup>3</sup> has risen by over 18% between 2010 and 2020, from a little over 1.8-million to a little under 2,2-million (**Figure 13**). Of these, about 50% are employed by departments in provincial government and 21% by departments in national government. A further 16% are employed by local government and 10% by public entities and institutions of higher learning.<sup>4</sup> (Over the same period, employment in the formal, non-agricultural private sector has increased by 27%, from just under 6.4-million to just over 8-million.)

**Figure 13: Employment in the public sector and the formal, non-agricultural sector (2009Q3 to 2020Q1)**



Source: QES, StatsSA

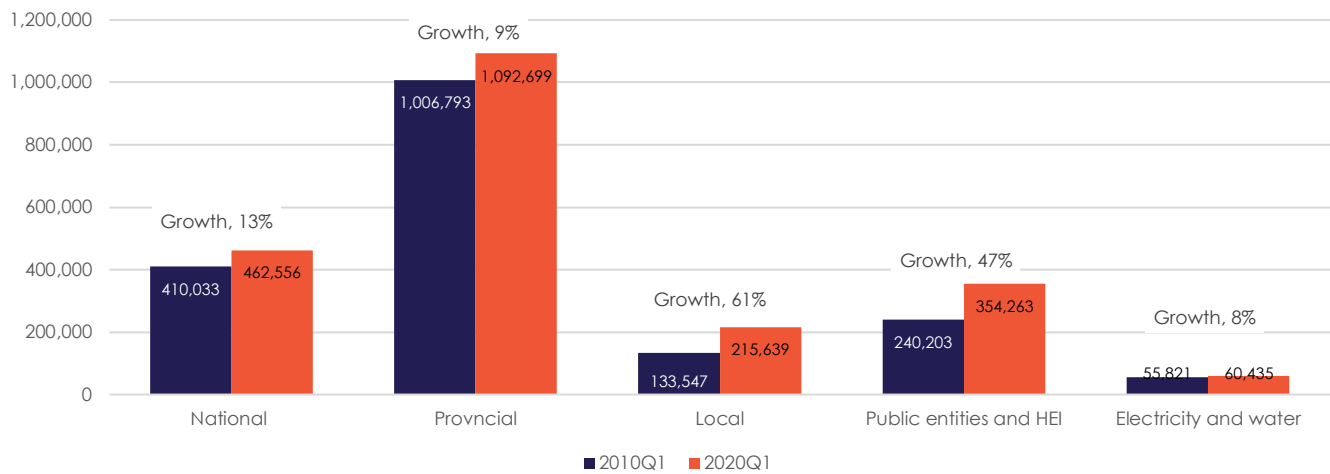
- Within the public sector, the fastest growth has been registered at local government level, which the QES reflects as having increased by over 60% between 2010Q1 and 2020Q1. Public entities and institutions of higher education increased by 47%, while the number of employees in national and provincial government increased by 13% and 9%, respectively. In absolute terms, public sector employment increased by about 340,000, of which nearly 115,000 were in public entities and institutions of higher education, 86,000 were in provincial

<sup>3</sup> For our purposes, we have defined public sector employment to include all employment captured in the QES and attributed to national, provincial and local government, as well as all employment in extra-budgetary institutions (public entities and higher education) along with employment in the water and electricity sectors. This is not a perfect match, however, although we think any deficiencies are reasonably small.

<sup>4</sup> The categories of extra-budgetary institutions (public entities) and institutions of higher learning are separated after 2013, but we continue to aggregate them for ease of comparison. Note that this category of employment is the least stable, with distinct spikes in some periods, largely coinciding with elections when the IEC's payroll will expand significantly but temporarily

government, 82 000 in local government and 52 000 in national government.

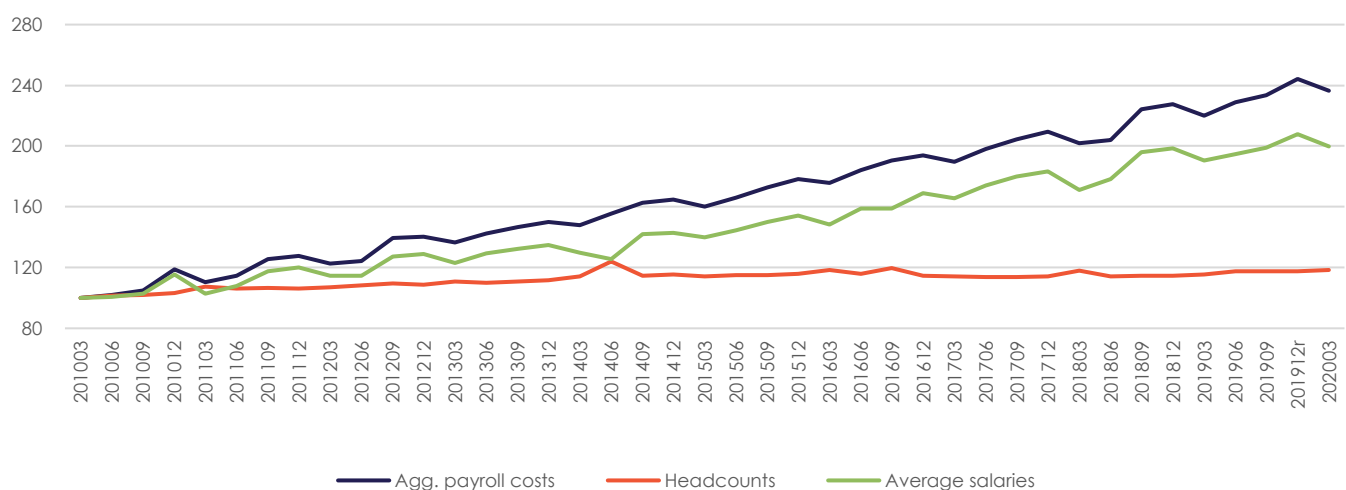
**Figure 14: Changes in employment across the public sector (2010Q1 to 2020Q1)**



Source: QES, StatsSA

- The monthly public sector wage bill grew by 136% in nominal terms between 2010Q1 and 2020Q1, from R28bn to over R66bn (or R341bn for the whole of 2010 to R745bn for 2019). This represents a real, inflation-adjusted increase in spending of just over 70%. The 18% increase in headcount accounts for only a small portion of the 136% increase in payroll costs, with the remainder accounted for by an increase in average salaries of nearly 100% in nominal terms (Figure 15). Given that CPI increased by 65% over that period, this represents a real, inflation-adjusted increase in monthly salaries of about 30% (or 2.5% a year).

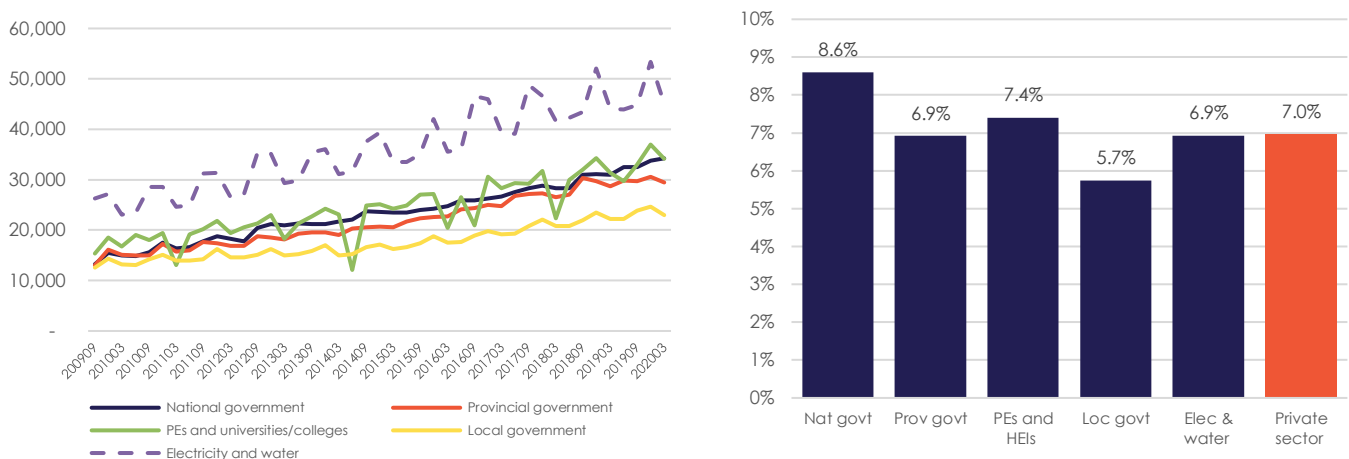
**Figure 15: Public sector employment, aggregate payroll costs and average salaries (2010Q1 = 100)**



Source: QES, StatsSA

- Within the public sector as we have defined it, the highest average wages are paid in the electricity and water sectors (R46,500 per month in 2019), the lowest were in local government (R22,000). In national and provincial government, the respective averages were R32,400 and R29,700 (**Figure 16**, LHS). Public sector wages have grown at a compound annual average of 7.2% since 2010Q1, but growth rates have been much faster in national government (8.6%pa) than in local government, where wages have grown at 5.7% a year (**Figure 16**, RHS). Over the same period, salaries in the private sector have grown at 7% a year off a lower base.

**Figure 16: Average monthly wages in public sector and average annual growth from 2010Q1 to 2020Q1**

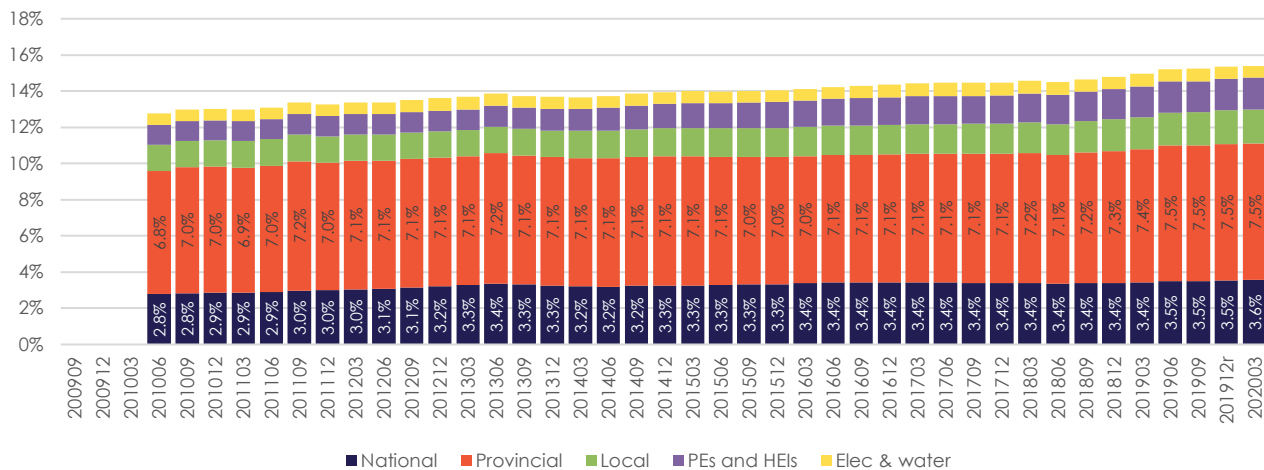


Source: QES, StatsSA

- As a percentage of GDP, compensation of public sector employees has risen from about 12.8% in 2010 to nearly 15.5% in 2020. This was driven by payroll costs in national and provincial government (1.5 percentage points, combined), public entities (0.7 percentage points) and local government (**Figure 17**).<sup>5</sup>

<sup>5</sup> The rising share of GDP accounted for by public sector compensation partly reflects trends in government's payroll, and partly the deceleration of GDP growth. The latter has also affected the relationship between compensation in the private sector and GDP, the ratio of which has risen from about 33% in 2010 to 42% in 2020. In total, compensation in the formal, non-agricultural sectors of the economy has risen from around 45% of GDP to over 55%. (This trend is also visible in StatSA's GDP estimates, though the trajectory is not quite as steep, having risen from about 49% to 54% of GDP between 2010 and 2019.) See [http://www.statssa.gov.za/timeseriesdata/Excel/P0441%20Gross%20Domestic%20Product%20\(Quarterly\)%20\(2020Q2\).zip](http://www.statssa.gov.za/timeseriesdata/Excel/P0441%20Gross%20Domestic%20Product%20(Quarterly)%20(2020Q2).zip)

Figure 17: Public sector payroll costs as a % of GDP by sector, four-quarter moving average



Source: QES, StatsSA and SARB database

**Summary of insights from the QES**

The story told through an analysis of the QES data and reflected above is, we believe, broadly correct. This is that:

- Compensation of employees in the public sector has grown quickly over the past decade;
- This growth has been driven both by (i) an increase in the number of employees in the public service and (ii) increases in remuneration of those employees; of the two forces, the latter is the more potent;
- Within the public sector, employment growth has been fastest at local government level and in public entities, while average wage growth has been fastest among national departments; and
- The growth in aggregate payroll costs has increased faster than GDP, with the result that compensation costs now account for a larger share of GDP than they did a decade ago.

There are some qualifications to make in relation to the above points arising out of the data, the most important of which relate to the manner in which SA’s extensive public employment programmes (the EPWP, Community Works Programme, etc) are treated in the data, and how they affect the observed trends. These comments are, to some extent, speculative as there is no real way to assess their validity using QES data. The core point here is that a large and (generally) growing number of low-paying, temporary public sector jobs have been created each year since 2004 through the EPWP and, since 2009, the Community Works Programme. Many beneficiaries are paid as if they were temporary employees of various government agencies. To the extent that these numbers are reported in the QES, they will have (i) exaggerated the rate of growth or employment and (ii) held down average remuneration (and, therefore, the measured rate of increase of average remuneration).

It is our view that these jobs are increasingly concentrated in public entities and local government and, to that extent, their figures reported above (both in relation to employment growth and in relation to lower wage growth in local government, may misrepresent underlying realities in the public sector itself. Some caution is, therefore, warranted, in interpreting these results too literally. It is likely that the expansion of EPWP-type jobs if and when the Presidential Youth Employment Initiative is established will further swell

headcounts and reduce the measured rate of increase in average remuneration.

These comments notwithstanding, we think that the QES data presented above is a reasonably accurate depiction of basic trends in the public sector. They do not, however, answer two critical questions:

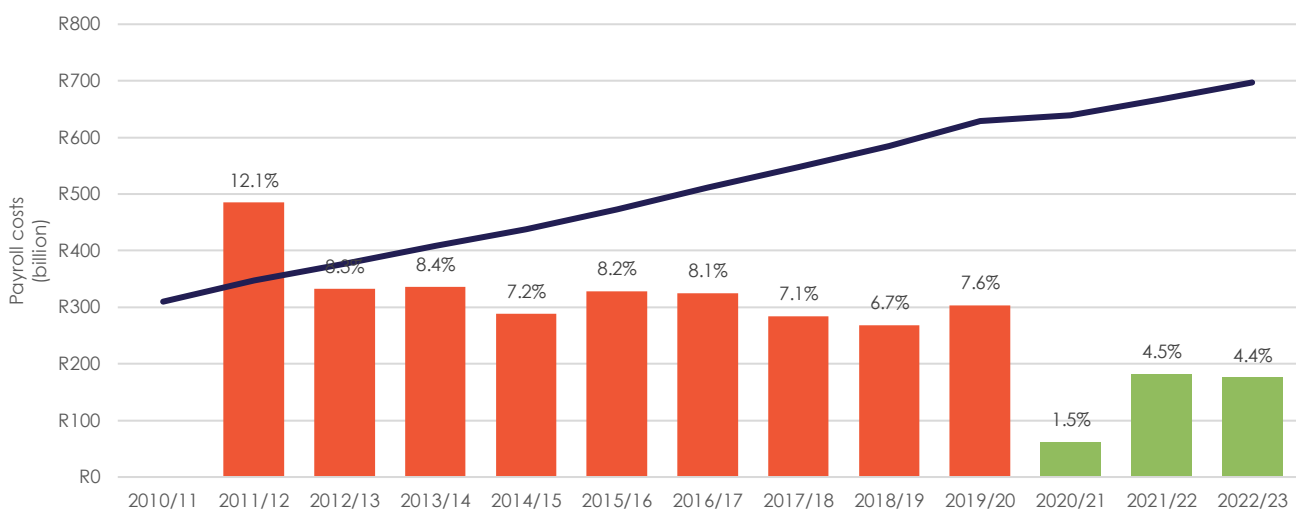
- What is the “right” size for the public service?
- Are public servants overpaid?

Before addressing these, it’s worth pointing out that in 2020, government began the process of addressing the unsustainable nature of payroll trends.

*Government’s attempt to fix compensation spending in 2020*

In the February 2020 budget, government sought to set a new trajectory for compensation spending, cutting R160bn in projected compensation spending out of the three-year estimated for the 2020/21-2022/23 MTEF. The result was a sharp reduction in the year-on-year increase in budgeted compensation spending from an average of over 7% a year before 2020/21 to 1.5% in 2020/21, and then 4.5% and 4.4% in 2021/22 and 2022/23 (Figure 18).

**Figure 18: Compensation spending growth over the 2020/21 MTEF**



Source: National Treasury

The primary strategy for achieving this outcome was a decision not to implement the third annual increase agreed to in the three-year wage agreement signed in 2018. This effectively freezes wages at the 2019/20 level and then budgets for increases of no more than CPI for each of 2021/22 and 2022/23. The combined effect is a reduction in payroll costs of about R40bn, R50bn and R60bn in each of the three years of the MTEF relative to the baseline trajectory.

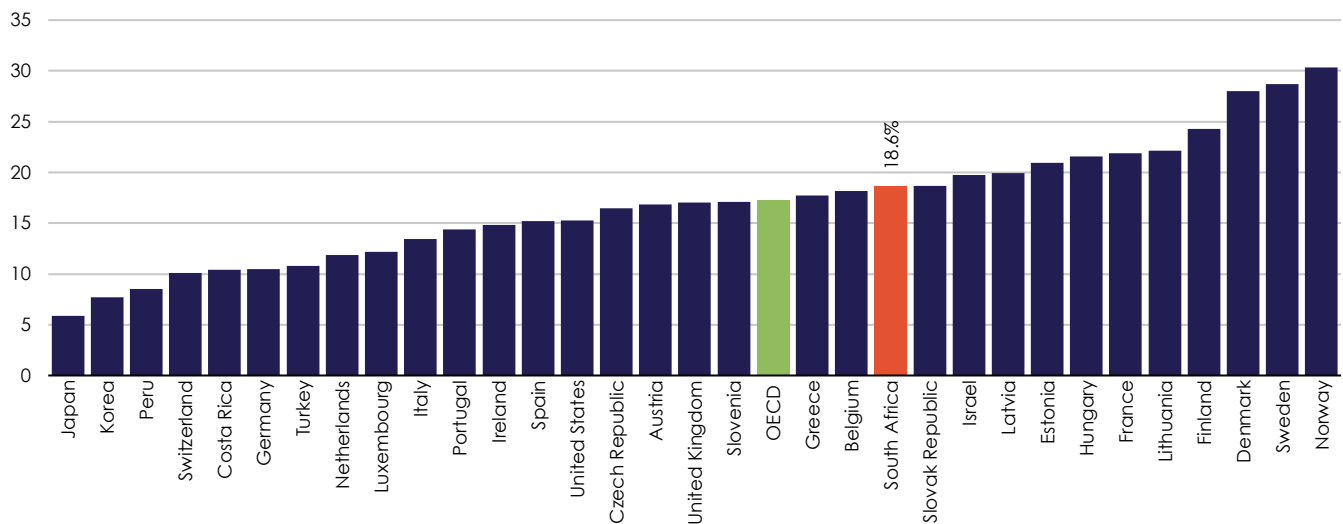
The decision to freeze wages is being litigated by a number of unions, and government – represented by DPSA and National Treasury – has so far held the line. We are unable to assess the likelihood of government winning the case. If it does not, it will have to implement the increases and make good on outstanding backpay. What this means for the medium and long term is unclear. However, if government loses the case, it can claw back the effect by implementing below-inflation increases in 2021/22 and 2022/23.

### What is the right size for the public service?

There is no formula to determine how large or small a government should be or what proportion of the population (or, even, of the employed population) should work in the public sector. To that extent, the size of the public sector is, in some senses, a political choice. In this regard, it is not unreasonable to think that the “natural” size of the state in SA is probably somewhat larger than in peer countries given the extent of poverty and inequality, which makes redistributive actions on the part of the state both more necessary (in the sense that a disproportionately large number of people must rely on the state to provide healthcare, education and other public goods and services) and more politically salient (in that the median voter is poor and may, therefore, have a strong preference for redistributive action).

Nevertheless, however large the public service is to be, the costs of employing public servants must be funded by taxpayers and, for that reason, it is helpful to look at the ratio of public servants to employees in the private sector. It is of course the taxes raised on the incomes, profits and consumption of the latter that are used to finance the employment of the former. In this regard, the fact that SA’s public sector – or, to be precise, the employees of its national and provincial governments – accounts for nearly 19% of employment in the country puts SA a little higher than the average for OECD countries (**Figure 19**). This suggests that SA’s public sector does not make up an unusually large proportion of total employment. This conclusion is reinforced when one considers SA’s extraordinarily high level of unemployment, a fact that would imply that, while the ratio of public servants to total employment might be slightly above average, the ratio of public servants to the population is below average.

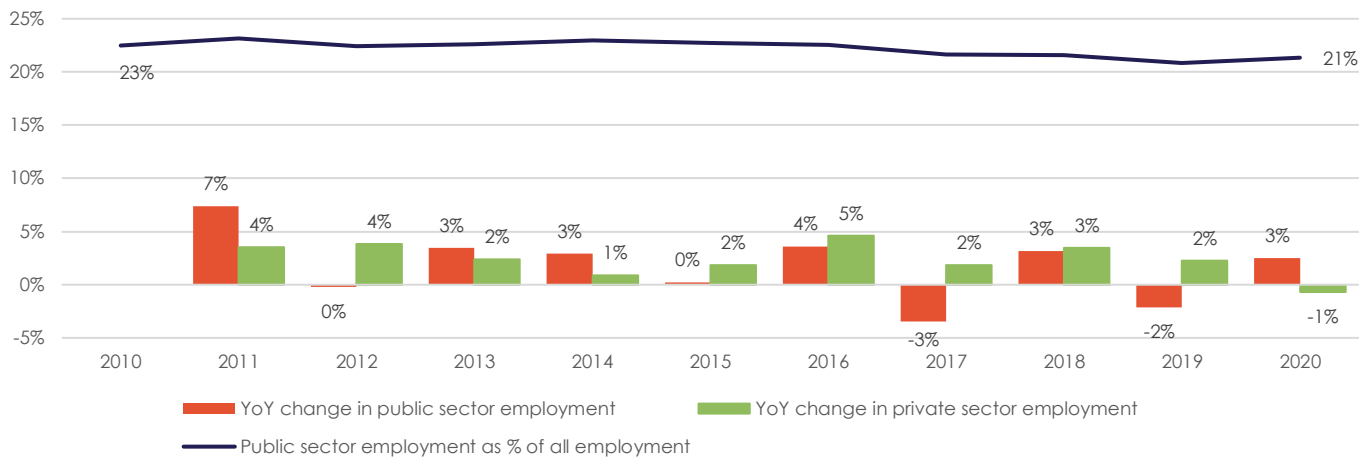
**Figure 19: Employment in national and provincial government as a % of total employment, 2017 or latest**



Source: OECD

Indeed, the ratio of public servants to private sector employment appears to have improved somewhat over the past decade: QES data show that the broader public service (as defined above) accounted for 23% of employment in 2010Q1, a figure that had fallen to 21% in 2020Q1 (**Figure 20**).

Figure 20: Public and private sector employment, YoY growth

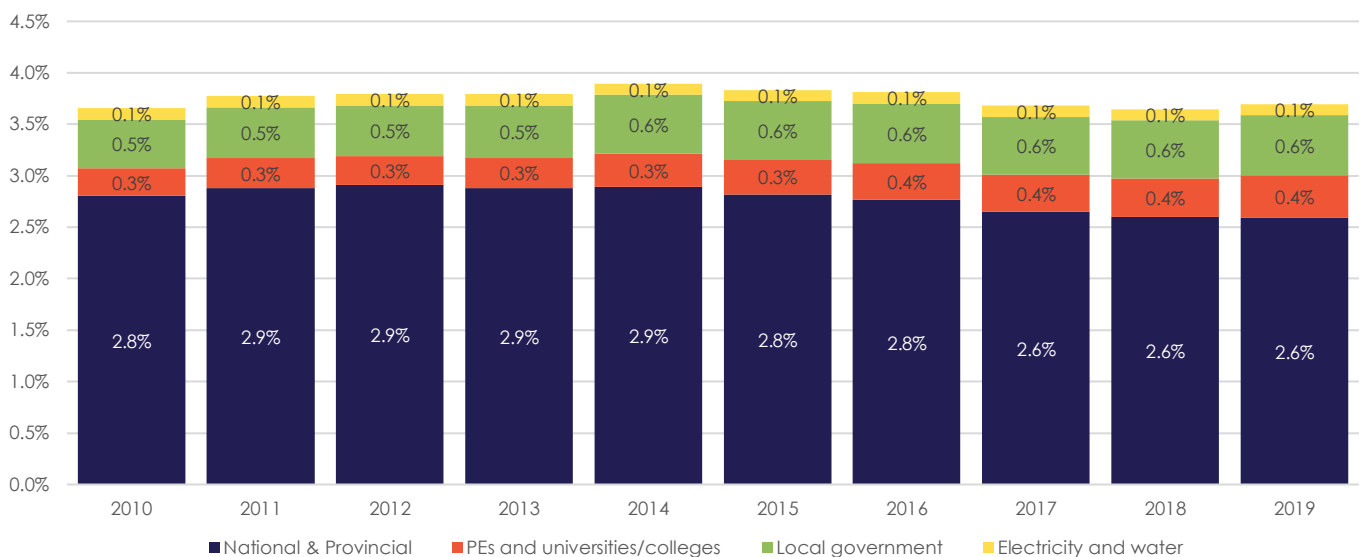


Source: QES, StatsSA

Public sector employment per capita

Perhaps a more relevant number than the ratio of public servants to private sector employees (a figure that is obviously affected by the fact that SA has an unusually high proportion of adults who do not work) is the number of public servants as a proportion of the population. In SA this has hovered around 3.7%, though the figure has tended to decline over the past decade, with the bulk of the decline a result of slower-than-population-growth increases in the headcounts of national and provincial departments (**Figure 21**).

Figure 21: Public servants as a % of the population



Source: StatsSA, QES and population estimates

It is not straightforward to find comparable figures for other countries (see introduction), but an IMF report from 2010 suggests that, at less than 4% of the population, SA's public service is not unusually large. That report concludes that, on average, 9.2%, 6.8% and 4.0% of the population is employed by the public sectors of, respectively, high-, middle- and low-income countries (**Table 1**).



**Table 1: Public servants as a % of population**

	Sample size	Public sector	General govt	Central govt	Subnat' govt	Education	Health	Armed forces	Public enterprise
<b>Africa</b>	12	3,9	3,8	1,9	1,3	1	0,9	0,4	1,5
<b>Asia and Pacific</b>	22	0,4	4,2	2,7	1,4	1,1	0,7	0,9	0,6
<b>Europe</b>	41	10,5	7,7	3,5	4,5	2,4	2,5	0,8	3,6
<b>Western Hemisphere</b>	26	6,8	5,3	1,4	2,6	1,8	0,8	0,4	4,1
<b>Middle East and Central Asia</b>	14	6,3	4,6	2,7	5,2	2	0,8	1,1	3,6
<b>European Union</b>	27	10	7,9	3,4	4,7	2,6	2,3	0,6	2,8
<b>Low-income countries</b>	15	4	1,1	0,4	0,9	0,8	0,6	0,4	8,1
<b>Middle-income countries</b>	50	6,8	5,3	2,4	2,7	2,1	1,1	0,7	3,7
<b>High-income countries</b>	44	9,2	7,9	3,6	2,1	2,1	2,4	0,8	1,9

Source: IMF (2010)

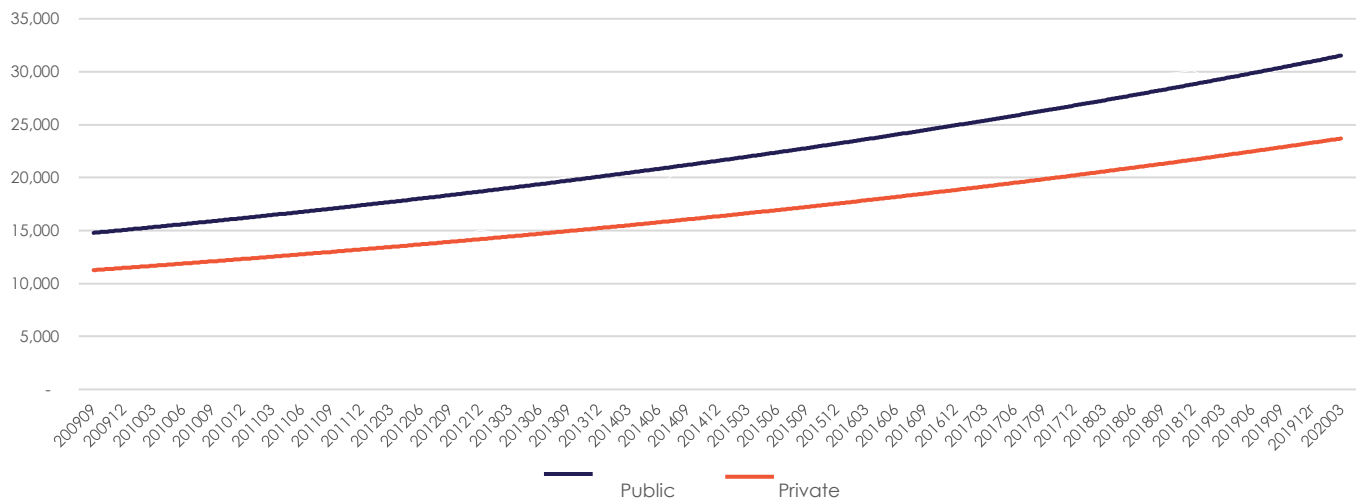
We are somewhat sceptical of the comparability of these figures with SA's, but it seems plausible to conclude that government employment in SA is not unusually high when measured in per capita terms. Indeed, given the degree of social need and the extent of inequality, there is a plausible argument that public employment is actually lower than one might expect if it is to provide public goods and services and, in particular, if it is to engage in meaningful redistributive activities. To the extent that this is true, SA's public service is unusually well-remunerated, making its expansion unaffordable.

Perhaps the most critical point to make about the size of the public service is that how one assesses the desirability of a public service of any given size rests, ultimately, on an assessment of the productivity of the public service: what do the public get for the taxes they pay? This is a question we address below. Before doing so, however, we present some comparative data on public service remuneration, much of which suggest that SA's public servants are relatively well-remunerated – both in comparison to private sector employees and to their international counterparts.

### Public servants' remuneration

One way to assess the pay of SA's public servants is to compare it to incomes earned in the private sector. Using data from the QES, **Figure 22** shows that average salaries in the public sector are higher than those in the private sector and that they have risen faster over time. In 2010Q1, average monthly salaries in the public sector were R15,200 compared to R11,200 in the private sector; by 2020Q1, the figures were, respectively, R33,200 and R22,000. Over the period, the public sector premium rose from 34% to 38%.

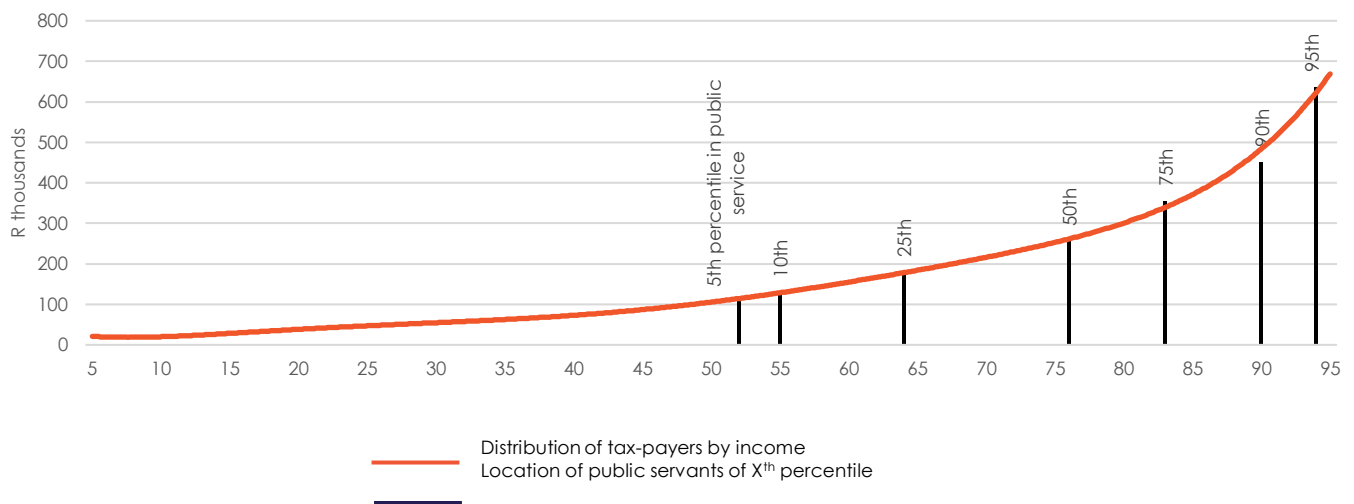
Figure 22: Average monthly wages in the public and private sectors, smoothed



Source: QES, StatsSA

An alternative approach to demonstrating the same point was provided by National Treasury, which was to compare public servants' incomes to the incomes of taxpayers at various points in the distribution. This reveals (Figure 23) that every employee of national and provincial government earned enough to place them in the top half of the distribution of taxpayers in 2014. Employees in the fifth percentile of earnings in the public service, for example, earned more than 52% of all taxpayers; and that half of all public servants earned more than all but 23% of taxpayers as a whole.

Figure 23: Distribution of public servants' income compared to all taxpayers (2014)



Source: National Treasury

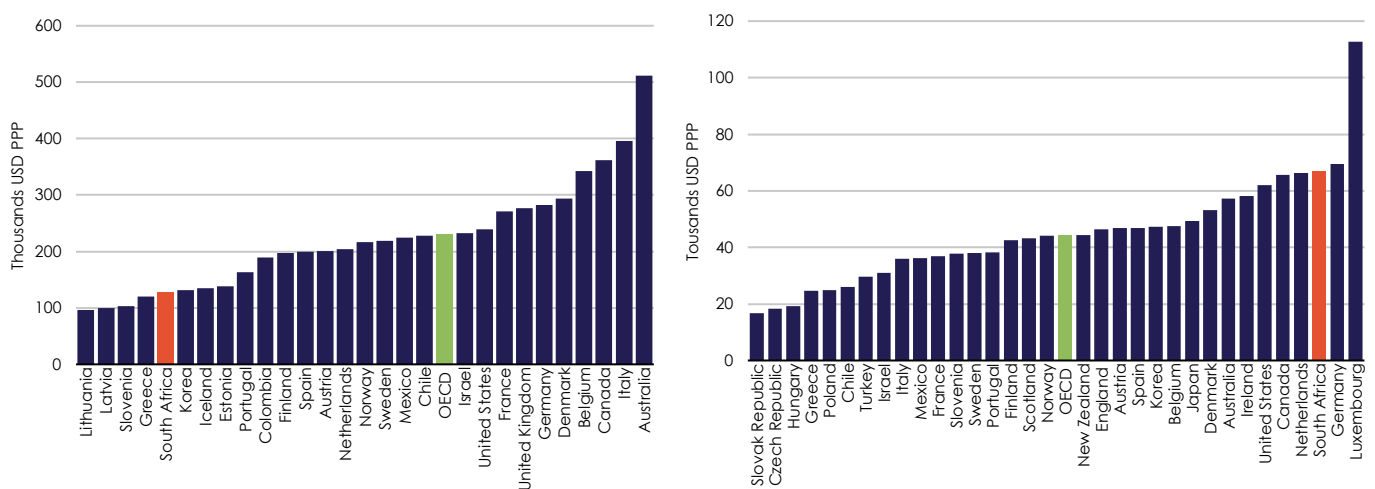
Some of this is not very surprising, given the skills premium in SA, because a very high proportion of public servants have a tertiary qualification.<sup>6</sup> This is true of teachers and nurses (almost half the public service), all members of the professions, as well as a very large proportion of managers and

<sup>6</sup> It might be possible to argue, in fact, that the public service is a driver of the skills premium, in which case the public sector wage premium and the skills premium are really the same thing.

administrators across all departments. It is somewhat more surprising that entry-level positions in government typically earn more than most taxpayers.

Further evidence to the effect that the wage premium enjoyed by public servants is unusually large can be found in comparing the incomes of senior managers (Figure 24, LHS) and teachers (RHS) in SA's public service to the incomes of comparable public servants in OECD countries and to a few other emerging economies. The data reveal that, while senior managers' salaries (US\$128,000, adjusted for purchasing power) are on the low end of the spectrum (and 45% below the OECD average), teachers' salaries (US\$67 000) are near the top of the distribution, and nearly 50% higher than the OECD average. According to the OECD, only Germany and Luxembourg paid teachers more.<sup>7</sup>

Figure 24: Compensation of senior managers (LHS) and teachers (RHS) in USD, PPP (2015)

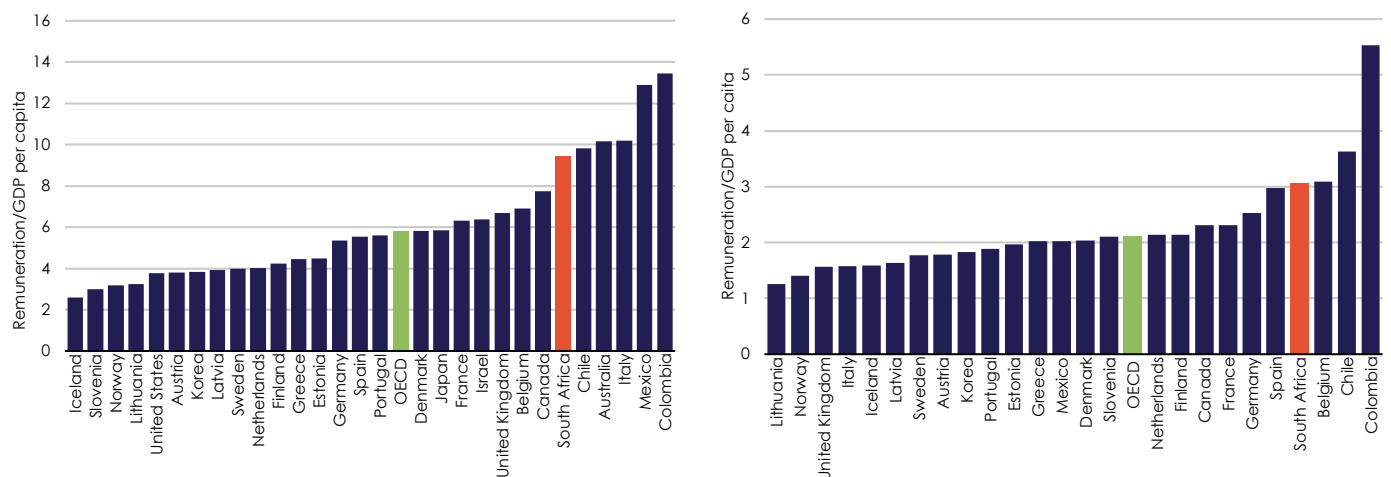


Source: OECD

A different approach to cross-country comparisons of public sector wages accommodates the fact that differences in national income explain a significant fraction of the differences in the absolute value of public servants' wages by comparing them to those countries' per capita GDP. Using this approach, SA's public servants appear to be relatively well paid: top managers' compensation, at 9.5 times GDP per capita, is 55% higher than the average of the OECD (580% of GDP per capita), while senior professionals in SA's public service earn 3.1 times GDP per capita compared with an OECD average of 2.1 times (Figure 25).

<sup>7</sup> The fact that teachers are at the top of the spectrum and senior managers at the bottom reflects the unusually compressed nature of the distribution of wages in SA's public service, where one calculation suggests that the Gini coefficient of incomes in government is 0.38, compared with over 0.6 for all incomes from labour across the South African economy.

Figure 25: Compensation of top management (LHS) and senior professionals (RHS) as ratio of GDP per capita (2015)



Source: OECD

These calculations all relate to compensation in 2015. Given that economic growth since 2015 has been below the rate of growth of the population, while public sector remuneration has increased in real terms, it is likely that the extent to which SA's public servants are unusually well-remunerated relative to GDP per capita has increased.

### Insights and commentary

The core facts about SA's public sector payroll costs are:

- Whether they are measured as a percentage of GDP, of public spending or of tax revenues, public sector payroll costs in SA are somewhat larger than the global norm and have been growing quickly.
- To the extent that payroll costs are unusually large, the main driver of this is not that there are an unusually large number of public servants: as a percentage of the population, the number of public servants is, if anything, somewhat less than one might expect given SA's socioeconomic profile.
- In fact, the main driver of high payroll costs is that average remuneration of public servants is high by international standards and when compared to private sector employees and per capita GDP.
- The increases are broad-based but progressive: increases have been recorded across the public service as a whole but the fastest increases have been at the bottom of the income spectrum.
- Remuneration increases have continued to rise quickly in real terms over the past 15 years – in excess of 4% a year for officials who remained in the public service throughout the period 2006 to 2019.
- There is no evidence that these increases have been accompanied by or driven by increases in productivity gains.

These facts can be explained by a number of factors: a 2007/08 decision to raise public sector wages; the political strength of unions; and institutional dysfunction in government.

- **Rightsizing public sector pay combined with fiscal miscalculation**

One reason government has often given for the large increases in pay between 2008 and 2010 is that these were necessary to ensure that the public service could attract and retain skilled staff. This was manifest in the introduction of occupation-specific wage dispensations after the 2007 strike by public sector doctors, but which led to increased wages across the whole of government. These adjustments had been negotiated in the midst of the economic boom of the mid-2000s, but they were largely implemented after the onset of the global financial crisis. Thus, while government responded to the financial crisis with an appropriate stimulatory increase in spending, that increase was not temporary and could not be withdrawn if economic conditions changed. In retrospect, it is clear that the assumption that the economy would return to pre-crisis growth trends was hopelessly optimistic, and the fact that wages had been adjusted at that time was very unfortunate. (In its own terms, the policy is thought to be a qualified success: the increase in the remuneration of doctors does appear to have helped government attract and retain staff. The same does not appear to be true for lawyers and engineers, however.)

- **Politics**

If miscalculation explains the timing of the large increase in remuneration between 2008 and 2010, it does not explain the continued rapid rise in salaries after it has become increasingly clear that growth rates are not returning to pre-crisis levels. The most obvious explanation for this is that organised labour, particularly Cosatu in which public servants are dramatically over-represented, is in close alliance with the ANC. Labour has thus been able to extract continued improvements in wages as a reward. Though real increases have been forthcoming every year, unions have resisted attempts to tie these to productivity-enhancing reforms. Teachers unions, for example, have resisted a wide range of initiatives aimed at measuring teacher performance for fear that this would eventually be used to link pay to performance, and even resisted the implementation of time-and-attendance technologies that would help manage absenteeism.

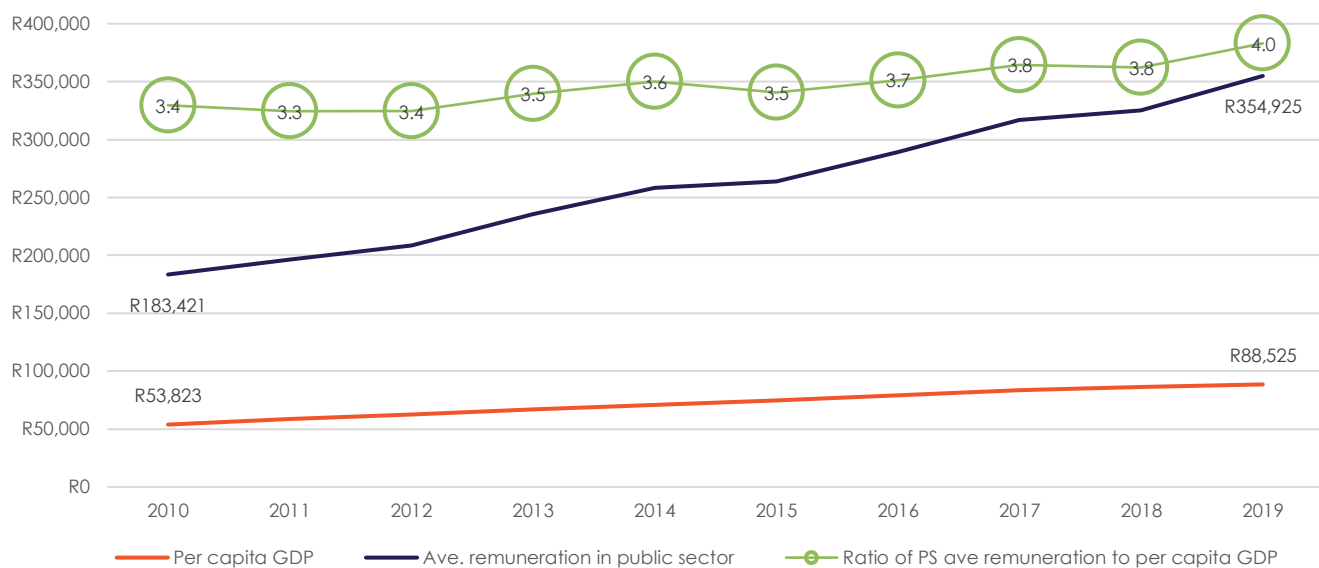
We believe that this argument is essentially correct, but the ability of organised public servants to leverage their relationship with the ruling party to secure higher wages is strengthened by two additional factors. The first is that the ANC's official ideology places the state, and, by extension, the public service, in the centre of its theory of social change. Unions have been particularly effective at leveraging this to make the case for policies that favour the interests of public servants. The second factor is that, while formal, ideological commitment to the state and to state-led development is not sincerely held by many in the ANC for whom politics has become the vehicle for rent-extraction, those ideological commitments serve as a cover for their support of policies that facilitate the extraction of rents. Seen in this light, supporting (or failing to oppose) continued increases in public service remuneration is a by-product of a different, less legitimate agenda.

• **Institutional dysfunction**

In their respective papers submitted to the courts in defence of the decision not to implement the third year's increase in wages agreed to in the 2018 settlement at the Public Sector Bargaining Chamber, National Treasury and the DPSA have argued that the agreement was never properly signed off, and that government did not, in effect, actually intend to allow wages to rise along the trajectory set out in its text. Instead, they argue that during the course of the negotiations, two ministers (since departed) made concessions that were never properly endorsed by the Mandate Committee and never properly signed off by Cabinet or Treasury. The last agreement, in other words, does not reflect official government policy, but was the outcome of a degree of bad faith and institutional dysfunction.

Whatever the appropriate balance between these three factors is in explaining the basic facts of ever-rising remuneration (and, indeed, whether one seeks to credit the last factor at all), the bottom line is that payroll costs in government have risen very quickly along a trajectory that is deeply unsustainable, with remuneration in the public service growing at an average of more than two percentage points a year faster than nominal GDP per capita, and with the ratio between them rising from 3.4 in 2010 to over 4 in 2019 (Figure 26).

**Figure 26: Public sector remuneration compared to GDP per capita**



Source: StatsSA, QES and SARB database

Much of this has to do with the decline in average GDP growth. Indeed, the whole premise of the public sector remuneration framework (which delivers faster-than-inflation increases to personnel year after year) would make far more sense and would, in fact, be sustainable, if real GDP growth returned to 3+% a year. Given the sustained deceleration in economic growth, however, the remuneration system has become increasingly disconnected from the capacity of the economy to generate the tax revenues that would render wage increases of these kinds affordable. To the extent that payroll costs are to be put on a more sustainable trajectory, therefore, government is going to have to (i) reduce the number of personnel in the public service, (ii) reduce the rate at which remuneration rises over the long term to a level that is more commensurate with the carrying capacity of the economy, or, more likely, (iii) some combination of these two.

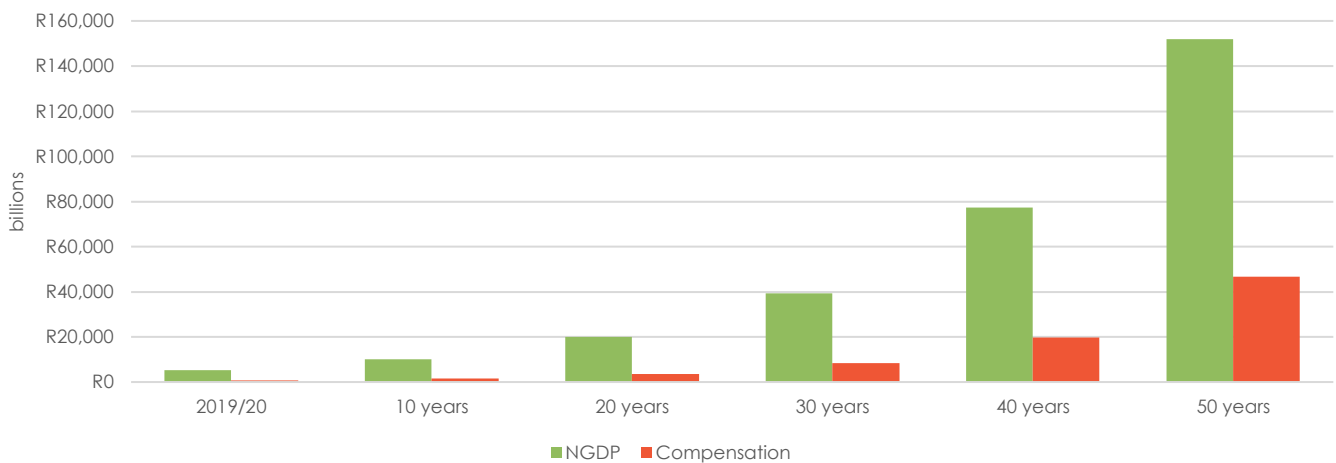
Before discussing whether and how these changes can be effected, it is worth making a different point about the relationship between public service remuneration and productivity.

*Pay and productivity in the public service*

One of the long-term dilemmas confronting all public services is that they are often dominated by activities whose productivity is (i) difficult to measure and (ii) increases much more slowly than many activities in the rest of the economy. Thus, while the value-add generated by the average worker in a 21<sup>st</sup> century factory is many thousands of times higher than the value created by the average worker in the 19<sup>th</sup> century, by some measures the productivity of nurses, teachers and police officers has barely increased relative to their 19<sup>th</sup> century predecessors. A teacher today teaches about the same number of children as teachers did 150 years ago; police officers have access to much greater technological resources today than they did even 50 years ago, but the basic work of a patrol officer has changed much less, while the core work of prosecutors and correctional officers has barely changed at all.

Although productivity in public services grows much more slowly than productivity in the private sector, wages in the two sectors tend to grow more or less in line with each other, because, if they did not, public servants wages would fall far behind those in the rest of the economy and, over time, it would become impossible to attract people into these professions. It is not, in other words, undesirable, inappropriate or unsustainable for public sector salaries to rise faster than productivity; it is inevitable that they will do so. What is inappropriate and unsustainable, however, is for public service remuneration to grow faster than the productivity of the economy as whole. This is precisely what has happened in SA, and it is a trend that must eventually be reversed if for no other reason than that it is mathematically impossible for government payrolls to grow faster than the economy forever. This is reflected in **Figure 27**, which shows the implications over the long term of payroll costs continuing to grow at a rate that is two percentage points faster than NGDP (9% versus 7%). If this were to persist for 50 years, the government payroll would grow from 12% of GDP to over 30%. By that point, if government’s budget had grown quickly enough to maintain the current ratio of compensation spending to total spending, it would account for almost 100% of GDP.

**Figure 27: Projecting NGDP and government payrolls**



Source: Own calculations



It does not follow that, because public services consist of activities in which productivity growth is slower than is the norm, productivity levels in government are satisfactory. In fact, there is wide consensus, including within government, that the state's performance in the delivery of many (if not most) of its functions is far below desired (and achievable) levels. And, while it is difficult to measure these effects accurately, there is an equally widely shared conviction that levels of productivity and output have generally declined in recent years across a range of functions. Examples where this is clearly the case include:

- Electricity generation and the provision of water.
- Collection of taxes.
- Maintenance of the country's roads.
- Local government administration and service delivery, especially (but not exclusively) outside the metros.
- The provision of public transport, especially (but not exclusively) urban commuter rail.
- Policing and law enforcement.

In other areas the data are more ambiguous, but concerns about declining output and productivity (and, especially, quality-adjusted output) are also sometimes voiced in relation to basic and higher education and the provision of public healthcare.

The fact that remuneration has risen in real terms, even as economic growth has decelerated and service delivery has weakened, makes trends in government's payroll costs deeply unsustainable.

## What is to be done?

SA must address three interlinked but distinguishable problems with respect to the public sector payroll:

- Payroll costs are too high.
- Payroll costs are rising too quickly.
- Public sector employment is increasingly unproductive.

A capable state on a sustainable fiscal trajectory (which must surely be an aim of labour as well as business) must address all three of these challenges. Because all three relate to government's strategy for managing its human resources, and because all labour relations, especially those in the public sector, are both political and social in character, the manner in which each of these three challenges is handled affects the other two. If government were to decide, for example, that its best course of action to reduce payroll costs would be to lay off 50,000 employees, the process of doing so (which would inevitably be highly conflictual, bureaucratic and time-consuming) would have implications for its capacity to negotiate productivity improving changes to the conditions of employment of the remaining staff. Similarly, if government were to seek to impose a nominal wage reduction on current staff (ie, if government were to actually cut wages from one year to the next), its capacity to effect changes to the regime governing the rate of increase in remuneration might be reduced.

The bottom line, therefore, is that there is no simple formula for government to resolve all three of its challenges. Indeed, each would be a difficult to overcome it were the only problem to be addressed. In what follows, we have tried to craft a set of recommendations that we think would go a long way to resolving these challenges, but we recognise the political difficulty that it entails.

One way to think about the challenges government faces is that it needs to restore a system that is on an explosive trajectory to a sustainable equilibrium. The status quo is sticky and hard to leave, but equally, it is unsustainable. Such an equilibrium would have to both eliminate the dynamics that are driving it towards unsustainable growth and be affordable in the present. In addition, the approach taken to address the overall affordability of the system would have to minimise any reduction in the ratio of public servants to the population (in order to ensure capacity is not necessarily lost) and also ensure that public servants' productivity will increase over time.

### Step one: Agreeing on what is affordable

One of the biggest obstacles to achieving a sustainable public sector payroll is that far too many people, both in organised labour (ie, its institutional structures that sit opposite Business in NEDLAC) and, critically, in government itself, do not appear to recognise the critical importance of constraining payroll costs to affordable levels. Indeed, it is not obvious that they accept that any level of compensation spending is unaffordable. For them, the only legitimate question to ask about the public service appears to be whether it is large enough to meet SA's many socioeconomic needs and its policy commitments.

It is not easy to engage with opponents who do not recognise the inevitability of a budget constraint and of having to make trade-offs, but that

does not mean that the budget constraint disappears. There are some in labour who realise this but, to the extent that this is true, they tend to see it as a problem for another day, rather than one that is pressing and immediate. It is, therefore, essential that government come to some level of clarity about how to think about the long-term sustainability of the compensation budget. This, we think, can be defined only by answering two prior questions:

- What is the optimal level of taxation given SA's needs, given both the scale of the socioeconomic deficit and the distortionary, growth-retarding impact of high taxes?
- Given all the other needs and obligations – debt service costs, social grants, complementary goods and services, investment in infrastructure – what is proportion of tax revenue is optimally consumed by compensation spending?

The answers to both are controversial. It is clear, however, that the current path is unsustainable. Thus, in the absence of a dramatic and sustained acceleration of GDP growth, either taxes will have to rise to accommodate current payroll trends or the rate of growth of payroll costs will have to be reversed. Since there seems to be no room for raising taxes, and that doing so will slow growth, either payroll costs will continue to rise as a share of tax revenue or their rate of increase must be reversed.

There is no way establish with complete certainty what the optimal levels of taxation are or what proportion of these revenues is optimally allocated to compensation spending. As a rough rule of thumb, however, we think that the experience of the past decade has shown that tax rates cannot be raised much beyond the current levels of 26% of GDP and should, ideally, be lowered. Indeed, Treasury believes that raising tax rates further would be detrimental and this view was clearly seen in the “emergency budget” where the focus was on spending cuts, not tax increases.

Meanwhile compensation spending, which has averaged around 45% of revenues, has almost certainly been too high and is an important reason why less and less government spending has been allocated to investment in infrastructure. In any event, given that debt service costs will continue to rise for the foreseeable future, it will not be possible for compensation to continue to consume 45% of revenues without even deeper cuts to non-interest, non-wage spending. This means, we think, that the pre-Covid ratio of payroll costs to GDP of about 12% was already too high and that a more sustainable target is in the region of 10.5% of GDP.

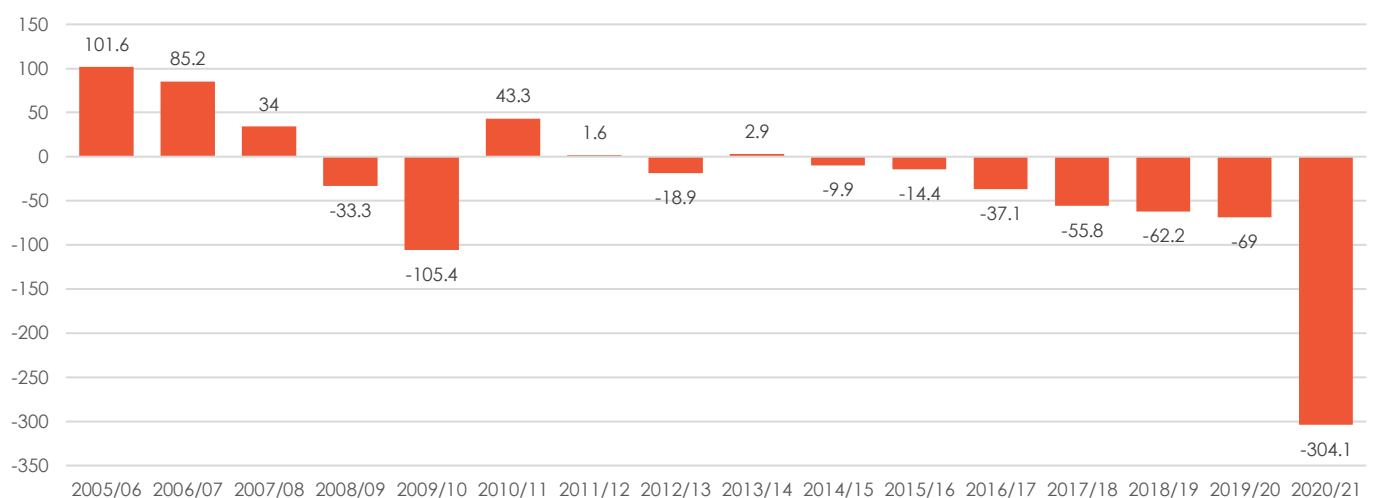
Inevitably, given the implications of a target of this kind, contestation over its legitimacy is bound to be fierce: as the IMF (and unions) have noted, the size of the public service is a political and social choice, and there is no *a priori* optimal size. Still, 10.5% of GDP is a full percentage point greater than the global average (**Figure 2**) and that is roughly the average ratio of payroll costs to GDP over the past decade. In any event, whether or not the figure of 10.5% can be justified on the basis of a scientific calculation, there is no question that payroll costs cannot grow faster than GDP forever, and that the rate of growth over the past few years is grossly unsustainable.

Equally important, to the extent that proponents of a larger state envisage a larger public payroll, they must either contemplate payroll costs consuming a greater share of tax revenue or that tax revenue as a share of GDP must rise. In the former instance, the consequence must be a decline in the proportion of revenue devoted to social security, complementary goods and services

and infrastructure investment. Indeed, the decline in non-payroll spending will be more rapid than the increase in the payroll costs because debt service costs will be rising even more quickly. This is simple maths which must be pointed out to labour but rarely is.

The alternative to this is to increase the ratio of taxes to GDP, which would both lower the proportion of revenues consumed by payroll costs and reduce the level of borrowing, and thus slow the rate of increase in debt service costs. The challenge, however, is that recent attempts to levy more taxes have failed: until the tax relief offered in the 2020 budget, tax rates have generally risen over the past decade (eg, the VAT increase in 2018) without delivering increased revenues. Indeed, even before the impact of Covid-19 on 2020/21 revenues, SARS had missed its revenue targets by nearly R200bn over the previous three years,

**Figure 28: Revenue underperformance by fiscal year (ZARbn)**



Source: National Treasury

### Getting to 10.5%

The difficulty of getting payroll spending from 12.2% of GDP to 10.5% depends entirely on the rate of economic growth. In a fast-growing economy, such an adjustment would be relatively painless, economic growth would just be faster than spending growth. In a slow-growing economy it is far more difficult – and must be the baseline we concern ourselves with.

In the context of the Covid-induced economic crisis, the goal is exceptionally difficult: a 10% decline in GDP in 2020/21 will mean that payroll costs this year will be in the order of 14% of GDP and 60% of revenues. These figures will be temporary, declining as the economy recovers. But a great deal depends on how quickly that recovery happens.

The critical questions to ask about the glidepath towards a sustainable payroll budget are: (i) over what period is the transition to be achieved that is neither too short nor too long so as to be credible; and (ii) how much of the weight of the adjustment will fall on remuneration levels and how much on headcounts. Again, these are difficult questions about which there is bound to be considerable contestation.

The basic mathematics of the adjustment of payroll spending costs from 12.2% of GDP (the level in 2019/20) to 10.5% mean that the target can be achieved by some combination of faster GDP growth, headcount reduction

or lower average remuneration. The faster the need to adjust spending and the slower the rate of economic growth, the deeper the cuts need to be on headcounts and remuneration. These dynamics do not change in a post-Covid world in which payrolls account for 14% of GDP, but the adjustments needed are much bigger.

To put these numbers in context: if we assumed that Covid-19 had never happened and we return to the numbers presented in the February 2020 budget, Treasury's plan was to slow payroll cost growth in 2020/21 to 1.5% in nominal terms, and then allow it to grow by 4.5% in 2021/22 (ie, in line with inflation) and 4.4% in 2022/23 (**Figure 18**). Given that nominal GDP was expected to grow by only 5.3%, 6.1% and 6.4% in 2020/21, 2021/22 and 2022/23, however, the result was that by 2022/23, payroll costs would still consume 11.5% of GDP (compared to 12.2% in 2019/2). If these growth trajectories were to persist, payroll costs would reach 10.5% of GDP only in 2026/27. If, on the other hand, a more accelerated adjustment were needed – to hit 10.5% by 2022/23, for example – payroll costs would have to be essentially frozen at 2020/21 levels (±R640bn) until 2022/23. This would represent a reduction, relative to the budget baseline, of R27bn (4%) in 2021/22 and R54bn (8%) in 2022/23, whereafter payroll costs could be allowed to grow at the rate of growth of nominal GDP (**Table 2**).

**Table 2: Adjusting payrolls to 10.5% of GDP: status quo v. a two-year adjustment**

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
<b>Payroll (ZAR billions)</b>	629	639	668	697	728	760	793	828	864
<b>Y-o-Y growth</b>		1,5%	4,5%	4,4%	4,4%	4,4%	4,4%	4,4%	4,4%
<b>GDP (ZAR billions)</b>	5 157	5 428	5 759	6 126	6 517	6 933	7 375	7 845	8 346
<b>Y-o-Y growth</b>		5,3%	6,1%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%
<b>Payroll/GDP</b>	12,2%	11,8%	11,6%	11,4%	11,2%	11,0%	10,8%	<b>10,6%</b>	<b>10,4%</b>
<b>If adjust to 10.5% of GDP over 2 yrs</b>			641	643	684	728	774	824	876
			11,1%	<b>10,5%</b>	<b>10,5%</b>	<b>10,5%</b>	<b>10,5%</b>	<b>10,5%</b>	<b>10,5%</b>
<b>Reduction rel. to baseline (ZAR billions)</b>			(27)	(54)	(43)	(32)	(19)	(4)	12

Source: National Treasury, Budget Review 2020; own calculations

These numbers show just how challenging it is to achieve the kind of adjustment that is needed. Even before Covid-19, reducing payroll costs to 10.5% of GDP would have taken seven years if payroll costs were constrained to grow by no more than inflation during that period. Alternatively, if the target had been to hit 10.5% in two years' time, payroll costs would have had to be frozen at 2020/21 levels for two years. That, in turn, would have meant either wage freezes (and, therefore, real wage cuts of over 4% each year) or an 8% reduction in headcount (±100,000 personnel) over that period if wages rose at the rate of inflation.

#### How should business think about these trade-offs?

As a general proposition, once a payroll budget limit is in place, there is a straightforward one-to-one trade-off between the rate of change of average wages and the rate of change of personnel numbers. If payroll costs must fall by 4%, this can be achieved either by reducing wages by 4%, reducing headcount by 4% or reducing them by 2% each.

Until 2020, government's revealed preference was to allow headcount reductions to keep compensation spending within budget limits. This year, however, government refused to implement the third annual wage increase agreed to in 2018, effectively freezing wages at their 2019/20 level. This is now the subject of litigation and it is not clear how the courts will find. However the case is decided, we believe that this is the preferable course, and that the weight of adjustment should fall on wages and, in particular, the rate at which wages have risen, rather than through reducing headcount. For obvious reasons, this is not straightforward: before Covid-19, it would have been possible to bring payroll costs down to 10.5% of GDP by freezing public servants' wages for two years (in effect, imposing a 9% real reduction in their incomes over two years). This strategy would have been exceptionally challenging and, in all likelihood, CPI-linked increases would have had to have been implemented from at least the second year. This would have extended the period of adjustment to seven years, over which period both headcount and average real wages in the public service would have remained unchanged.

Obviously, there are a lot of uncertainties associated with the post-Covid recovery, but if we assume that nominal GDP declines by 8% in 2020 (a real decline of  $\pm 1\%$ ), and that it grows by 8% in nominal terms in each of the next two years' recovery (a real increase of  $\pm 4\%$  each year), getting payroll costs down to 10.5% of GDP by 2023/24 would require annual nominal decreases in payroll spending of more than 1% a year for three years. Achieving this would, in other words, require both wage freezes and a decline in headcount over the medium term (**Table 3**). An adjustment of this rapidity is politically implausible, but even if the target date for achieving the 10.5% target were pushed out to 2025/26, aggregate payroll costs would have to grow at no more than 1.8% a year in nominal terms, or less than half the expected rate of inflation, for five years.

**Table 3: Post-Covid adjustments of payroll**

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
GDP pre-Covid (ZAR billions)	5 157	5 428	5 759	6 126	6 517	6 933	7 375	7 845	8 346
GDP POST- COVID (ZAR BILLIONS)	5 157	4 745	5 124	5 534	5 887	6 263	6 662	7 087	7 539
NGDP growth post-Covid		-8,0%	8,0%	8,0%	6,4%	6,4%	6,4%	6,4%	6,4%
PAYROLL PRE-COVID (ZAR BILLIONS)	629	639	668	697	728	760	793	828	864
Pre-Covid payroll/gdp	12,2%	11,8%	11,6%	11,4%	11,2%	11,0%	10,8%	10,6%	10,4%
POST-COVID PAYROLL/GDP	12,2%	13,5%	13,0%	12,6%	12,4%	12,1%	11,9%	11,7%	11,5%
Getting to 10.5% by 2026/27		13,5%	12,3%	11,3%	10,5%	10,5%	10,5%	10,5%	10,5%
TARGET PAYROLL (ZAR BILLIONS)		639	632	625	618	658	700	744	792
Payroll growth DIFFERENCE FROM BASELINE (ZAR BILLIONS)		-	(36)	(72)	(110)	(102)	(93)	(84)	(72)

Source: Own calculations

Given the enormous difficulties of achieving adjustment to 10.5% through freezing wages, it seems inevitable that some of the weight of adjustment

would have to fall on headcount. This, it hardly needs to be said, is not straightforward.

### *Headcount reductions are hard!*

Government's default approach to reducing headcount is that employment termination should be voluntary and through natural attrition (supplemented, perhaps, with incentives for early retirement). Natural attrition can be supported by a complete hiring freeze or by constraining the number of new appointments to be lower than the number of people leaving the public service. This approach has some plausibility: as the National Treasury has reported, more than 5% of staff in a typical department will leave the public service every year. This figure includes retirements, resignations, dismissals and the expiration of contracts, but the number is large enough to make possible a significant reduction in headcount in a short period.

Given the apparent ease for natural attrition, it remains surprising that this mechanism has not been implemented. In our assessment, this is a result of the highly decentralised system of appointments and human resource management, in which all the critical decisions reside with the heads of national and provincial departments. In this context, every departmental head has an incentive to free ride on the savings that other departmental heads might secure, keeping their own department staffed at maximum. Neither National Treasury nor the provincial treasuries appear to have resolved this, but it is certainly amenable to resolution through clear leadership and, where necessary, strict rules.

At the same time, it is important to note that relying on natural attrition to reduce headcount, while reducing the potential for conflict that more active and adversarial approaches might generate, is not without its problems. The most obvious is that it can result in unwanted changes in the composition of the public service, especially if those who leave are more skilled, older, more experienced or of greater strategic value to the public service than those who remain. If doctors, for example, are more likely to leave the public service than administrators, the effect of relying on natural attrition will be to degrade government's capacity to provide healthcare.

It is hard not to think, therefore, that a deliberate, strategic programme aimed at reducing headcount in activities that generate the least social value would be preferable to relying on natural attrition. Whatever its merits, though, this approach is one that few people in government are eager to embrace. It implies that government would be required to make deliberate choices to shutter some activities and retrench staff. This is, after all, a government that was unable to divest itself of SA Express.

Essentially, what would be required is for government to take a cold, hard look at its functions and decide which add the least social value. Then it would invoke the provisions of s189A of the Labour Relations Act and begin the consultation process mandated for retrenchments based on an employer's operational needs. This is a slow, difficult process that has never – to our knowledge – been invoked in the public sector, and for which, it must be assumed, the public service lacks skills. It is also bound to be highly charged and conflict-laden. It is something that government is likely to avoid having to do until it runs out of options. Business, however, needs to be encouraging government to think seriously about this, emphasising the consequences of inaction, while also offering technical and legal skills should they be required.



### How might we make progress?

The challenges outlined above are formidable. The necessary adjustments are bound to be painful and there's not much in the way of "low-hanging fruit". One way to make progress, however, would be a state-centric version of the social compact. This would have three essential components:

- Agreement on ratios of payroll costs to GDP and to tax revenues that are sustainable;
- Agreement on the time frames over which the adjustment is to be made; and
- Agreement that government, public sector unions and business will work together to develop productivity enhancement plans for the public service.

The issues with which the first two components must address are set out above. Here we focus on the third component: a public sector productivity pact. Historically, public sector unions have resisted government's attempts to implement any kind of productivity enhancing initiatives. Teachers unions, for example, have resisted the introduction of standardised national tests below matric, the Annual National Assessments, for fear that these might evolve into a mechanism for performance-related pay. They have also resisted technologies to track time and attendance, as well as even the mundane oversight of school inspectors.

In the context of poorly performing public services and a dire need to control costs and enhance productivity, this approach is unhelpful. It is critical, therefore, that government and business seek to compact with unions to help design and participate in a rigorous, reliable, transparent, credible and legitimate process aimed at generating a deeper understanding of productivity challenges in the public sector and how to address these. Precisely how this would work is obviously a matter for debate and negotiation, but business, which mobilised a large fraction of SA's consulting talent in the development of its proposals for an economic recovery strategy, might make a similar commitment to a programme of this kind.

To do this well would be a very substantial undertaking. The value of success, however, would be extremely high. It is, therefore, a project that could become central to any social compacting process.

The deployment of skills through TAMDEV would be crucial as a structured avenue through which business can supply this support. It would need to be from respected entities, cautious against state capture reputation-washing and cognisant of the backlash that could come from unions.

Labour always wants to know what business is bringing to the table and this could be a key offer we think that adds value.

## Appendix – What would a productivity review look like?

While public sector remuneration has grown very rapidly, and at a rate that far exceeds the growth rate of the economy, few believe that the value added by the public service has increased at anything like the rate of remuneration growth. In fact, it is somewhat fanciful to think that levels of output have even remained flat, and it is much more likely that they have declined. The divergent trend of remuneration growth that is faster than the rate of growth of GDP combined with declining output from the public service implies a rapid decline in public sector productivity. Addressing this is critically important if SA is to get value from the  $\pm 35\%$  of national resources that the public sector consumes.

We believe that a key proposal should be that government embark on a process of rigorous productivity reviews in all its main functions, each aimed at assisting to find mechanisms to raise output significantly within existing budget constraints. The method would be modelled along the lines of the value-chain analyses that underpin B4SA's economic recovery strategy. Because this is the public service, the work would be somewhat more politicised and, ideally, organised labour would be a willing partner in the endeavour. A different kind of difficulty is that, unlike in the private sector, it is impossible to reduce all public services to a common denominator. In the private sector every decision can be reduced, in principle at least, to a calculation of the NPV to shareholders of the cashflows associated with investments, changes of product, and changes of process. In government, it is not so easy: the monetary value of many of the goods and services produced can't really be calculated and, in any event, the distribution of those benefits (or changes of those benefits) is at least as important as their absolute value.

The challenge is real, therefore, but, in a context in which the quantity and quality of public services is believed to be falling even as the cost of providing them is rising, the potential value to society of doing a "good-enough" productivity review is potentially enormous. Doing this would involve a number of steps, each of which has its own complications:

1. Define the goals of specific programmes in terms that are both rigorous and quantifiable.
2. Determine the quantum of resources used in delivering the services and how these have changed over time.
3. Rigorously measure outputs and (ideally) how these have changed.
4. Assess when/where/why productivity is below desired levels.
5. Develop proposed solutions.
6. Implement and measure effects.

None of these steps is easy because there are deep-rooted institutional interests seeking to define the goals of public services in particular ways. Another problem is that existing data on spending and output are deficient in many ways, and there are both real limits and limits imposed by lack of imagination on solutions. We believe, however, that far too little effort is being put into addressing what we believe is a profound productivity slowdown in government, and that even those who would like to improve the quality of governance (the National Treasury, the AG, the Presidency) have become hostage to existing approaches that fail to deliver the data, analysis and recommendations that they need to make progress. There is a real opportunity, therefore, for business to assist government in improving service delivery while increasing value for money on public spending. It would be useful, however, to field test the approach, and we would suggest that a first round of reviews be targeted on a manageable number of services, preferably ones that are at least somewhat amenable to the process and in which business might have some comparative advantage in providing insight. These might include:

- Expenditure on roads construction and maintenance
- Improving revenue estimation and collection by municipalities
- Cleaning up procurement processes
- Hospital management
- Time and attendance management in schools