

The South African government's COVID-19 response: protecting lives and livelihoods

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Given the health-related and economic impact of COVID-19, epidemiological and economic modelling should be brought together to enable multi-criteria decision- and policy-making to protect both lives and livelihoods.

This chapter brings together aspects of the impact of COVID-19 on lives and livelihoods in South Africa. As at 15 August 2021, the epidemic is reported to have led to 77 141 deaths and been associated with 229 850 excess deaths. At the same time, the national economy has been severely affected with Gross Domestic Product decline of 7% in 2020/21, job losses exceeding 2 million, and sharp reductions in national revenue.

The chapter takes a case study approach to provide an overview of the Government's budgetary support to the health and income protection responses as well as the modelling that informed these. It also reviews some of the carry-through implications of the economic down-turn on public finances, including health budgets. The authors draw primarily on their experiences and subsequent reflection, with particular focus on the period 1 March 2021 to 28 February 2022.

The budget provision for the health response to COVID-19 exceeded R20 billion, which was achieved through additional allocations and reprioritisation. Income protection measures exceeded R100 billion. However, suboptimal attention was given to how prolonged lockdowns would affect businesses, jobs, livelihoods and the economy over the medium and long term, with job losses initially exceeding 2.2 million and 1.4 million by the first quarter of 2021. As these effects fed through to public finances, growth and tax revenue declined substantially, resulting in reductions in virtually all government budgets. Over the 2021 Medium-term Expenditure Framework period, the economic effects of the epidemic and stringent lockdown measures have resulted in the reduction of provincial health budget projections by as much as R76 billion.

The chapter emphasises the need to consider both lives and livelihoods in pandemic decision-making, ideally bringing together various dimensions of epidemiological and economic modelling in a multi-criteria decision framework.

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Introduction

Strong public health measures are essential to counter COVID-19, which has caused over 4 million deaths globally using a narrow definition.¹ High levels of uncertainty surrounding the spread of the virus and its impact on health systems led to many economies implementing a wide set of public health interventions (PHIs) including, in some cases, highly stringent lockdowns. The epidemic and various approaches to lockdown restrictions have produced the worst global recession in a century, worsening poverty and unemployment, both globally and in South Africa.² This has led to debate around how to optimise protection of both lives and livelihoods. By December 2020, the World Health Organization (WHO) was advocating that governments consider both epidemiological and economic factors in their decision-making.³ The effects of prolonged lockdowns were greater in low- and middle-income countries with weak fiscal positions, high debt and limited ability of governments to provide income support for large sections of the population for prolonged periods.

In South Africa, government attempted to mount a strong and early response. During March and April 2020, there was considerable uncertainty as to whether it was feasible to eliminate or contain the spread of infections at low levels through stringent lockdown measures, or whether community-wide transmission was inevitable and the response should focus on mitigation and 'flattening the curve'. However, after several months of attempting to contain infections through, in international comparison, very stringent lockdown measures,⁴ increasing economic harm and job losses made it necessary to construct a different longer-term response, and to find alternative strategies to reopen the economy safely.

This chapter attempts to summarise some of the economic trade-offs and policy dilemmas in the context of South Africa, a middle-income country with structurally high unemployment and inequality and constrained pre-pandemic fiscal and economic positions.⁵ These dilemmas have been faced by many countries given the global nature of this pandemic and are continuously evolving.^{6,7} The chapter examines the health and income-protection responses, including budgetary provisions, public financial management (PFM) measures to rapidly deploy funds, the effects on key fiscal and macro-economic indicators, and how epidemiological and cost models were used to inform the national public policy response. In some areas, given the severity of the pandemic, the private sector worked closely with government, for example in vaccine roll-out.

Bringing together health and economic modelling for decision-making

As the pandemic has progressed, new evidence has become available, and both global health and economic research

developed new approaches to controlling the disease. The recommendations of the European Centre for Disease Control and Prevention⁸ consider both health and societal implications and include differentiated responses depending on incidence and geographic spread, e.g. sub-national vs national. For example, on closure of businesses, where unavoidable, they recommend that this be restricted to limited sub-national regions and then only during periods of high incidence, whereas interventions like masking and physical distancing can be implemented nationally and at relatively low incidence.

One of the earliest attempts to optimise ways of implementing lockdowns was a study by Acemoglu et al.,⁹ calibrated to US data. They developed a SIR^a model augmented with age-specific risks and differential targeted policies. The results show that targeted lockdowns for high-risk groups such as the elderly, and effective testing and tracing, can significantly reduce the fatality rate and the economic losses compared to uniform lockdowns. The importance of differential targeting to improve both health and economic outcomes has also been highlighted.^{10,11}

Literature also suggests that indiscriminate lockdowns are less effective and more costly in developing economies compared to in advanced economies.¹² Lockdowns are not effective in cities with overcrowded dwellings, where physical distancing is difficult, if they lead to large displacement of people or if compliance is low. As people and governments of developing countries have fewer resources, stringent lockdown levels can put poor and middle-income families at the risk of starvation, crime and disease, and can lead to significant deterioration of basic government services.¹² Epidemiological models that consider developing country characteristics, such as the age composition of the population, suggest that mortality rates as well as the gains in lives saved from more severe lockdown measures are lower for developing countries.¹³ Recent work has begun to bring together epidemiological and economic models into a single modelling framework.¹⁴⁻¹⁶

Methodology

This chapter takes a case study approach. The authors work in the fields of public finance, economics and epidemiology, and are involved in various aspects of the government's COVID-19 response. They draw primarily on their experiences and subsequent reflection, with particular focus on the period 1 March 2021 to 28 February 2022, and on published survey data, research and budget documents, such as the special adjustment budget released on 24 June 2020¹⁷, the second adjustment budget, the 2020 Medium-term Budget Policy Statement (MTBPS) and Budget Review 2021.

a susceptible, infected, recovered (SIR)

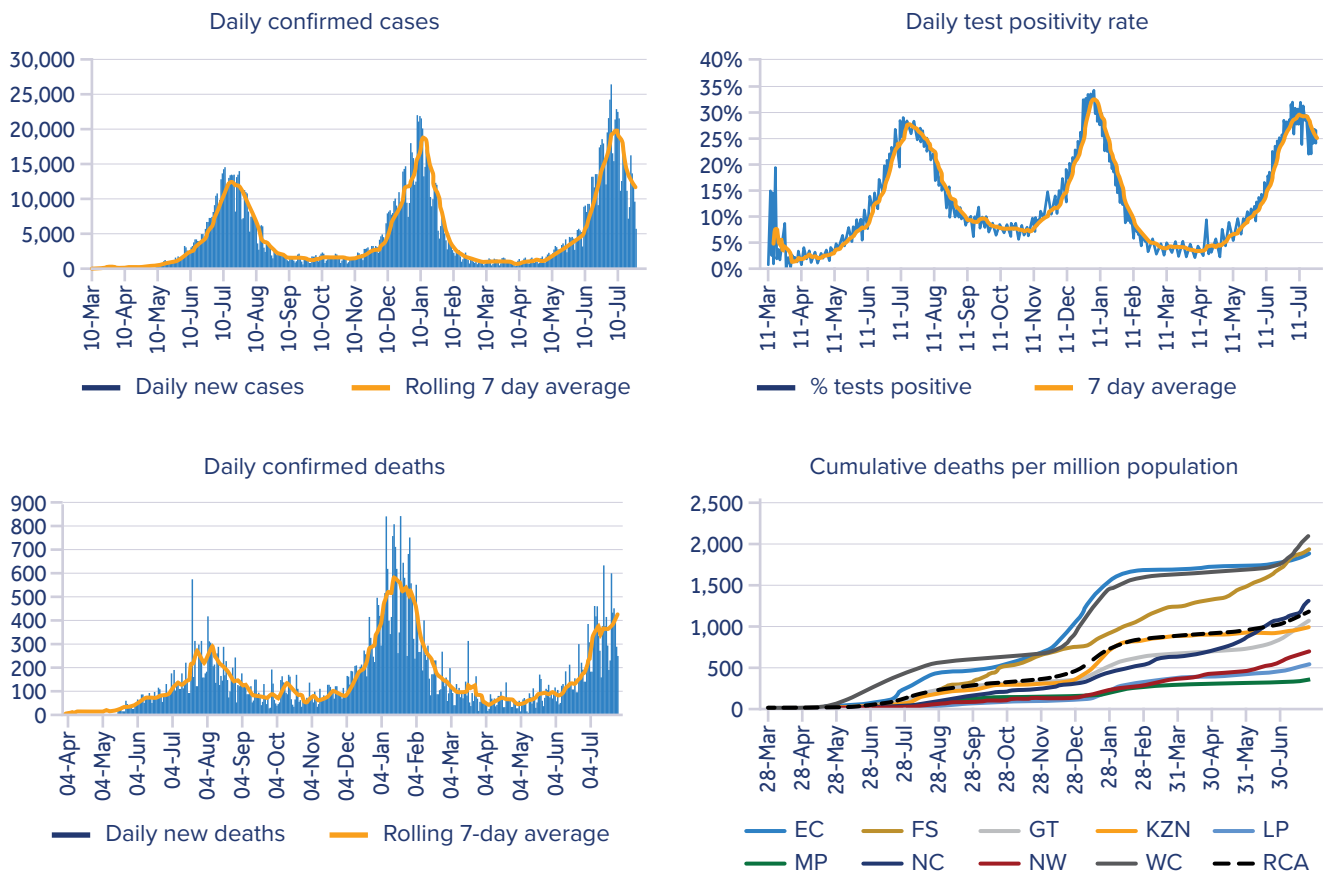
Key findings

Summary of South African COVID-19 statistics

South Africa has, at the time of writing, experienced three large waves of COVID-19 infections. At the peak of the second and third waves, there were more than 20 000 cases reported per day, with one third of tests conducted being positive, and on average, close to 600 and 400 deaths per day respectively.

The relative burden differed considerably between the nine provinces. The Western Cape, Free State and Eastern Cape had the highest cumulative number of confirmed COVID-19 deaths per million population (Figure 1), although differences in reporting consistency are likely to have influenced this measure. A more robust measure might be the South African Medical Research Council's estimates of excess deaths. According to their estimates as at 17 July 2021, Northern and Eastern Cape had by far the highest excess deaths at 554 and 534 per 100 000 population respectively, followed by Free State at 404 and KwaZulu-Natal at 361.¹⁸

Figure 1: COVID-19 cases, test positivity rates, and deaths



Source: Authors' calculations based on NDoH, 2021¹⁹ and Stats SA, 2020.²⁰

After a short period of low numbers of cases and Level 1 restrictions following the second wave, incidence started to increase from April 2021 in a few provinces around the country. By mid-July 2021, the highly transmissible Delta variant was detected in all provinces, rapidly becoming the dominant variant in six out of nine provinces.²¹ Adjusted Alert Level 4 restrictions were implemented on 28 June 2021 for 14 days and extended on 11 July 2021 for an additional 14 days. The restrictions, including a complete ban on alcohol sales, were aimed at preserving hospital capacity, and reducing the spread of Delta variant.

The adjusted Level 4 measures prompted by the third wave are likely to generate smaller economic impacts

compared to the initial Level 4 restrictions. However, the prolonged effects on livelihoods, poverty, hunger and unemployment may have contributed to the widespread looting and destruction of economic infrastructure which took place in July 2021. This again points to dilemmas in balancing lives and livelihoods in the context of an ongoing pandemic, already in a third wave and having lasted for over 16 months. In response to the third wave and social unrest, the President and the Minister of Finance announced in July 2021 an intervention package, which seeks to speed up vaccine coverage, support economic recovery, and provide relief to households and businesses. While widespread vaccine roll-out is expected to contribute markedly to stabilising the economy, the emergence of the Delta variant

as South Africa's predominant strain may continue to require preventive measures, which should be appropriately calibrated against their economic impact.

Epidemiological modelling

Epidemiological modelling by government relied substantially on the work of the South African Coronavirus Modelling Consortium (SACMC). This work is described extensively in Chapter 2 by Silal, et al.²²

In May 2020, the first version of the National COVID-19 Epi Model (NCEM) projected 8.01 to 8.62 million laboratory-confirmed cases, a total incidence of between 48.7 and 51.7 million, and 40 223 and 43 759 deaths, in the optimistic and pessimistic scenarios, respectively, by 1 October 2020.²³

The updated NCEM version from early September was revised given that the COVID-19 epidemic peaked in mid-July – earlier and at a lower total number of active cases than in the optimistic scenario published in May 2020.²⁴ The revised model estimated that there had been 15.2 million infections (asymptomatic and symptomatic, regardless of detection) by September 2020, equating to 25.5% (uncertainty range: 22.0%–28.6%) of the population. Total deaths were estimated to continue to increase until early November when the cumulative number of all deaths would reach 37 000 (of which 16 000 would have been in hospital); thereafter the growth rate was estimated to be very low.

Modelling a novel virus is challenging in the context of a limited understanding of the virus itself. By the end of the first wave, knowledge on SARS-CoV-2 had improved considerably, allowing for models to produce more robust projections. The SACMC Epidemic Explorer²⁵ was launched as a publicly available dashboard to describe the COVID-19 epidemic in South Africa, analysing resurgence risk, presenting metrics to prepare for future outbreaks, and monitoring COVID-19 hospital admissions for all provinces, districts and (in the secure government version) sub-districts in the country.

Funding the health response

Estimating the cost of the health response

Based on a mandate of the National Department of Health (NDoH), in March 2020 the SACMC was established to project the spread of the disease to inform policy and planning over the course of the epidemic. In addition to the NCEM, a costing work group of the SACMC developed a National COVID-19 Cost Model (NCCM) to project the

required overall cost of COVID-19-related health care in both the public and private sectors. Later in the year, a National COVID-19 Vaccine Budget Model (NCVBM) was added.

The NCCM took inputs from the NCEM and cost inputs based on data from existing sources that were adapted to represent the type, number and prices of ingredients required in the health sector's COVID-19 response. While most of the inputs were based on the rapidly evolving South African clinical COVID-19 government guidelines and tender documents, some data regarding the required inpatient staff contingents were based on literature describing experiences with COVID-19 in-patient care in China and Italy.²⁶ Based on these, the NCCM calculated the six-month health budget from April to September 2020, allocating costs at the level of the provinces as well as nationally, incremental to existing resources such as hospital beds and staff contingents.

The NCCM was updated with new NCEM results whenever they became available, and was also changed to incorporate additional interventions as these were deemed relevant by policy-makers and planners (for example, temporary inpatient infrastructure such as field hospitals and add-on clinic space), or as they became incorporated into national COVID-19 management guidelines. Prices and quantities were updated for a number of items as new tenders and data on actual resource use became available; for example, in July 2021, assumptions regarding in-patient length of stay were adjusted downwards as local data became available in the South African hospital database.²⁷

By the end of May 2020, using input from the NCEM's first version, the NCCM estimated that the cost of the COVID-19 health-sector response for 2020/21 would be around R29 billion under the NCEM's optimistic scenario (which included around 20 000 additional ICU beds – Table 1), and R38 billion under the pessimistic scenario. Income protection responses are detailed below and at that stage, the President envisaged an overall response across all sectors of around 10% of Gross Domestic product (GDP). Scenarios differed in the costing of those budget items that were directly linked to the number of projected cases, i.e. in-patient care (ICU and other beds, ventilators and oxygen) and drugs. In both scenarios, the largest contributor to total cost were additional ICU beds, personal protective equipment (PPE), and infrastructure such as fever clinics and 30-bed COVID-19 wards.

Table 1: Projected COVID-19 health cost for April–Sept 2020^b

Budget item	Description	Scenario with 20 000 additional ICU beds	
		Total cost [R million]	% of total cost
PPE		5 035	18%
Testing	PCR tests only; no new instruments or extra staff	2 028	7%
Central functions	Port Health and surveillance	320	1%
Intensive Care Unit (ICU) beds	Including additional beds required, linen and staff costs	5 964	21%
Ventilators		1 034	4%
Oxygen	excludes oxygen equipment	2 510	9%
Hospital beds	Incl. additional beds required, linen and staff costs	123	0%
Drugs	At ICU, general wards and primary healthcare clinics	2 955	10%
PHC staff	For screening, testing, clinical assessment, post-test follow-up	443	2%
Community Health Worker supplies	1.1 thermometers per Community Health Worker	96	0.30%
Isolation facilities		846	3%
Fever clinics	1 000 units to be added to PHCs and CHCs	3 054	11%
30-bed COVID-19 wards	Attached to existing hospital or to field hospital	4 189	15%
TOTAL		28 597	

Additionally, a group of experienced public finance specialists was trained to work with Provincial Departments of Health and update the model with province-specific data on baseline availability of resources, prices, and future need for those resources that were independent of the course of the epidemic such as PPE and isolation and quarantine facilities.

Finding the right funding mechanisms

Within the South African PFM framework, there is a range of mechanisms to respond to emergencies and other unforeseen events²⁸, and several of these were used in the COVID-19 response.

Firstly, early in March 2020, the Provincial Disaster Relief Grant – a conditional grant managed by the Department of Co-operative Governance and Traditional Affairs – was used to allocate R466 million to Provincial Health Departments to fund initial PPE needs.²⁹ Subsequently, additional funds were approved or reallocated within various departments for PPE and other expenses.

Secondly, National Treasury issued formal guidance to all departments to use provisions in section 29 of the Public Finance Management Act (1 of 1999) (PFMA)³⁰ to start spending immediately at the start of the financial year and approved reallocation of funds within departments when needed.³¹ Procurement rules were eased to enable rapid purchase of PPE, but after massive abuse these amendments were eventually revoked.

Thirdly, the most comprehensive budgetary intervention was the tabling of a Special Adjustments Budget¹⁷ (SAB) in June 2020. The NCCM was instrumental in informing the overall budget allocations for the health response, although the detailed budget breakdown per item was to a large extent determined by provinces in line with their need. The SAB allocated approximately R21.5 billion to the health-sector COVID-19 response (Table 2), mainly to Provincial Departments of Health. This was achieved through a combination of additional funds from the fiscus (through increased lending), reprioritisation of funds from other departments towards health, and reprioritisation within health

^b Not all of these components were supported and included in the special adjustments budget, with allocations to the health response in the order of R21.5 billion. Cost scenarios varied among others with numbers of ICU admissions, and the number of admissions was ultimately lower than initially modelled.

departments. Further adjustments at the provincial level are estimated to have taken the total amount closer to R25 billion, of which R17.4 billion was additional to the health-sector budget, mainly from additional fiscal injections, reprioritisation

from other provincial departments and surpluses, and the remainder reprioritised within.^c Amounts were also allocated to support the central activities of the NDoH and National Institute for Communicable Diseases (NICD).

Table 2: Summary of 2020/21 special adjustments budget for the health sector for COVID-19

Funding mechanism	COVID-19 allocation (ZAR '000')	Areas to be funded
New COVID-19 component of HIV grant	3 450 537	PPE, testing, Cuban medical brigade, contracting private hospitals
Health Facility Revitalisation Grant	1 065 786	Infrastructure requirements for COVID-19, e.g. additional bed space, field hospitals
National Tertiary Services Grant	297 617	Tertiary hospital COVID-19 care, e.g. ventilators and other equipment and supplies
NHI Grant	22 706	Contracting health professionals to assist with COVID-19 response
Indirect Health Facility Revitalisation Grant	200 000	Various infrastructure needs for COVID-19
National Institute for Communicable Diseases	96 700	Disease surveillance and control
NDoH core budget	411 029	NDoH's own PPE requirements, Port Health services, Cuban public health advisory team, etc.
Provincial Equitable Share	15 955 625	Various areas of the COVID-19 response not covered or only partially covered by other allocations
Total	21 500 000	

Source: National Treasury, 2020.¹⁷

Finally, funding for COVID-19 vaccines was needed in 2020/21, partly because manufacturers required partial upfront payments. The majority of the 2020/21 allocations were made using provisions of section 16 of the PFMA,³⁰ which in emergency situations allows the Minister of Finance to allocate funds to areas not budgeted for. An amount of R1.25 billion was allocated using these provisions. The bulk of funding for the vaccination roll-out would be required in 2021/22,² and based in part on the NCVBM, Government made budget provision for this in the main 2021 Budget, as shown in Table 3. A total of R9 billion was allocated over 2021/22 (R6 billion) and 2022/23 (R3 billion)

for this purpose, bringing the total vaccine allocation to R10.3 billion. Should the need arise, the Minister of Finance can authorise additional allocations from the contingency reserve in-year in terms of the 2021/22 Appropriation Act.³² By July 2021, approximately R4 billion of the R4.35 billion for vaccine purchases by the NDoH had already been spent and an additional R5 billion of vaccine-related spending pressures had been registered, with part of this requested for allocation from the contingency reserve. By 25 July 2021, 73 million vaccines had been ordered (30 m Pfizer, 31 m Johnson & Johnson, 12 m COVAX), of which 13% had entered the country (9.5 m) and 8.7% used (6.4 m).^d

c The authors' calculation is based on review of the nine provincial adjustment budget publications.

d Personal communication: National Treasury, 25 July 2021.

Table 3: Funding the COVID-19 vaccination roll-out

R million	2020/21	2021/22	2022/23	2023/24	Total	Purpose
National Department of Health	1 100	4 350	2 100	0	7 550	Vaccine procurement and distribution, EVDS, private contracting
Provincial Departments of Health	0	1 500	900	0	2 400	Service delivery costs
Medical Research Council	150	100	0	0	250	Sisonke trial, vaccine research
Government Communication and Information System	0	50	0	0	50	Communication campaigns
Total allocated	1 250	6 000	3 000	0	10 250	
Additional potential funding			TBC		9 000	Contingency reserve and emergency allocations

Source: National Treasury, 2021.²

While the PFM mechanisms already described (for example virements, disaster funds, the Special Appropriation Bill, etc.) were largely adequate to avail funds to the sector, the budgeting process also had its challenges. Although the NCCM was of great assistance, the lack of a more specific, implementable and costed sectoral plan led to considerable uncertainty regarding the ability of the sector to practically scale up services, particularly ICU care. Another challenge was South Africa's already precarious fiscal position, with the majority of additional funding for the health (and social protection) response having to be reprioritised from other sectors. Spending areas that were the most affected by lockdown, e.g. travelling and infrastructure projects, were specifically targeted for reprioritisation.^{2,17}

Protecting livelihoods

Unemployment Insurance: TERS benefit

The main social security instrument to assist formally employed employees is the Unemployment Insurance Fund (UIF). As a complement to unemployment benefits, the UIF adapted an existing scheme, the Temporary Employer-Employee Relief Scheme (TERS), which assists companies in distress to pay a portion of wages while the employee remains in employment. This scheme was repurposed to also provide benefits to workers who are furloughed or worked reduced hours during the lockdown. Employees would receive a minimum benefit equal to the applicable minimum wage up to a maximum of R6 370 per month, not tied to the accumulation of credits.

The capacity of the UIF system to accommodate the need came under extreme strain during the lockdown in April and May 2020. Some of the initial hurdles included building new databases linked to other administrative systems under extreme time pressure, and rapidly scaling up the volume of payments. In addition, business-owners struggled to submit information in the format required by the new system. Given these bottlenecks, payments were made directly

to employees from May 2020 onwards, and from June, employees were allowed to submit claims directly, partly in response to delays due to prior compliance lapses by employers. Rapid scale-up and systems upgrades eventually addressed backlogs to the extent that by August 2020, most payments were settled in the first 10 days after month-end.

The COVID-TERS benefit was intended to cover an initial three-month period, with the initial phase having very few eligibility criteria and even covering non-contributors. It was extended numerous times over the next financial year, before it came to an end on 15 March 2021. The eligibility criteria became narrower over time, as many work sectors re-opened and benefits had to be scaled back in accordance with affordability. By the end of January 2021, the scheme had paid R57.3 billion in 13.9 million payments to employees.²

Social grant increases

Social grants in South Africa are effective in reducing extreme poverty, lifting 7.9% headcount above the poverty-line and reducing the poverty gap by 29.5%.³³ Spending on social grants amounts to 3.4 % of GDP, one of the highest on the continent, on 18 million beneficiaries, the bulk of which go to the elderly (38%) and children (31.7%).

Going into lockdown, the existing social grants were insufficient to mitigate the economic effects of the pandemic, which disproportionately affected poor households that lost already marginal earnings in the informal labour sector. During April and May 2020, the reported proportion of households with adults and children experiencing hunger rose to 24% and 18%, respectively, up from 8% at baseline in 2018.³⁴ Beyond unemployment insurance in the formal sector, there was at that stage no provision to supplement lost income for the working-age poor. This crisis highlighted a gap that has long plagued South Africa's social welfare coverage: providing relief to long-term unemployed adults.

Government announced a R50 billion package of support to poor households to supplement social protection – 10% of the total announced COVID-19 relief package. Existing social grants were topped up (Table 4), and two new social grants were initiated: a caregiver grant (the recipient of the child support grant on behalf of the child) at R500 per month, and a R350 per month Social Relief

of Distress (SRD) cash grant for unemployed adults not receiving other grants.

The total additional social grant spending between May 2020 and April 2021 was R53.6 billion. The SRD and caregiver grants ultimately reached approximately 6.1 and 7.1 million beneficiaries per month respectively.

Table 4: Adjustments to social grant spending in 2020/21

	Baseline per month (Rand)	Number of beneficiaries	Top-up (Rand)	Top-up %
Child support ^e	445	12 811 209	300	67.4%
Old age	1 860	3 672 552	250	13.4%
Disability	1 860	1 045 388	250	13.4%
Foster care	1 040	339 959	250	24.0%
Care dependency	1 860	155 94	250	13.4%

New social assistance grants

	Amount per month (Rand)	Number of beneficiaries
Social Relief of Distress	350	6.1 million
Caregiver ^e	500	7 167 022

Source: National Treasury, 2021.²

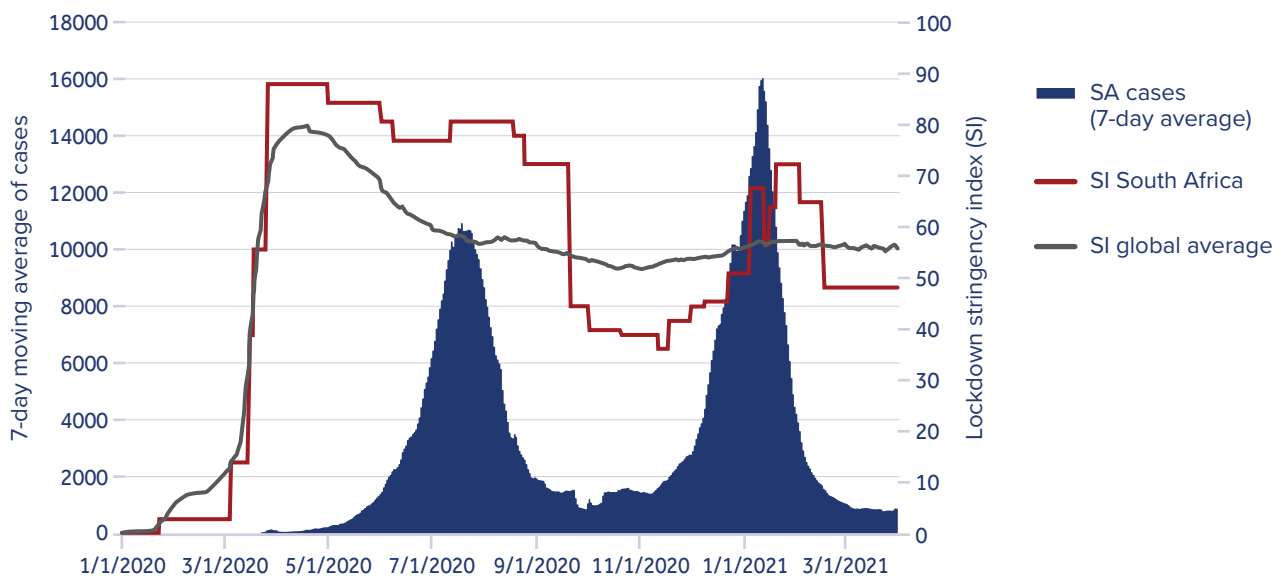
Impact on the economy and medium-term budget outlook

Impact on economy

South Africa implemented a lockdown at the end of March 2020. In the first wave of the epidemic (April to September),

South Africa’s lockdown levels were generally stricter and more protracted than the global average (Figure 2). Stringency was again increased during the second, more severe wave, but the increase was smaller and shorter, and economic impacts less severe.

Figure 2: Lockdown stringency index



Source: Oxford COVID-19 Government Response Tracker, 2021.⁴

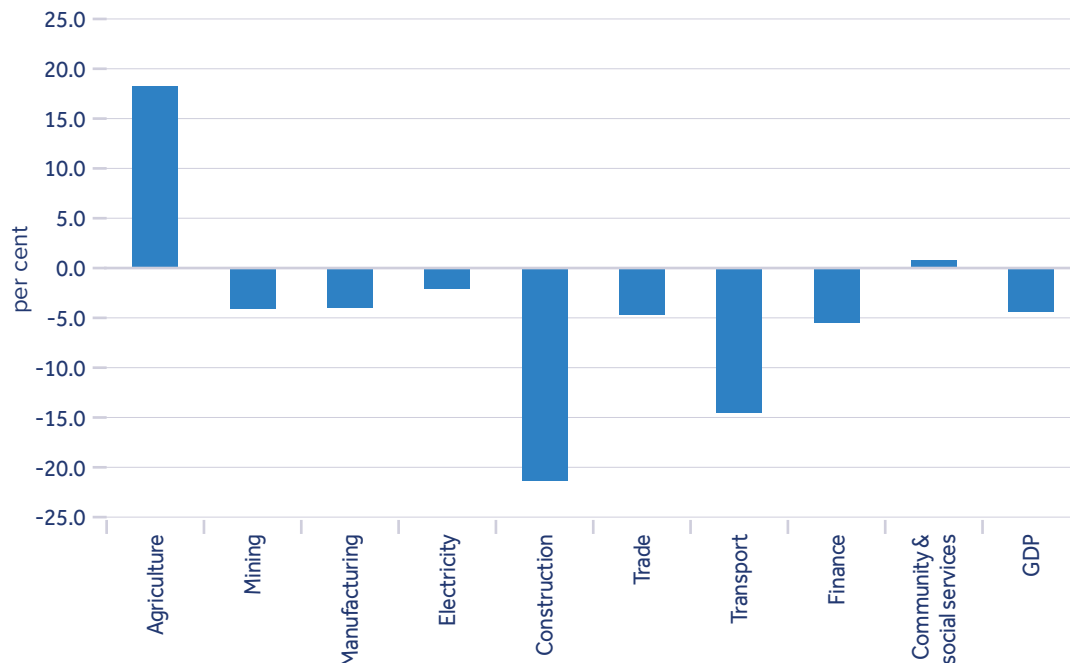
e The Child Support Grant reaches the largest number of households. From the second month, this was replaced by the Caregiver Grant.

The high stringency levels at the beginning of the epidemic were driven partly by the early experiences in some European countries such as Italy, and high levels of uncertainty surrounding the spread of the virus and the impact on health systems. There was little understanding of how to implement lockdown levels that maximise the benefits to the health system while minimising the costs to employment and economic activity.

First estimates of the impact of lockdowns on the South African economy were large – assuming different permutations of lockdown levels in 2020, suggesting a decline in annual GDP in the range of 5.4 to 16.1%.^{35–37} The projections for these output losses were accompanied by estimates of very large employment losses, particularly for low- and medium-skilled workers.

In the end, the economic contraction and job losses were large but not as severe as initially expected. The global economy performed better than expected, with GDP contracting by an estimated 3.3% in 2020 compared to a June 2020 International Monetary Fund (IMF) forecast of 4.9%.³⁸ In South Africa, GDP contracted by 7.0%. The large contraction in the second quarter of the year was followed by a strong rebound in the third quarter as the country moved to less stringent lockdown levels. Statistics South Africa estimated that 2.2 million jobs were lost in Quarter 2 and about 900 000 jobs were recovered by Quarter 4, implying net job losses of nearly 1.4 million³⁹ and economic activity remaining below the 2019 level. Figure 3 compares the level of output in different economic sectors at the end of 2020 to their output in 2019. Construction and transport were worst affected, while agriculture recorded strong growth in 2020.

Figure 3: Differences in sectoral output performance from 2019 to 2020, Q4

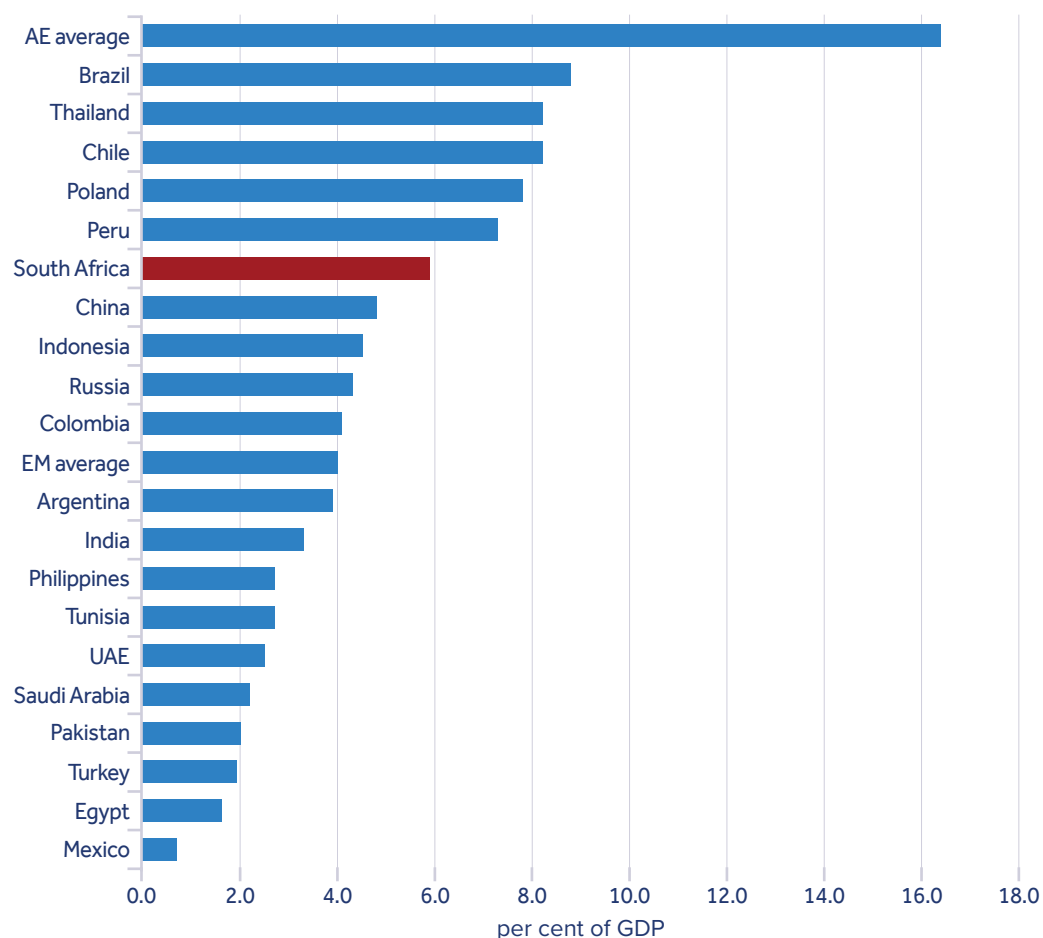


Source: Stats SA, 2021.⁴⁰

So, what was driving the better economic outcomes? Firstly, South Africa addressed the second wave by implementing more targeted and less economically damaging lockdowns. Secondly, the government and the Reserve Bank implemented measures to stimulate economic activity. Figure 4 and Figure 5 show the size of fiscal and monetary responses relative to other countries. These interventions are relatively small compared to the stimulus packages generated in advanced economies, but large compared

to other emerging markets. Nonetheless, these large expenditures and debt have fiscal implications which are discussed further on. Thirdly, prices of some of South Africa's major commodity exports reached record levels. Fourth, favourable rains and strong agricultural output supported overall economic activity. Finally, strong policy responses in advanced economies and much better-than-expected economic outcomes globally supported the South African economy through trade and financial channels.⁴¹

Figure 4: Emerging markets fiscal response – 2020

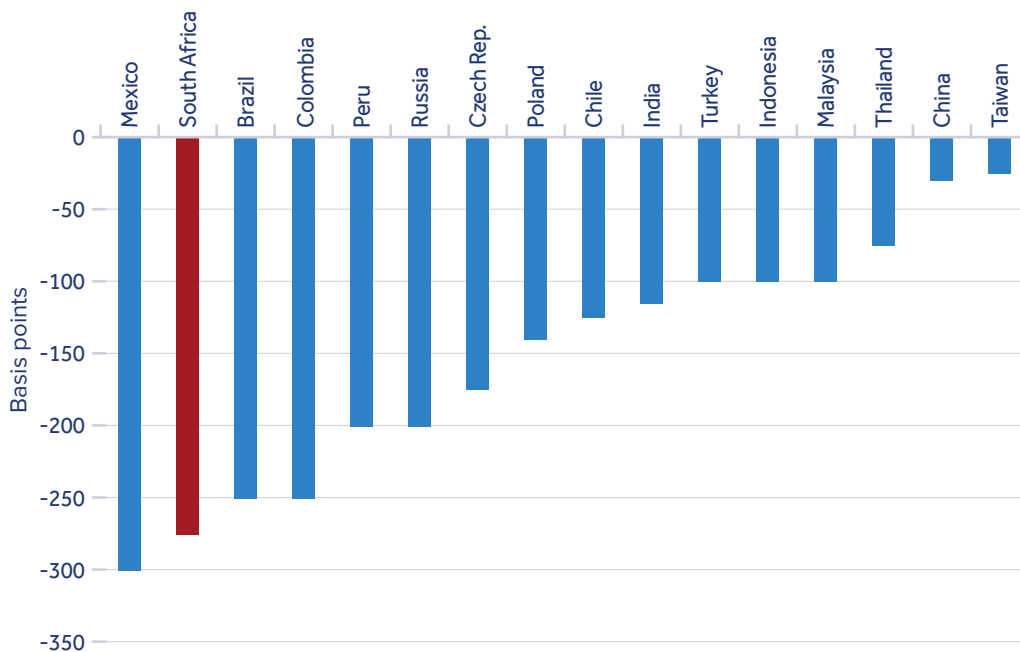


Source: IMF, 2021.⁴²
 AE = advanced economies; EM = emerging markets.

Despite the better-than-expected economic outcomes, GDP remains below its 2019 level, and the employment losses are larger than during the global financial crisis in 2008/09.² The COVID-19 crisis will have longer-term impacts through health and economic channels. The level of investment remains well below its 2019 level, implying slower capital stock replacement and creation. This, in turn, will reduce potential growth at least over the medium term.⁴³ Continuous unemployment and under-employment can lead to loss of skills, affecting labour productivity and reducing potential growth. School closures might

have led to worsening learning outcomes, and in the absence of mitigation strategies, can slow down future skills accumulation.⁴⁴ Longer-term health complications⁴⁵ related to COVID-19 may also reduce labour productivity. The reduction in the repo rate – the interest rate at which the central bank lends money to commercial banks – (see Figure 5) was a monetary policy intervention to lower the cost of borrowing for government and households through the pandemic emergency and will be continuously re-evaluated as the situation improves.

Figure 5: Reduction in the repo rate from January to October 2020



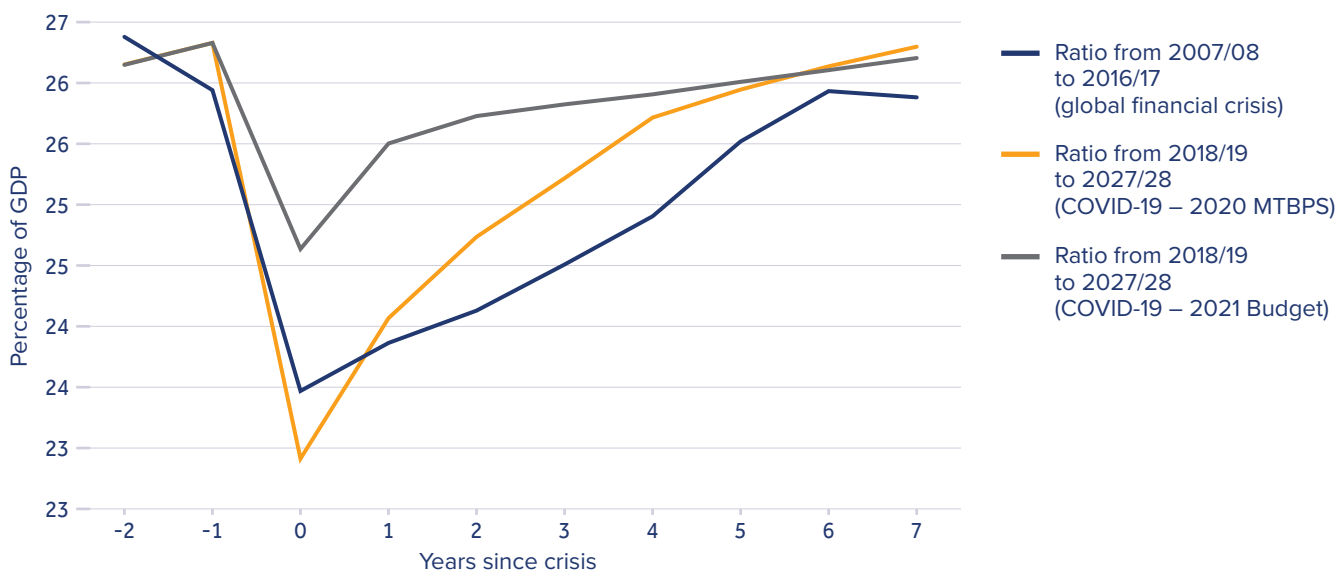
Source: Haver Analytics, 2021.⁴⁶

Revenue implications

South Africa entered the crisis in a very precarious fiscal situation.⁴⁷⁻⁴⁸ Revenue was estimated to fall by over R300 billion and the debt to GDP ratio was expected to exceed 100 % of GDP as the stringent lockdown levels hit tax revenue while creating spending pressures.¹⁷ The shortfalls were over and above tax relief measures estimated at the time of their announcement to result in R70 billion of tax revenue being foregone. These included expansion of the youth employment subsidy, deferral of tax owed by businesses and excise duties (in the light of the alcohol and tobacco ban), a four-month ‘holiday’ on the Skills Development Levy, and favourable treatment of COVID-19-related donations.

In November 2020, South Africa’s sovereign credit rating was further downgraded by Fitch Ratings Inc. and Moody’s Investors Service, both also maintaining a negative outlook. The ultimate revenue shortfall for 2020/21, however, was just over R150 billion, and government’s consolidation efforts stabilised the debt trajectory below 100 % of GDP.² The revenue performance was better than expected, relative to the global financial crisis (see Figure 6). This was mainly due to high commodity prices, which buoyed tax receipts from the mining sector, along with recovery in consumption as restrictions were eased. Despite the tax revenue needs, government has chosen not to increase taxes due to the likelihood of negative impact on economic activity.

Figure 6: Tax-to-GDP ratio after a crisis



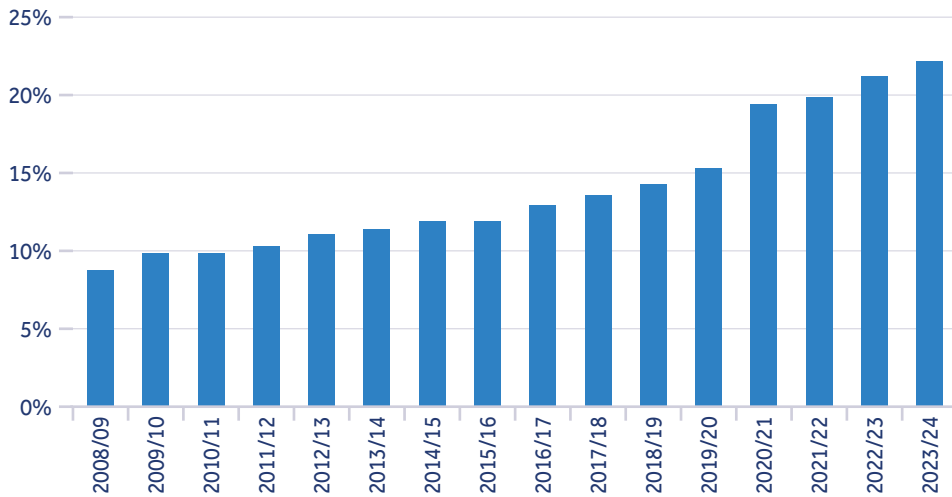
Source: National Treasury; 2021.²

Impact on fiscal outlook and health budgets

The fiscal response and the decline in revenue collection widened the consolidated deficit from 5.7% in 2019/20 to an estimated 14% in 2020/21.² Simultaneously, the combination of a smaller revenue pool over the medium term, high debt stock, and slow economic recovery, had set government on an unsustainable fiscal path. Debt service costs (interest

payments) now exceed 20% of government revenue (Figure 7) and exceed the budget of the entire public health sector.² The costs of servicing debt have increased by approximately R100 billion over the past few years² and this, associated with revenue reductions of R150 billion, annually decreases fiscal space for health services and contributes to perceptions of austerity.

Figure 7: Debt service cost as a percentage of government revenue

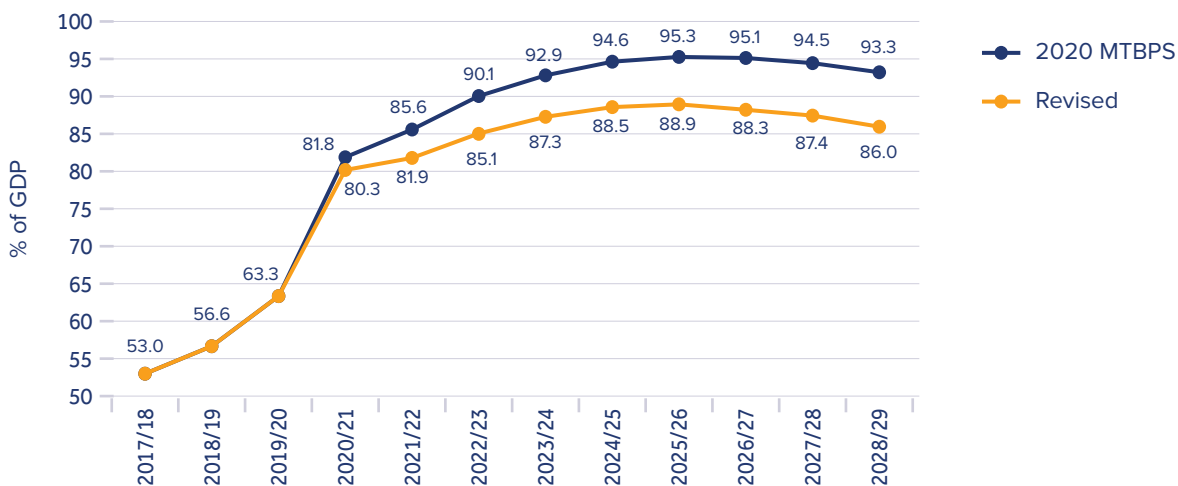


Source: National Treasury, 2021.²

In order to stabilise debt and avoid a sovereign debt crisis, Budget 2021 contained drastic action to contain expenditure, with the aim of stabilising debt by 2025/26 (Figure 8). Non-interest expenditure over the next three years was reduced by R264 billion (5.3%) compared to

Budget 2020 projections. Figure 7 shows rapid increases in national debt, but levelling off at a lower level than previously anticipated, partly due to spending reductions. While stabilising the fiscal environment, these reductions pose significant challenges for publicly financed services.

Figure 8: Government debt rising as % of GDP, though at a slower pace than previously expected



Source: National Treasury, 2021.²

Spending reductions affect all of government, including health departments. Tabled 2021 provincial health budgets showed reductions of 4.5% in 2021/22, 11.3% in 2022/23 and

14.1% in 2023/24, totalling R76 billion over these three years, as compared to previously published MTEF estimates.⁴⁹ As shown in Table 5, there will be very low (1.8%) expenditure

growth in nominal terms between 2019/20 and 2023/24, and based on projected population growth, expenditure per capita is expected to remain virtually static in nominal terms. A considerable share of these budget reductions could be absorbed by the proposed wage-freeze for public servants, as more than 60% of expenditure in the sector (and 84% of the

reductions) is on compensation of employees. Nevertheless, the reductions go beyond wage-freeze savings and unless managed carefully, may pose considerable risk to services and the public health system as a whole. They are likely to require carefully considered decisions, efficiencies and prioritisation of budgets to protect the health system from significant harm.

Table 5: Budget projections for Provincial Departments of Health

ZAR million	2019/20	2020/21	2021/22		2022/23		2023/24		Average growth 2019/20–2023/24	
Province	Expenditure	Adjusted budget	Budget	Reduction	Budget	Reduction	Budget	Reduction	Nominal	Per capita
Eastern Cape	26 201	27 446	26 431	-1 329	25 340	-3 595	25 869	-4 367	-0.3%	-0.3%
Free State	11 124	11 822	12 135	-556	11 808	-1 518	11 810	-2 115	1.5%	1.3%
Gauteng	50 674	58 836	56 505	-3 560	55 723	-7 925	57 391	-9 122	3.2%	0.6%
KwaZulu-Natal	45 227	51 408	48 412	-2 480	47 482	-5 912	47 305	-8 492	1.1%	0.2%
Limpopo	21 011	22 598	21 973	-1 647	21 037	-3 808	22 129	-3 834	1.3%	-0.2%
Mpumalanga	14 258	16 155	16 204	-421	15 474	-2 022	15 386	-2 898	1.9%	0.4%
Northern Cape	5 183	5 616	5 716	-253	5 714	-540	5 883	-652	3.2%	2.9%
North West	12 436	14 196	14 119	-142	13 712	-1 433	13 724	-2 103	2.5%	0.2%
Western Cape	24 773	27 214	27 392	-419	27 318	-1 779	26 895	-3 512	2.1%	0.3%
Total	210 886	235 290	228 888	-10 808	223 609	-28 532	226 392	-37 096	1.8%	0.3%

Source: National Treasury, 2021.⁴⁹

Kurowski and colleagues⁵⁰ review the experience of falling health budgets across many countries following previous global recessions, and propose a range of interventions to emerge from double shocks (health and economic) to aid recovery. They argue that health budgets should be increased during the COVID-19 period to allow the economy to recover. Falling health budgets post COVID-19 are already a worrying phenomenon in several countries. The WHO cautions against the re-emergence of austerity budgets following the global crisis, and highlights very harmful effects of austerity on health budgets following previous recessions.⁵¹ In recent months, the IMF, World Bank and Organisation for Economic Co-operation and Development (OECD) have all made similar calls emphasising the importance of the health sector in turning around the COVID-19 induced economic crisis and of not withdrawing social support, health spending or fiscal stimulus too early.⁵² This may question whether the net reductions for the health sector effected in Budget 2021 (despite additional allocations of R8 billion for the third wave and R9 billion for vaccines) might be too large and inhibit the sector's response to future waves and its contributions to reducing the economic effects of the pandemic.

Conclusions

South Africa has been severely affected by COVID-19, with 77 141 reported COVID-19 deaths¹⁹ and 229 850 excess deaths¹⁸ having been recorded by August 2021. Government acted early and decisively, which is likely to have delayed the peak in COVID-19 cases, and possibly saved lives. However, complete lockdowns have been shown to be a blunt tool which has vast economic and socio-economic side-effects. The economy suffered the worst recession in a century causing large employment losses, huge fiscal deficits, plunging tax revenue and a growing debt burden. South Africa's budgetary and PFM systems were largely capable of responding rapidly to the pandemic, both through initial short-term mechanisms and a more comprehensive special adjustments budget, which allocated more than R20 billion to the health sector COVID-19 response. An additional R100 billion has been spent on income support through new social grants and TERS benefits. The large budget reductions to public services, including health, were not anticipated

when the first stringent lockdown was imposed, which suggests that greater consideration to long-term effects on lives and livelihoods is required.

The effects of the initial stringent lockdown levels will be long-lasting. Many people employed prior to the crisis remain unemployed. The fiscal situation remains precarious and has led to substantial expenditure reductions (including in the health sector), which may complicate the response to future waves. Given the huge and multi-year consequences for both lives and livelihoods, there seems to be merit in further exploring models that integrate epidemiological and economic dimensions in order to balance complex policy choices across multiple dimensions.

Issues of resilience and adaptability in social protection and healthcare systems have come to the fore, with numerous lessons and examples globally forming a growing evidence-base of measures available for rapid remedial action towards income protection of large groups, including workers in the informal sector. The linking of data from the South African Revenue Service, UIF and social assistance agency (SASSA) holds potential lessons for creating a national social security registry. Such integrated systems design is difficult to achieve during a crisis and should therefore be a conscious objective once some stability is reached.

The support programmes that achieved the highest level of coverage or fastest take-up were programmes where an existing system or policy could be adjusted to serve the specific needs that emerged from the COVID-19 pandemic – as was the fortuitous case of the UIF’s COVID-19 TERS programme supported by an accumulated surplus. This was most difficult for programmes with a high level of decentralisation – exemplified by the failure to redirect school feeding schemes in a time when household and child hunger was experienced by as many as one in five households.⁵³

Programmes that had to be designed from scratch took longer to implement, but were more finely targeted. This is because with the passing of time, better information emerged on the characteristics of the pandemic and the impacts of containment measures on household livelihoods.

There is therefore a trade-off between the speed of intervention and the efficiency of those interventions. Perhaps the best example of such trade-off can be found in the irregularities that emerged in the deluge of applications for COVID-19 TERS payments.⁵⁴ With the benefit of hindsight, it is easy to identify areas where programme design could have been better – and therefore the policy environment requires deliberate efforts towards improved planning for resilience. While many government departments had a framework for business continuity, this crisis illustrated that it did not extend sufficiently into an understanding of how policy would have to adjust in the face of a global crisis that affects all segments of society simultaneously. In the face of an additional crisis emerging in July 2021 – widespread looting, partially linked to deteriorating livelihoods – the required resilience is under severe strain.

Recommendations

- Future responses to COVID-19 and other health threats should consider both lives and livelihoods more closely – health as well as economic, fiscal and socio-economic implications. Ideally, decision-making should involve multi-criteria decision models and frameworks involving a diverse range of stakeholders.
- To facilitate this, more technical work is required to bring together models of epidemiological and macro-economic impact, so that they can interact within common frameworks.
- Social security institutions should operate with adaptable systems that enable rapid implementation of temporary income protection measures in the event of disasters, pandemics and other economic shocks.
- The health system should improve its readiness to deal with temporary surges in healthcare demand resulting from unpredicted health threats, through better data systems and data flows across all spheres of government, and through streaming projections from predictive models through decision-makers to all levels of implementation. Stronger legislative and other mechanisms are required to facilitate public-private sector collaboration, including contracting.
- Given the third wave of COVID-19, the massive national vaccine programme and large backlogs in routine services, the adequacy of the health budget will have to be continuously reviewed, noting the large budget reductions effected in Budget 2021 following large economic and tax shortfalls linked to the pandemic.

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