South Africa Economic Update, Edition 15

# Learning: Overdue Reforms and Emerging Priorities in Basic Education



© 2025 The World Bank 1818 H Street NW, Washington DC 20433 Telephone: 202-473-1000; Internet: www.worldbank.org

Some rights reserved.

This work is a product of the staff of The World Bank. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

#### Rights and Permissions

The material in this work is subject to copyright. Because The World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Attribution—Please cite the work as follows: "World Bank (2025) South Africa Economic Update. Learning: Overdue Reforms and Emerging Priorities in Basic Education © World Bank."

Adaptations—If you create an adaptation of this work, please add the following disclaimer along with the attribution: This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.

Third-party content—The World Bank does not necessarily own each component of the content contained within the work. The World Bank therefore does not warrant that the use of any third-party owned individual component or part contained in the work will not infringe on the rights of those third parties. The risk of claims resulting from such infringement rests solely with you. If you wish to re-use a component of the work, it is your responsibility to determine whether permission is needed for that re-use and to obtain permission from the copyright owner. Examples of components can include, but are not limited to, tables, figures, or images.

All queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

# **Table of Contents**



ACKNOWLEDGMENTS			
LIST OF A	ACRONYMS	02	
OVERVIE	:W	03	
PART 1:	THE STATE OF THE ECONOMY	07	
1.1	RECENT DEVELOPMENTS	08	
1.1.1	Domestic conditions gradually improved during 2024, but GDP growth remains subdued	08	
1.1.2	Poverty remains prevalent due to limited job creation	10	
1.1.3	Lower inflation allowed for more accommodating monetary policy	11	
1.1.4	South Africa's external balance is stable but vulnerable to volatile commodity prices and short-term capital flows	12	
1.1.5	The fiscal deficit rose to a new level leading to higher public debt	12	
1.2	OUTLOOK AND RISKS	14	
1.2.1	Improved growth prospects and fiscal consolidation	14	
1.2.2	Uncertainties in the global economy cannot be ignored, but the main risks are domestic	17	
1.3	THREE POLICY ACTIONS FOR FASTER AND MORE INCLUSIVE ECONOMIC GROWTH	18	
1.3.1	Action 1: Addressing the infrastructure constraints	18	
1.3.2	Action 2: Improving the efficiency of public spending	19	
1.3.3	Action 3: Strengthening human capital development	21	
Referenc	es	23	
PART 2:	THE OVERDUE REFORM AND EMERGING PRIORITIES IN THE BASIC EDUCATION SECTOR	25	
2.1	THREE KEY CHALLENGES IN BASIC EDUCATION	26	
2.1.1	Challenge 1: The learning crisis - early progress, setbacks, and the urgency to accelerate progress	26	
2.1.2	Challenge 2: The increasing financing constraint of the State	29	
2.1.3	Challenge 3: Limited efficiency and equity of public spending on basic education	33	
2.2	THREE ACTIONS FOR BETTER LEARNING	36	
2.2.1	Action 1: Focusing on learning outcomes, starting with foundational learning	37	
2.2.2	Action 2: Leveraging the private sector to expand access to, quality of, and competition in education service delivery	40	
2.2.3	Action 3: Improving the efficiency and equity in public spending on education	42	
Annex 1:	Basic education datasets	46	
Annex 2:	Key lessons from the Sobral experience in Brazil	47	
Annex 3:	: The Mississippi Miracle	49	
Referenc	ees	50	

#### LIST OF FIGURES

Figure 1: Weak GDP growth and declining GDP per capita	08
Figure 2: GDP has underperformed all other income groups since 2016	08
Figure 3: Financial services were the pillar of growth in recent quarters	09
Figure 4: Weak domestic demand hindered growth in 2024	09
Figure 5: Rail freight volumes have declined significantly	09
Figure 6: Unemployment remains elevated, with most job seekers unable to find work in over a year	10
Figure 7: South Africa has one of the lowest employment ratios in the world	11
Figure 8: Larger goods trade surplus kept the current account deficit contained in H1 2024	12
Figure 9: FDI flows to South Africa remain weak compared with other Emerging Markets	12
Figure 10: The persistently wide fiscal deficit and rising public debt over time	13
Figure 11: What drove the deterioration of fiscal deficit in recent years?	13
Figure 12: South Africa is on the wrong side of productivity growth, 2011-2022	18
Figure 13: The gap in labor productivity between South Africa and the world is widening in all sectors, 2001-2017	18
Figure 14: Contributing factors to productivity in South Africa	22
Figure 15: South Africa's HCI is low relative to its spending on education and health	22
Figure 16: Results from International Assessments by South Africa, 2000-23	27
Figure 17: Comparing the System Test Scores and School-based Assessment Scores, Western Cape, 2022	29
Figure 18: South Africa budgetary allocation to the education sector	30
Figure 19: Real spending on basic education has declined since 2019-20	30
Figure 20: On average, provinces allocate 41 percent of their budget to education, 2023-24	31
Figure 21: Variations in public spending per learner in Grades 1-12 across provinces	31
Figure 22: Provinces spend on average, almost 75 percent of their education budget on wages	32
Figure 23: South Africa's underperformance: Expected vs actual PIRLS 2021 Grade 4 scores	33
Figure 24: The differences in spending per learner are not always corrected by public funding, results for one province in 2021-22	35
Figure 25: Reforming the education system: from challenges to recommendations	37
Figure 26: Reading benchmarks in Nguni languages	39
LIST OF BOX FIGURES	
Figure B1: South Africa's debt dynamics are unfavorable	16
Figure B2: Without fiscal consolidation, there are significant risks of debt non-stabilization	16
Figure B3: Learning outcomes are the most unequal in South Africa	28
LIST OF TABLES	
Table 1: Baseline forecasts	14
LIST OF BOXES	
Box 1: Why is fiscal consolidation a priority for South Africa?	16
Box 2: Measuring inequalities in learning outcomes	28
Box 3: Explaining the Norms and Standards for School Funding (NSSF)	31
Box 4: How are wages negotiated in the education sector?	32
Box 5: US Charter Schools, Colombian Concession Schools, and UK Academies	41

### Acknowledgments





The South Africa Economic Updates aim to contribute to policy debates in South Africa and beyond by providing independent, rigorous, and timely analysis connecting South Africa with global developments while also helping benchmark the country against international trends. Its stakeholders include the government, academia, and the media, as well as international partners and the wider population interested in South Africa's economic development. Each edition of the Economic Update includes a section on recent economic developments and the country's outlook and a special focus section discussing an issue pertinent to its development trajectory. In this edition, the focus section analyzes the challenges faced by the education sector and discusses policy options to address them.

This economic update was prepared by a team led by Irineu Evangelista De Carvalho Filho (Senior Economist) and Jacques Morisset (Lead Economist and Program Leader). The team included Dumisani Ngwenya (Economist), who contributed to Part 1 of the report. The main authors for Part 2 of the report were Elizabeth Ninan Dulvy (Program Leader) and Luis Crouch (Senior Economist Emeritus, Research Triangle Institute), with inputs from Harry Patrinos (Chair in Education Policy at the University of Arkansas), Mamy Rakotomalala (Education Consultant), Alasdair Fraser (Education Consultant), Jesal Kika-Mistry (Education Consultant), Javier Baez (Lead Economist), Samira Towfighian (Senior Education Specialist), and Yevgeniya Savchenko (Senior Economist). The National Department of Basic Education, some provincial education departments, and representatives of the National Treasury provided invaluable feedback on Part 2 of the report. The report also benefited from feedback from Nic Spaull (Senior Program Officer, Gates Foundation), Martin Gustafsson (Researcher with the Department of Economics, Stellenbosch University and Advisor to the Department of Basic Education), Servaas van der Berg (Professor of Economics, Stellenbosch University and South African National Research Chair in the Economics of Social Policy), Mastoera Sadan (Chief Sector Expert: Social, Department of Planning, Monitoring and Evaluation, South Africa) Carol Nuga Deliwe (Director of Impact, Mastercard Foundation), and Carien Vorster (Regional Representative, Roger Federer Foundation). Lavinia Engelbrecht provided communication and dissemination support. Emeline Umeh provided administrative and logistical support.

We thank Pedro Miguel Gaspar Martins (Program Leader) and Toby Linden (Lead Economist) who were the peer reviewers.

The report was prepared under the overall guidance and supervision of Satu Kahkonen (Country Director), Hassan Zaman (Regional Director for Prosperity), Daniel Dulitzky (Regional Director for People), Marco Hernandez (Practice Manager for Economic Policy), and Meskerem Mulatu (Practice Manager for Education).

The report was edited by Lucy Victoria Davis. Aashna Ameen provided the cover illustration. Typesetting and design by Emma Fae Visser.

# Lists of acronyms



ALMP Active La	bor Market Program
----------------	--------------------

ANA	Annual	National	Assessment

CSG Child Support Grant

DBE Department of Basic Education

ECD Early Childhood Development

ECE Early Childhood Education

**EGRA** Early Grade Reading Assessments

**EGR** Early Grade Reading

FDI Foreign Direct Investment

**GDP** Gross Domestic Product

HCI Human Capital Index

ILO International Labor Organization

ITE Initial Teacher Education

**NAEP** National Assessment of Education Performance

**NSSF** Norms and Standards for School Funding

**OECD** The Organization for Economic Cooperation and Development

**PEDs** Provincial Education Departments

Progress in International Reading Literacy Study **PIRLS** 

PPP Public-Private Partnerships

**PSET** Post-Secondary Education and Training

Quality Management System QMS

**RMB** Rand Merchant Bank

**SARB** South African Reserve Bank

SASE South African Systemic Evaluation

SBA School-based Assessment

SGB School Governing Body

SOE State-Owned Enterprise

SOP School Operating Partner

**TIMSS** Trends in International Mathematics and Science Study

**TPS** Teacher Professional Standards

**UMIC** Upper-Middle-Income Countries

WDI World Development Indicators

# **OVERVIEW**

In tomorrow's world, the winners will inevitably be those who possess the knowledge to innovate and adapt to increasingly rapid technological advancements. In contrast, those who lack this knowledge will fall behind.

There is consensus among policymakers that a wellfunctioning education system is essential for developing the next generation's skills from an early age. However, South Africa is currently facing a severe learning crisis, as its education outcomes are too low compared to the country's level of development and the resources invested in this sector by the state. This report seeks to address the question of how to transform the education system into a driver of inclusive growth.

This report is divided into two parts. The first assesses the state of the South African economy, analyzing the latest developments and sharing the short to mediumterm outlook and risks, including a set of policy actions for faster and more inclusive growth. The second part discusses how the country can improve its human capital through a comprehensive reform of its basic education system.

#### The state of the economy

In 2024, South Africa's economy continued to advance on a slow and weak inclusive growth trajectory and recorded its highest fiscal deficit in recent history (except for 2020).

Despite a wave of optimism from the successful political transition in June 2024 and the absence of load shedding since March, the real economy is still on a slow path to recovery. Good news came from the financial sector (with the gradual decline in the inflation and interest rates) and, to a lesser extent, from the external sector (with a slight increase in the level of international reserves) but the government's accounts continued to deteriorate. Nonetheless, GDP only grew by an estimated 0.8 percent in 2024, which is slightly better than in 2023 but significantly lower than the average GDP growth rate of 4.1 percent estimated by the World Bank for middle-income countries.

In this context, many social indicators remain broadly unchanged: about two-thirds of the population continue to live under \$6.85 per day, and 40-50 percent of the country's wealth remains in the hands of the richest 1 percent of the population. In the absence of robust economic growth, job creation would remain insufficient to absorb new entrants to the labor market, with the unemployment rate higher than 30 percent and about two out of three young workers unable to find a (productive) job.



Ensuring fiscal sustainability remains a top priority. In 2024, the overall fiscal deficit reached 6 percent of GDP, marking its highest level since 2009, excluding the COVID-19 crisis in 2020. While public revenues were slightly lower than anticipated due to slower economic growth, expenditures rose too fast as the result of higher public debt service payments and large transfers to state-owned enterprises (SOEs) (especially Eskom). Consequently, the government borrowed to finance this gap, including over \$3 billion on the Eurobond market, leading to an increase in the public debt level to 74.9 percent of GDP at the end of 2024, up from 67.6 percent in 2021 and 28.3 percent in 2009.

Over the next three to five years, economic growth is forecasted to gradually converge towards 2 percent, while the government will have to rebuild fiscal space to avoid a debt crisis.

Economic growth is projected to gradually improve and converge towards 2 percent in the next three to five years, which would be almost three times higher than the average GDP growth reported between 2014 and 2024. Such recovery, albeit modest, will be driven by improved infrastructure services and a relatively favorable external environment. During this period, inflation is expected to remain under control, allowing a further easing of monetary policy that will encourage banks' credits to businesses and households and, thus, stimulate economic growth.

To achieve a sustainable public debt trajectory, the authorities will need to reduce the fiscal deficit from 6 percent to 4.6 percent of GDP by 2027. Achieving this goal will require reforms, as debt-service payments are projected to increase rapidly, influenced by the existing public debt profile. The focus would be on reducing the wage bill and transfers to state-owned enterprises and sub-national governments while preserving capital and social expenditures.

The risks to the above scenario are not marginal. Externally, South Africa is vulnerable to a decline in demand for its key export commodities (mining and agriculture), a global trade war, and increased geopolitical instability. As experienced in recent years, the country is also exposed to climate risks such as droughts and floods. However, the main risks are domestic, beginning with a fragile political coalition, high crime and insecurity, and persistent social tensions. The fiscal consolidation process may also face resistance from labor unions (requesting higher public wage adjustments), SOEs (Transnet's financial troubles), and some subnational governments that are already or close to financial distress.

To enhance growth and improve equity, South Africa could remove existing infrastructure constraints on businesses and households, improve the efficiency of public spending, and enhance human capital development.

Growing at a rate of about 2 percent per year is unlikely to fully satisfy South Africa's policymakers and citizens. At this pace, the average income per capita will barely increase by 1.1 percent per year. This means it could take almost 65 years for the country to become a high-income economy. Additionally, social indicators such as poverty and unemployment are unlikely to improve as job opportunities for low-income families will continue to be limited.

South African policymakers could consider three mutually reinforcing actions to achieve faster and more inclusive growth:

- 1. Addressing the infrastructure constraints in energy and transport. These constraints, peaking in 2023, are estimated to have cost the economy 3-5 percentage points of GDP growth, disproportionately affecting small businesses and low-income households. The authorities have responded to this crisis by adopting a series of reforms, especially in power generation, that have already produced positive results with the emergence of privately sponsored renewable energy projects. At this stage, it is important to continue this effort by extending these reforms to transmission and distribution in the energy, railway, and port sectors. The World Bank estimates that the implementation of these reforms, though their positive impact on firms' production and distribution costs and households' disposable income, could lead to an increase in GDP growth of 1 percent in the short term and 3 percent in the medium-term, translating into 200,000 to 500,000 additional jobs.
- 2. Enhancing efficiency in public spending. Due to the fiscal consolidation process required in the next few years, the government will have to be smart about spending. Building on South Africa's recent experience and international evidence, efficiency gains can be achieved by the combination of (i) partnerships with the private sector; (ii) implementation of cross-cutting reform across the state (digitalization, procurement, and recruitment processes); and (iii) a series of targeted interventions such as coordinating and consolidating existing programs (e.g., active labor programs), increasing the value for money of social grants, improving the management of strategic investment projects, and simplifying administrative procedures (including business registration and licensing).

3. Strengthening human capital development. Human capital plays a pivotal role by directly impacting on the productive ability of the economy, but also indirectly by enhancing the contribution of other factors such as the adoption of recent technologies. An improvement in human capital would also favor equity as it encourages the use of labor in production processes, which is the most direct way to reduce poverty on a sustainable basis. Yet, South Africa has been an underperformer compared to other upper-middle economies and relative to the public resources allocated to the education and health sectors. This assessment highlights the urgency for decisive improvements in South Africa's human capital, particularly through reforming the system of basic education.

#### The overdue reform and emerging priorities in the basic education sector

Despite improving access to quality basic education for two decades, South Africa continues to face a multidimensional learning crisis.

For two decades following the end of apartheid, South Africa succeeded in increasing access to basic education for almost all children and started to correct some of the deeply entrenched inequalities from the apartheid era. By 2000, gross enrollment ratios averaged over 100 percent for primary schooling and over 70 percent for secondary schooling, with girls' participation rate being one of the highest on the continent. The country also made excellent progress in learning, with consistent improvements in math, reading, and science scores. Although starting from a low level, these scores were getting closer to the 'low' international benchmarks on learning set for OECD (Organization for Economic Cooperation and Development) countries.

Despite impressive improvements in learning levels up to 2016, South Africa is facing a learning crisis alongside financing constraints and issues with the limited efficiency and equity of public education spending.

• The learning crisis. Progress in learning began to stall around 2016, and it deteriorated further with the COVID-19 pandemic-related school closures. For example, the percentage of Grade 4 learners who could not properly understand what they were reading increased from 78 to 81 percent between 2016 and 2021. Inequalities in learning by income, race, and gender persisted, with learners in the wealthiest 10 percent of schools being 10 times more likely to be able to read than those in the poorest 70 percent of schools. Beyond income

inequality, differences in learning outcomes are also associated with the variation in teaching and learning inputs and processes in the classroom, which means schools could be targeted based on both income and learning performance.

- The increasing financing constraint faced by the sector. Traditionally, South Africa's government spends about 4.3 percent of GDP on basic education, which is higher than what most upper-middleincome countries (UMICs) spend but lower than UMICs which have high levels of inequality. The current financing model is under threat due to the reduced fiscal space faced by the central government and competing priorities for public spending. Total spending in basic education declined in real terms from R338 billion to R323 billion in the last five years. Many provinces are left to either cut teaching posts or reduce spending on the agreed per-learning allocation as per the Norms and Standards for School Funding (NSSF). Meanwhile, there is pressure for the education system to continue to expand to accommodate an additional 1.2 million learners by 2030, which would require an additional 20,000 classrooms and the hiring of 25,000 new teachers.
- · Limited efficiency and effectiveness of public spending in education. The wage bill accounts for more than 75 percent of public expenditure in this sector. Regarding teachers delivering quality services, the Department of Basic Education (DBE), in its Annual Performance Plan 2016-17, identified 'poor teaching, leadership and lack of accountability' and 'no consequences for poor performance and wrongdoing' as major challenges. An additional source of inefficiency is the poorly managed school infrastructure development program. Beyond inefficiencies found in spending categories, the quality of education expenditures is also negatively affected by: (i) a large number of uncoordinated programs that are hard to manage over time; (ii) the limited utilization of existing data to inform planning and decision-making processes; and (iii) the weaknesses in the spending redistribution mechanisms used by the government to improve equity across learners.

While the learning crisis is already impacting the economy, the costs to individuals and society are expected to increase exponentially over time unless bold actions are taken.

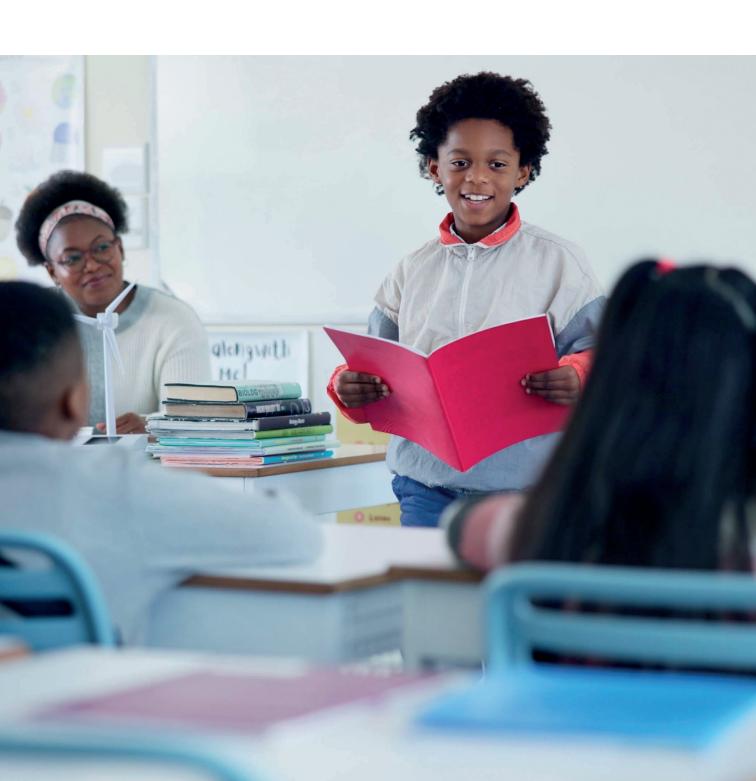
To contribute to policy discussions on how to address the current learning crisis in South Africa, this report proposes three mutually reinforcing solutions.

Although not exhaustive, they represent a platform that can be used by the government to obtain shortterm results, build momentum for deeper reforms, and instill changes in the mindset of involved stakeholders that are needed to make the education system an effective instrument for economic transformation and jobs.

- 1. The government could start by making a more concerted effort to improve the foundations of learning - i.e., the early years of a learner's life. Education- and learning levels, in particular- are cumulative and are subject to strong longitudinal effects. It is next to impossible for children to learn algebra or read a history text in Grade 9 if they have weak math skills starting in Grades 2 or 3 or are very slow readers starting in Grades 1 or 2. The authorities could focus their efforts on: (i) improving the pedagogical offering with a coordinated intervention consisting of structured (and at least partially scripted) daily lesson plans, appropriate and high-quality educational materials, and oneon-one instructional coaching to help teachers transform their instructional practices; (ii) measuring learning against benchmarks that can be understood by most stakeholders using assessments such as the Early Grade Reading Assessments (EGRA), including in local languages; and (iii) improving access to quality Early Childhood Development (ECD) services so children, particularly those who are disadvantaged, enter Grade 1 ready to learn.
- 2. South Africa could leverage the private sector to help expand the quality and coverage of its education system, because, as explained earlier, it will be hard for the public sector to do this alone. Internationally, South Africa is an outlier as only 5.5 percent of all its pre-tertiary learners are enrolled in private schools compared to 19 and 27 percent, respectively, for primary and secondary levels worldwide. Some provinces have recently piloted partnerships with the private sector to serve learners from poor communities, and many of these partnerships have delivered encouraging results. Building on this record of accomplishment, the government could scale up these initiatives with the private sector, including Non-Governmental Organizations, to expand the network of schools and improve learning performance at minimum cost. The authorities would need to closely monitor these partnership schools by designing results indicators that cannot be manipulated while providing a platform for payments to be tied to the achievement of results and regular auditing.

3. There is an urgent need for meaningful efficiency gains in public spending on education. This can be done by revisiting teachers' performance in the classroom with the adoption of Teacher Professional Standards (TPS), which have proved to be central in the effort to strengthen teachers' accountability in several countries. In addition, the school infrastructure development program needs to be closely examined to assess the cost-effectiveness of current school construction models. Substantial efficiency gains can also be obtained by scaling up successful programs and dropping others- using evidence from programs more effectively to avoid political interference in the selection process.

Lastly, the authorities could act by improving the allocation of resources toward schools that serve lower-income learners who also perform poorly on learning. Resources could be used to improve foundational learning through better teaching and learning practices in the classroom, and provinces can gradually be incentivized to deliver better services using conditional grants that reward the schools making the greatest effort to assist learners who have poor learning outcomes and are attending schools serving lower-income families.





# PART 1: The state of the economy

South Africa's economic performance remained modest in 2024, but the successful political transition that followed the national elections in May 2024 has brought a new sense of optimism. This positive sentiment has been reinforced by the suspension of national load shedding since March 2024 and the sharp reduction in inflation, which fell to 2.9 percent in November 2024. The short-and medium-term outlook has improved, and the GDP growth rate is projected to converge toward 2 percent even though several external and domestic risks could affect this trajectory. Two main forces will continue to shape the future of the South African economy: the government's ability, first, to unlock economic growth through long-delayed structural reforms, and second, to manage the fiscal consolidation process that is required to stabilize public debt. Over the longer term, South Africa could address its human capital gap with greater determination if the country wants to achieve faster and more inclusive economic growth.

#### 1.1 RECENT DEVELOPMENTS

#### 1.1.1 Domestic conditions gradually improved during 2024, but GDP growth remains subdued

Following a short rebound after the COVID-19 crisis, South Africa returned to its low growth trajectory in the past two years. The economy grew by an estimated 0.8 percent in 2024, which is only slightly better than in 2023 (Figure 1). Such performance was also modest compared to other middle-income economies and most regions in the world (Figure 2). In 2024, low dynamism affected all domestic sectors except for a few modern services (finance, real estate, and business services). However, agriculture suffered the most, with an estimated contraction of 16 percent, as adverse weather conditions affected crop output (Figure 3). Although agriculture accounts for only 2 percent of GDP, its poor performance hindered the country's overall economic recovery since the nonagricultural GDP growth is estimated at around 1.1 percent in 2024. On the demand side, both household consumption and (net) exports positively contributed to growth, but domestic investment contracted by about 3 percent between 2023 and 2024 (Figure 4).

South Africa's financial markets reacted positively to the successful political transition in June and the elimination of load shedding since March. The Rand appreciated by 10 percent between end-May and end-September 2024, and the stock market value increased by 12.8 percent over the same period. In early November, one rating agency, Standard & Poor's, upgraded the country's credit rating outlook from stable to positive.

Figure 1: Weak GDP growth led to declining GDP per capita

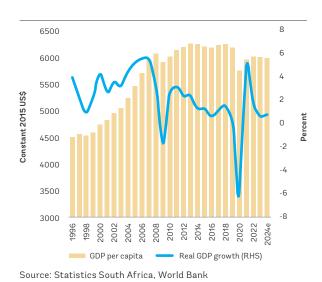


Figure 2: GDP has underperformed all other income groups since 2016

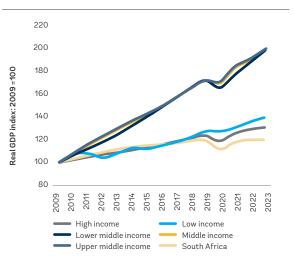
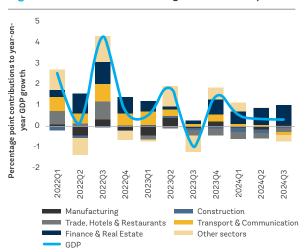
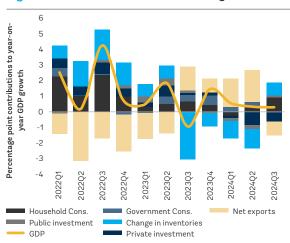


Figure 3: Financial services drove growth in recent quarters



Source: Statistics South Africa

Figure 4: Weak domestic demand hindered growth in 2024

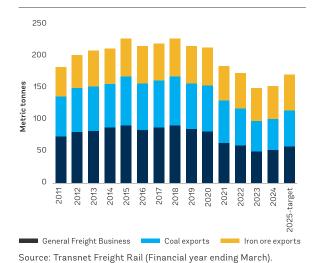


Source: Statistics South Africa

The differentiated response between the real and financial sectors to improved domestic conditions could be explained by the prudence of businesses and consumers, who are likely to wait for the confirmation of the good news before changing their behaviors. Furthermore, even if they act fast, results will take some time before becoming visible on the ground. For this reason, the Rand Merchant Bank (RMB)/Bureau for Economic Research business confidence index has only increased gradually in recent months. This index was up 45 points in Q4 2024 for the third consecutive time, suggesting that the impact on the real economy might be bigger next year.

One additional reason for the slow response of the real sector is that structural impediments continued to constrain economic growth in 2024. These impediments include a malfunctioning transport and logistics sector, a pressing need to bring the fiscal position to a sustainable trajectory, a poor track record at generating good jobs and reducing economic inequality, and significant vulnerabilities to climate change. There is no need to detail all these constraints as they have been well explained in many recent studies.<sup>2</sup> Domestic stakeholders, including the government, agree that deliberate policy actions are needed to minimize constraints on the private sector and, by so doing, dynamize the economy.

Figure 5: Rail freight volumes have declined significantly



Lastly, the weak global environment constrained the real economic growth of the South Africa's external sector. The close relationship between external conditions and South Africa's economic performance has been established in several studies.3 The higher the prices of mining and agriculture commodities, the greater the country's export revenues, with these two categories of exports accounting for about two-thirds of total exports and their higher contribution to GDP growth. In 2024, commodity prices were largely flat (even in decline), with the notable exception of gold and silver. Furthermore, the country's export capacity continued to be restricted by major deficiencies in the freight transport networks, perhaps less than in 2023, but which are still visible (Figure 5). As an indicator, the volume of freight on the railway networks was about 33 percent lower last year than in 2018.

The uncertainty about the permanence of a benign electricity supply discourages new investment in energy-intensive industries, such as manufacturing, mining, and construction

A good summary of these constraints can be found in: The World Bank (2024) and R. Hausmann et al. (2023).

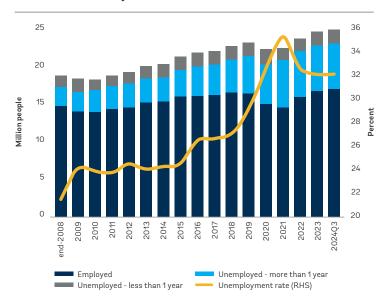
Hausmann et al. (2022).

#### 1.1.2 Poverty remains prevalent due to limited job creation

As of mid-2024, approximately 37 million South Africans, or 62 percent of the population, still live on less than \$6.85 per day. This is 3 million more poor people than in 2000. It is also much higher than the poverty rate observed in other upper-middle-income countries such as Brazil (22 percent) or Thailand (11 percent). Another indicator of social distress is the fall in South Africa's real income per person, which today is about \$200 lower than it was in 2014 (Figure 1), while about half of the county's wealth remains concentrated in the hands of 1 percent of the population. Those statistics highlight that South Africa's economic model, despite the use of generous and widespread grants by the government, has failed, at least during the last decade, to generate inclusive growth and address all the inequalities that were inherited from the apartheid regime.

The rise in poverty is due to a combination of demographic, geographic, and economic factors. Demographically, the population growth of low-income groups has been faster than that of the rich (about 2.5 times faster between 1996 and 2022). Geographically, these groups are further hindered by urban spatial divides that impede income mobility. The density of South African cities is not only extremely low, at about half the level seen in cities in Latin America, but the public transport system remains deficient, complicating the movement of people, goods, and services for the large population living in townships and isolated areas.4

Figure 6: Unemployment remains elevated, with most job seekers unable to find work in over a year



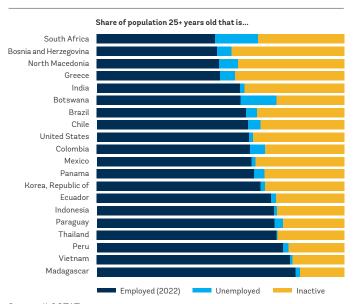
Source: Statistics South Africa, World Bank

The primary explanation for South Africa's poverty trap is its persistently low economic growth. 5 Flat economic growth results in low labor demand, preventing the economy from absorbing the increasing labor force. Between the end of 2019 and September 2024, only 526 thousand jobs were created, compared to 1.8 million entries in the labor force during this period. As a result, South Africa's unemployment rate jumped from about 29 to 33 percent between 2019 and 2024 (Figure 6) and up to 41 percent when discouraged workers were included. Youth remain particularly vulnerable. The unemployment rate of 15 to 24-year-olds stood at 60.2 percent in Q3 2024. What's more, South Africa has one of the lowest employment ratios in the world (Figure 7).

<sup>4</sup> For a fuller analysis, see the third policy note of World Bank (2024).

<sup>5</sup> See, for example, M. Leibbrandt et al. (2010).

Figure 7: South Africa has one of the lowest employment ratios in the world



The weak link between economic growth and job creation is illustrated by the low elasticity of employment: for one percentage point of additional GDP growth, employment is estimated to increase by only 0.17 percent in South Africa against, for example, 0.29 percent in Malaysia. Many activities such as mining, big farming, and energy production require only a limited number of workers in their processes and, when they do, hiring is discouraged by South Africa's relatively high unit labor cost which is twice as high as in China and the highest among Sub-Saharan African countries. In addition, many poor workers can't find jobs due to several constraints on the supply side of the labor market, including low skills, high transport costs, and excessive regulations that reduce their mobility.

Source: ILOSTAT

The interconnection between rapid growth and the development of labor-intensive activities (manufacturing and modern services) is vital for South Africa's inclusive growth and job creation goals. Thanks to this channel, Malaysia was able to create several millions of jobs and reduce its poverty rate by 35 percentage points over the past two decades. That could be a useful source of inspiration for South African policymakers.

#### 1.1.3 Lower inflation allowed for more accommodating monetary policy

Until a few months ago, like most countries in the world, the South African Reserve Bank (SARB) followed a tight monetary policy to curb inflation, but this stance was recently adjusted. In line with the gradual decline in the headline inflation rate (down to 2.9 percent in November 2024 from 7.8 percent in July 2022) and easing inflation expectations, the SARB started to reduce its policy rate in September. This reduction could help revitalize credit growth, which contracted by 0.4 percent in real terms during the first eleven months of 2024.

Commercial banks currently maintain strong capital and liquidity buffers. As of October 2024, the system-wide capital adequacy ratio was 17.2 percent, well above the regulatory minimum of 10.5 percent. As of October 2024, non-performing loans remained at a moderate level of 5.3 percent in the banks' portfolios even though they were at historical highs in some asset classes. South Africa has remediated most deficiencies in money laundering and its framework for combating the financing of terrorism. As a result, it is likely to be removed soon from the grey list established by the Financial Action Task Force in February 2023.

High labor costs are not compensated by higher productivity. The average productivity of the South African worker was only \$18 per hour-worked against \$25 in Malaysia and significantly distant from OECD countries in 2019.

The decline in inflation has been widespread, except for "electricity and other fuels", hot beverages, and medical insurance, which still have annual inflation in the double digits. Despite the significant price increase for electricity, core inflation (which excludes food, non-alcoholic beverages, fuel, and energy) reached 3.7 percent in November 2024, exceeding the headline inflation rate. Food inflation was lower at 2.3 percent, from a peak of 14 percent in March 2023.

#### 1.1.4 South Africa's external balance is stable but vulnerable to volatile commodity prices and short-term capital flows

South Africa's external position remained broadly stable in 2024 as the modest current account deficit of about 1.2 percent of GDP was financed by capital inflows. The level of international reserves reached about \$65.9 billion as of November 2024, slightly up compared to a year ago and equivalent to more than six months of imports. This increase is mainly the result of revaluation gains from higher gold prices and proceeds from Eurobond issuance. While the goods trade balance remains in surplus (Figure 8), the country reports a trade deficit in services. Foreign Direct Investment (FDI) inflows, at about 1 percent of GDP in 2024, remain modest and lower than in recent years, lower than the levels observed in other large emerging markets such as Indonesia, Brazil, and Mexico (Figure 9).

While strong and supported by a flexible exchange to ease any adjustment, South Africa's external position remains exposed to variations in the terms of trade and the volatility of short-term capital flows. The trade balance is largely dependent on the international prices of mineral and agricultural commodities.<sup>8</sup> After reaching a historical high in Q2 2021, South Africa's terms of trade suffered a sharp drop by 16.5 percentage points by the end of 2023. In H1 2024, higher gold prices led to a small recovery in terms of trade. The country's capital balance is exposed to variations in short-term capital inflows that are highly sensitive to economic and political factors. The share of non-resident ownership of domestic government bonds declined from 43 percent in early 2018 to 24.2 percent in November 2024. This decline reflects persistently weak GDP growth, a deteriorated fiscal situation, and the loss of investment grade rating in 2020. There is some evidence of increased portfolio inflows in recent months, partly due to the perceived improvements in the political context and economic prospects.

Figure 8: Larger goods trade surplus kept the current account deficit contained in H1 2024

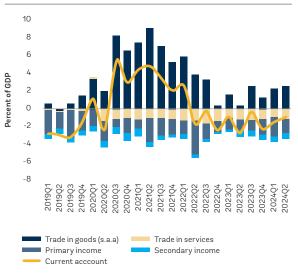
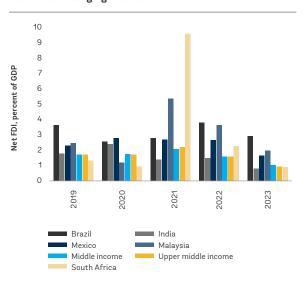


Figure 9: FDI flows to South Africa remain weak compared with other Emerging Markets



Source: South African Reserve Bank, World Bank

Source: WDI

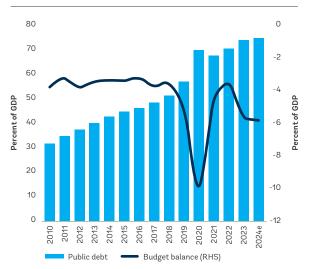
#### 1.1.5 The fiscal deficit rose to a new level leading to higher public debt

South Africa has a long tradition of sound fiscal policy, and for many years, its economic program has focused on controlling the government's deficit and borrowing. Yet, the overall fiscal deficit is estimated to reach about 6 percent of GDP in 2024, which is the highest imbalance in recent history except for COVID-19-induced deterioration in 2020 (Figure 10). The level of public debt is estimated at 74.9 percent of GDP by the end of FY 2024, up from 67.6 percent in FY 2021 and 28.3 percent in FY 2009. In 2024, authorities drew roughly 1.1 percent of GDP from the Gold and Foreign Exchange Contingency Reserve Account to reduce borrowing. The bulk of the fiscal deficit is being financed through net borrowing from domestic and international markets, including the issuance of \$3.5 billion in Eurobonds in November 2024.

To illustrate this sensitive situation, the country reported a goods trade surplus of R103 billion in 2023 compared to surpluses of R222 billion in 2022 and R450 billion in 2021.

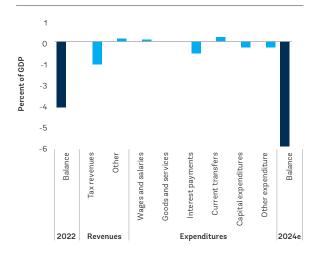
This deterioration of the government's accounts over the last two years is the result of lower-than-expected revenue, higher debt service payments, a slight increase in capital expenditures, and the debt relief provided to Eskom (Figure 11). First, slower domestic and international market rebounds resulted in lower-than-expected income and trade tax revenue. Second, the debt service payments have continued to increase rapidly, amounting to 5.2 percent of GDP, almost 20 percent of total revenue in 2024. This has been the fastest-rising expenditure category, increasing by 13.5 percent annually on average against 7.2 percent for non-interest current expenditure and 3.7 percent for capital spending over the last 10 years. Such an increase reflects the need for larger loans, higher interest rates on international markets, and a rise in the country's risk premium in recent years.9 Third, the level of public investment increased from 2.2 to 2.5 percent of GDP over 2022 and 2024, partly in response to the current infrastructure crisis. even though it continues to be low by international standards. Lastly, the government provided Eskom with an R254 billion debt relief deal spanning over 2023-2026 at an average fiscal cost of 1.1 percent of GDP per year.

Figure 10: The persistently wide fiscal deficit and rising public debt over time



Source: National Treasury, World Bank

Figure 11: What drove the deterioration of fiscal deficit in recent years



Source: National Treasury, World Bank

The deterioration of the government's accounts is happening in a context where the central authorities are facing increasing challenges. A significant portion of the budget comprises inflexible public spending categories such as the wage bill (31 percent), social protection spending (12 percent), and transfers to subnational governments and SOEs (16 percent). These rigidities are well recognized even if the government is attempting to control these categories of spending through several initiatives such as a voluntary retirement program for public servants, a lower real value of grants distributed to individuals, and a reduction of transfers to non-performing subnational governments.<sup>10</sup> These efforts might help in the short term but, increasingly, the view is that the role of the state might have to be revisited in South Africa.

The fragile context demands urgent attention to improve the performance of key SOEs. The SOEs operating in energy (Eskom) and transport (Transnet) have not only been unable to provide quality services to citizens in recent years, but they are also in financial distress and face several governance challenges. As of March 2024, contingent liabilities for all SOEs reached 7.1 percent of GDP. Over the past decade, the central government was forced to rescue the energy national utility (Eskom) several times, including through the three-year conditional plan agreed upon in 2023 that has significantly contributed to widening the fiscal gap in 2024 (and will continue to do so until the end of this program in 2026). Looking ahead, as discussed in the next section, the central authorities may have to urgently address two looming financial crises: (i) the accumulation of debt by municipalities with Eskom (close to \$5 billion as of the end of 2024) and (ii) the financing gap in Transnet that may require central government's assistance beyond the company's internal plans.

The 10-year bond rate averaged 10.29 percent in 2023, up from 10.10 percent in 2022 and 9.11 percent in 2021, but has eased from recent highs, averaging 9.76 percent in 2024

The situation of local finance is of concern with 66 percent of municipalities assessed in financial distress in June 2022, up from 26 percent a decade ago.

#### **OUTLOOK AND RISKS**

#### 1.2.1 Improved growth prospects and fiscal consolidation

In an ideal scenario, the South African economy could grow by 5 to 6 percent per year, which would be close to the potential output measured by the World Bank in its long-term growth model. Such growth rates were similarly achieved by successful countries, especially in East Asia. However, such a performance was only accomplished by South Africa during a brief period from 2005 to 2007 when the economy benefited from an exceptionally favorable external environment. Such a growth rate would be currently difficult to replicate in the short term given the magnitude of the structural constraints that continue to impede the development of the private sector and the need for fiscal consolidation.

For all these reasons, if the prospects for growth are better than in the recent past, the baseline scenario is that GDP is expected to rise by 1.8 percent in 2025, gradually reaching 2 percent by 2027 (Table 1). Such a trajectory is based on the continued political stability and sustained progress in providing power and freight transport services, building on the structural reforms currently implemented by the government in these two sectors. It also assumes that several reforms, under the responsibility of Operation Vulindlela, will help boost the capacity of local governments to deliver better social and infrastructure services to firms and households, including in large urban agglomerations. South Africa is also expected to benefit from a slightly more benign external scenario, as global disinflation and monetary easing in advanced economies will allow for the alleviation of inflationary pressures and a more accommodating monetary policy. The World Bank global team projects that the prices of key mineral and agricultural commodities exported by South Africa will move upward slightly or level out in the short to medium-term.

Socioeconomic indicators, such as poverty and unemployment rates, are not expected to improve significantly in this scenario as the expansion of the economy will not be sufficient to generate a surge in employment. As previously mentioned, a 1 percent increase in GDP growth is expected to generate only 30,000 to 50,000 jobs due to the low employment elasticity to GDP growth in South Africa. The poverty and unemployment rates are therefore projected to remain high, above 60 and 30 percent, respectively, throughout the projection period.

Table 1: Baseline forecasts (Annual percent change unless indicated otherwise)

	2021	2022	2023	2024 e	2025 f	2026 f	2027 f
Real GDP growth, at constant market prices	5.0	1.9	0.7	0.8	1.8	1.9	2.0
Private Consumption	6.2	2.5	0.7	0.9	2.1	1.9	1.9
Government Consumption	0.6	0.6	1.9	0.8	0.0	0.4	1.2
Gross Fixed Capital Formation	-0.4	4.8	3.9	-3.7	5.1	4.9	4.5
Exports, Goods and Services	9.7	6.8	3.7	-2.9	4.7	3.7	3.2
Imports, Goods and Services	9.6	15.0	3.9	-6.1	5.8	4.3	3.4
Real GDP growth, at constant factor prices	4.7	1.9	0.7	0.8	1.8	1.9	2.0
Agriculture	5.6	2.0	-4.8	-16.0	12.7	3.5	2.0
Industry	6.5	-2.6	-0.4	0.1	2.3	2.4	2.1
Services	4.0	3.4	1.2	1.7	1.3	1.7	2.0
Inflation (Consumer Price Index)	4.5	6.9	6.0	4.4	4.2	4.5	4.5
Current Account Balance (% of GDP)	3.7	-0.5	-1.6	-1.2	-2.1	-2.2	-2.3
Fiscal Balance (% of GDP)	-4.6	-3.6	-5.5	-6.0	-5.9	-4.7	-4.6
Primary Balance (% of GDP)	-0.4	0.9	-0.5	-0.7	-0.6	0.6	0.8
Debt (% of GDP)	67.6	70.5	74.1	74.9	76.9	78.0	78.3

Source: National Treasury, World Bank. Notes: e = estimate, f = forecast.

Monetary policy is expected to gradually ease due to the recent easing by the U.S. Federal Reserve and the favorable inflation outlook. The SARB is likely to continue loosening its monetary stance as inflation expectations remain in the center of its inflation target range of 3 to 6 percent. The pace of easing is dependent on domestic inflation outcomes, the behaviors of central banks in advanced and emerging economies, and the trajectories of the exchange rate and import prices. Projections assume that additional shocks to imported prices, or the local currency remain limited, including the pass-through of higher global food and energy prices to domestic prices.

South Africa is expected to have moderate and sustainable current account deficits in the next few years, and external stability should remain sound. The overall outlook for the commodity market is generally favorable for South Africa, with substantial decreases in the price of imported energy and smaller decreases in the price of exported minerals. Nonetheless, slower-than-anticipated global growth could further contribute to weaker commodity prices. The current account deficit is projected to average 2.2 percent of GDP over 2025-2026 as demand for merchandise imports recovers due to greater confidence by businesses and households. This deficit is likely to be financed with ease by net short-term capital inflows, which could recover in such a benign scenario of more rapid growth and fiscal adjustment. Moreover, the opening of the energy and freight transport sectors to the private sector is expected to boost investment, including through FDI.

Over the next few years, the government is projected to consolidate its fiscal position to ensure a sustainable debt trajectory over time (Box 1). In line with the message conveyed by the National Treasury in recent Budget Speeches, the primary fiscal is projected to improve from a deficit of 0.6 percent of GDP in 2024 to a surplus of 0.6 percent of GDP in 2026 and 0.8 percent of GDP in 2027. Such adjustment will reduce the government's borrowing requirements and help stabilize the public debt that is projected to peak at 78.3 percent in 2027-28 and decline thereafter.

Consolidation efforts will focus primarily on expenditures, as South Africa's relatively high tax collection does not provide much room for revenue improvements in the short term. The turnaround in the primary fiscal balance will largely result from ending the Eskom debt relief package in 2026 (about 1 percent of GDP), but it will also require adjustments in the wage bill and other categories of current spending, such as transfers to SOEs, local governments, and individuals. The authorities aim to control the public wage bill through a voluntary retirement plan and reduced salary increases. The introduction of outcome-based transfers could help monitor the performance of decentralized institutions and cut the funding of poor performers. The government is committed to those adjustments while protecting capital investment and critical services to the poor, although changing the composition of public expenditures in the next few years may prove challenging due to existing rigidities. As discussed in the next section, the fiscal consolidation effort will need to be accompanied by significant improvements in the efficiency of public spending to minimize the negative impact on economic growth and the delivery of public services, especially to the poor.

#### Box 1: Why is fiscal consolidation a priority for South Africa?

At the time when the country faces so many deficits in social and infrastructure services, it might not be obvious why, over the next few years, South Africa will need to adjust its fiscal accounts. After all, the country reports a level of public debt (about 75 percent of GDP), which is much lower than in many OECD countries. However, like an individual, a country would only benefit from borrowing if (i) the expected returns are higher than the costs, and (ii) it is capable of paying the service of the debt over time. Unfortunately, South Africa's government does not collectively meet these two conditions anymore.

With regards to the first condition, the rate of return associated with borrowing (proxied by the expected long-term economic growth) has been systematically lower than the implicit interest paid since the late 2000s (Figure B1). For example, during 2024, the real cost of issuing a 10-year bond in local currency was on average about 5.5 percent, which is about 8 times higher than the current GDP growth rate. To put it simply, unless the GDP growth rate increase significantly in the future, the costs of borrowing will need to be supported by future generations of South Africans - a good reason to reduce the fiscal deficit.

The second condition is that the country should be able to pay its annual debt-service payment. A rule of thumb is that interest payments should not be higher than 25 percent of total public revenues. In South Africa, the debt service was already absorbing nearly one-fifth of fiscal revenues in 2023, crowding out other development expenditures. Because of the government's debt profile, with a significant share of the debt maturing in the next 2-3 years, debt service is expected to reach about 20 percent of total public revenue by 2026.

If South Africa does not pursue a fiscal consolidation, its debt will continue to increase and explode in the next decade (Figure B2). Such projection will be anticipated by the markets, making future borrowing even more expensive. The risk is that the government may not be able to meet its debt service obligations and default on its debt. Such a default could lead to severe consequences, as seen in other countries like Belarus, Lebanon, Ghana, Sri Lanka, Zambia, Argentina, Ecuador, Suriname, and Ukraine since 2020.

Figure B1: South Africa's debt dynamics are unfavorable

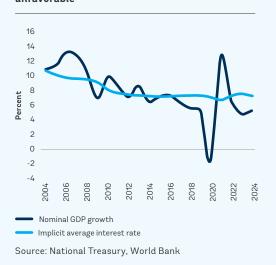
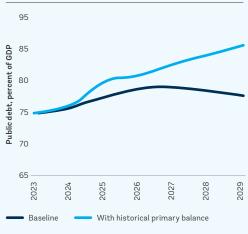


Figure B2: Without fiscal consolidation, there are significant risks of debt non-stabilization



Source: National Treasury, World Bank

#### 1.2.2 Uncertainties in the global economy cannot be ignored, but the main risks are domestic

The global economy is under tension stemming from the possible escalation of regional conflicts, global financial vulnerabilities that may trigger surges of global risk aversion, and increased geopolitical fragmentation that may disrupt global trade. Notably, the escalation of global conflict may lead to disruptions to oil and gas production and sharp energy price increases. Political instability in Africa has already disrupted trade. More frequent and severe natural disasters would also present risks for the global outlook. All these risks could significantly affect South Africa, but two merit particular attention:

- Trade-and capital flow-related risks: South Africa is especially exposed to a sudden reversal in portfolio investment flows caused by an increase in global interest rates or a deterioration of the country's risk, which could weigh on the interest payment bill and further crowd out non-interest spending. South Africa's risk premium remains elevated compared to most other emerging markets in 2024, and yields on bonds with long maturities have increased, disincentivizing the issuance of long-maturity debt. Surprise increases in global energy prices could be passed through to domestic inflation, complicating monetary policy in the context of weak demand and growth.
- Climate risks: South Africa is vulnerable to more frequent climate shocks as demonstrated by the flooding in the KwaZulu Natal province in April 2022, and the severe drought in several provinces that negatively affected agricultural production in 2024. The World Bank estimates that the overall macroeconomic damages of climate risks could average up to 0.8 percent of GDP annually between 2022 and 205011. The water shortages may increase given the deterioration of existing infrastructure, the challenges of supply (as South Africa suffers from a structural deficit), governance challenges, and overuse by consumers.

The South African economy's main vulnerability comes from a variety of domestic factors that may affect the private sector's expansion plans and the government's ability to maintain a sustainable fiscal path. Despite successful transitions reducing political risk ahead of the May 2024 elections, the coalition remains fragile. It includes 11 political parties, among them the African National Congress and the Democratic Alliance, the party with the second most seats in parliament. Similarly, if the consensus for economic reforms has become stronger, the opening of infrastructure sectors could still be challenged by vested interests, including from existing SOEs that have been losing some of their monopolistic powers during the transition. South Africa's political economy complexity could support or disrupt the pace of reforms.

Economic growth and social welfare can be disturbed by the growing challenge of insecurity. While this phenomenon is not new in South Africa, it has grown and taken different forms in recent years, including the growing influence of organized crime in some economic activities such as mining and construction. The last economic update estimated that the cost of crime could be around 10 percent of GDP for the South African economy.12

The expected effort by the government to bring its accounts to a sustainable fiscal and debt trajectory is in line with South Africa's long-standing tradition of macroeconomic stability. Policy leaders frequently reaffirm their commitment to fiscal consolidation, integrating it into the Medium-Term Fiscal Framework. This commitment signifies a focus on long-term economic stability. Yet, this effort will require a series of difficult decisions in public spending that may face resistance from different groups, delaying the much-needed fiscal adjustment. In a context of persistently weak labor market outcomes and high poverty, pressures on social grants and public sector wages are expected to continue despite the government's intent to control their expansion in the next few years. Concurrently, the situation of distressed SOEs, such as Transnet or several agencies operating in the water sector, could force the authorities to provide a financial rescue package that will increase the financing need of the central government and transfer the cost to taxpayers. The financial distress faced by many local governments may also put additional pressure on the budget.

<sup>11</sup> World Bank (2023a).

<sup>12</sup> World Bank (2023b).

#### THREE POLICY ACTIONS FOR FASTER AND MORE INCLUSIVE 1.3 **ECONOMIC GROWTH**

Despite a moderately positive short-term outlook, addressing its low growth, high poverty, and high unemployment challenges is a necessary condition for South Africa to catch up with rapidly growing middle-income countries. South Africa has underperformed in both productivity growth and capital accumulation, compared to successful emerging economies, over the past decade (Figure 12). On productivity, South Africa has lost on average 0.7 percent of productivity per year, while others have gained 1-2 percent. On capital accumulation, South Africa has invested 1.5 to 3 times less in physical and human capital than several fast-growing economies over the past decade. This underperformance has increased the gap between South Africa and successful countries (Figure 13).

Figure 12: South Africa is on the wrong side of productivity growth, 2011-2022

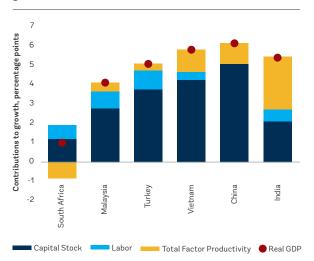
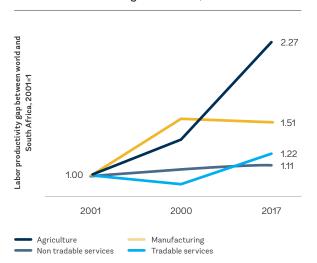


Figure 13: The gap in labor productivity between South Africa and the world is widening in all sectors, 2001-2017



Note: Solow growth decomposition. Source: Authors using data from the WDI database.

Source: Authors using data from the WDI database.

To grow faster and with more inclusivity, South Africa could act on three mutually reinforcing policy areas, which include: (i) addressing the infrastructure constraints on businesses and households; (ii) improving the efficiency of public spending; and (iii) boosting human capital development. The first two areas will shape the future of the South African economy by unlocking economic growth through the implementation of long-delayed structural reforms and by maximizing the impact of public spending on growth and poverty alleviation. Over the longer term, South Africa could address its human capital gap with greater determination if the country wants to achieve faster and more inclusive economic growth.

#### 1.3.1 Action 1: Addressing the infrastructure constraints

Poor infrastructure quality, particularly in energy and transportation (and increasingly water), has hindered private sector performance and the creation of more and better jobs. It has also increased the burden on households, especially the poorest that do not own the financial resources to develop alternatives (such as solar energy or trucks). Infrastructure bottlenecks have cost the economy 4-5 percent of GDP growth, while productivity among private sector firms has declined by 8-10 percent since 2011.

South Africa's electricity crisis poses the most severe constraint on private sector activity, with 55 percent of firms identifying energy as their biggest obstacle in the World Bank Enterprise Survey. The situation deteriorated significantly up to early 2024, with load shedding occurring for 289 days in 2023, costing the economy an estimated 2-3 percent in GDP growth. The state-owned utility Eskom's energy availability factor has plummeted from 75 percent in fiscal year 2014 to 58 percent in fiscal year 2023, due to insufficient capacity, operational failures, and poor maintenance. This unreliability forces businesses to invest in costly backup power solutions, diverting funds from productive investments. In response to this crisis, the authorities have started to implement

reforms to open the power sector to private operators (especially in renewables) and to restore the financial viability of the public utility. Consequently, the country has reported no national load shedding since March 2024. However, including with the World Bank's support through a series of Development Policy Loans, it remains crucial to continue these reforms to provide energy security and support the government's effort to move toward a lowcarbon economy. The emphasis could be given to: (i) transmission (which has become the key bottleneck to power availability) by ensuring the financial viability of the newly created National Transmission Company of South Africa and the opening of this segment to private capital to respond to the massive investment needs; and (ii) distribution by ensuring a better maintenance of the existing network and by promoting added investments through the improved performance of municipalities and the further unbundling of Eskom.<sup>13</sup>

Poor transport infrastructure also constrains private sector activity. Inadequate transport infrastructure, including inefficient ports, unreliable railways, and poor road networks, increases logistics costs and reduces the competitiveness of South African exporters. Chronic underinvestment and an inadequate regulatory environment in the port and rail sectors have led to constraints in access, pricing, and reliability. The situation has been exacerbated by years of underinvestment and operational failures in Transnet, which manages the country's ports and freight rail network. It is estimated that these constraints reduced the country's exports potential by about 20 percent in 2023. With the adoption of a national roadmap in December 2023, the government is now introducing structural changes in the freight and logistical sector, including the unbundling of Transnet, the transfer of some activities to private operators, and the strengthening of the regulator.

Addressing both energy and (freight) transport constraints will foster inclusive growth by lowering production and distribution costs for businesses while boosting household disposable income. Although it remains difficult to quantify with precision the impacts associated with the reforms in the two above sectors, the World Bank estimates that they could generate an increase in GDP growth of about 1 percent in the short term and up to 3 percent in the medium term.14 Such a projected increase in economic activity will create approximately 200,000 jobs in the short term and 500,000 jobs in the medium term.

#### 1.3.2 Action 2: Improving the efficiency of public spending

Nearly all countries use fiscal policy as a major policy instrument to influence the economy and improve living conditions. However, in South Africa, fiscal policy has not delivered the desired impact on long-term economic growth and poverty alleviation. <sup>15</sup>Typically, in a fiscally sustainable environment, countries benefit from reducing taxation and increasing public investment - as the highest fiscal multipliers are generally associated with these two actions. However, this approach might not be possible for South Africa today due to current fiscal constraints. <sup>16</sup>The required fiscal consolidation process does not allow any increase in fiscal deficits over the next few years, as explained earlier. Furthermore, existing rigidities in current spending (such as the wage bill and transfers) prevent a significant shift toward capital spending in the next few years, even if public investment has been traditionally low in South Africa -averaging around 3 percent of GDP over the past decade against 7-8 percent of GDP in, for example, several fast-growing East Asian countries.<sup>17</sup>

If the government cannot cut taxes and increase expenditure, it will have to increase the efficiency of public spending. Improving public spending efficiency is crucial to mitigate the negative impact of the projected fiscal contraction on economic growth and welfare. A restrictive fiscal policy, even if it would restore the government's credibility, may reduce the domestic aggregate demand in the short term, while affecting the provision of infrastructure and social services in the longer term.

South Africa could consider three potential axes of interventions, building on its own experience and lessons from successful countries, to improve the quality of public spending.18

<sup>13</sup> For further details, see the second policy note of World Bank (2025).

<sup>14</sup> Such estimates were obtained by using the World Bank's macroeconomic model MFMod, which is a general equilibrium model that incorporates household utility maximization and firm cost minimization decisions, with prices clearing products, labor, and capital markets. For details, see World Bank (2025).

<sup>15</sup> Analysis by the Reserve Bank of South Africa found that, over the past decade and controlling for other variables the fiscal multiplier even turned negative in the late 2010s. See T.J. Van Resburg, S. de Jager, and K. Makrelov (2021).

<sup>16</sup> N. Batini, L. Evraud, L. Forni, and A. Weber, (2014) and IMF (2015).

<sup>17</sup> For further details, see the second policy note of World Bank (2025).

<sup>18</sup> World Bank (2024), op. cit.

First, the authorities can boost efficiency (and save public money) by developing partnerships with the private sector in infrastructure and social sectors. The reforms implemented a decade ago by South Africa in the aviation and communication sectors have demonstrated that public-private partnerships offer two main advantages: they facilitate the diffusion of new technologies, and they alleviate the government budget constraint. This approach is particularly important to address the substantial investment needs in the infrastructure sectors and to complement the improvements in public investment management that are advocated later. It has started to be successfully replicated in the energy sector, especially in power generation, where private projects have multiplied by six over the past 18 months. It is now extended to power transmission and both the water and freight transport sectors. As discussed in the second part of this report, this approach could also be considered for social sectors such as education services, where private providers usefully complement the public sector.

Second, the authorities can improve the quality of public spending by accelerating the implementation of cross-cutting reforms within the public sector. Digital tools and data-sharing platforms, including e-procurement, could lead to more efficient public financial management through better coordinated, transparent, and speedy decision processes. The efficiency of public administration could be improved through more transparent and effective evaluation and recruitment processes. Rethinking intergovernmental relationships could help address the poor performance of many subnational governments in delivering social and infrastructure services. Central authorities are reforming metro trading services grants to incentivize better delivery, rewarding high performers while penalizing underperformers. More importantly, the authorities could correct the structural imbalance between the spending and revenue responsibilities allocated to subnational governments that are today responsible for approximately two-thirds of public spending but collect only one-tenth of the revenues required to finance them. This imbalance contradicts international best practices and contributes to a wider fiscal deficit and lower quality of services.

The third area of intervention for the government involves improving the efficiency of some specific existing programs or categories of public spending. Below are four proposals that could save public resources while delivering improved outcomes, particularly for the poorest households, per dollar spent by the government:19

- 1. Consolidating the existing Active Labor Market Programs (ALMPs). Today, there are at least 100 ALMPs spread over 20 departments and agencies. The government could consolidate them using a cohesive strategy, a standardized service delivery model, and an effective monitoring system. In addition, added improvements could be made by filling significant gaps in the range and coverage of services provided, particularly for vulnerable groups such as women and young people. In the short term, the government could prioritize ALMPs that have proven effectiveness and adequate coverage while also introducing an integrated information system, such as a comprehensive social registry, to track beneficiaries' progress.
- 2. Increasing the value for money of social assistance programs. The government allocates a substantial share of its resources towards social assistance (about 4 percent of GDP), mainly through the distribution of unconditional grants. The authorities could strengthen their efficacy by making the allocation of part of the grants to people of working age (i.e., the Social Relief Distress-370 grant) conditional, as implemented in many other countries. One option could be to link the payment of some grants to activities that benefit not only the recipients but also the economy as a whole. To promote employment, the beneficiaries could be asked to demonstrate how they have developed their skills or added to their work experience through proof of participation in training programs, ALMPs, and public work programs or their use of transportation to seek work opportunities. This last point is quite important as the cost of transport is considered one of the biggest constraints faced by low-income workers, absorbing as much as half of their monthly earnings and discouraging them from searching for a job. Subsidizing trips for the poorest segment of the population through vouchers is a step that can be taken immediately by reallocating some of the unallocated existing grants or other subsidies.

<sup>19</sup> For further details, see the first policy note of World Bank (2025).

- 3. Streamlining entry procedures and incentives granted to investors. Today, the approval system is very complex, with numerous measures and exceptions that are difficult for both public agencies and private operators to understand and implement.<sup>20</sup> Such complexity is often a route for corruption and is fiscally expensive. More importantly, it fails to produce the intended results. The government could simplify the existing system, following the example of Malaysia and Mauritius, by making the standard regime more attractive and reducing the number of exceptions, as international experience reveals that simplicity and predictability are most valued by investors. Such simplification could also allow the government to redirect its resources (and staff) to more productive activities.
- 4. Improving public investment management. This could be achieved by reducing the fragmentation in institutions and processes that inhibit the coordination, selection, implementation, and monitoring of capital projects and by streamlining processes in subnational governments, which account for three-quarters of public investment. The authorities could consider two measures in the short term: (i) establishing a centralized gateway for priority capital projects above a certain threshold (for example, above R5 billion, or \$250 million) as there are over 700 public institutions that currently operate in multiple parallel systems.<sup>21</sup> This approach has been adopted by countries like the Republic of Korea, New Zealand, and the United Kingdom; and (ii) reducing the administrative burden associated with conditional grants that finance capital expenditures by sub-national governments by consolidating them and harmonizing their reporting requirements.<sup>22</sup>

#### 1.3.3 Action 3: Strengthening human capital

While all production factors play a role in determining long-term growth, international evidence has demonstrated the importance of human capital. Human capital directly impacts productivity growth by providing more educated and healthier workers. Hanushek and Woessman (2012) show that it is the level of learning that makes the difference in economic growth and not merely access to and completion of education levels (e.g., expected years of schooling). Additionally, human capital complements physical capital and fosters innovation.<sup>23</sup> For Daron Acemoglu, 2024 Nobel laureate, cross-country differences in productivity are primarily explained by the close relationship between innovative technology and skilled labor, as both go together in the production process of firms. <sup>24</sup> Enhancing human capital, especially of the poorest groups, fosters equity as it encourages the use of labor in production, a direct path to reduce poverty on a sustainable basis.

Enhancing human capital development is the single strongest factor affecting long-term growth in South Africa. A recent study for the Global Alliance summit estimates that the contribution of human capital to South Africa's productivity is twice as big as institutions and about three times higher than an investment in physical capital and natural capital (Figure 14).25 While this result holds for many other countries in the sample, the importance of human capital, compared to other factors, is less significant in the wealthiest countries, such as the United States and Singapore than in nations such as India and China. This correlation translates a simple rule of economics, that when a factor is missing the most relative to others, the return on investment of that factor is the greatest - the law of diminishing returns. As emphasized below, South Africa is missing human capital, first, relative to its peers and, second, relative to its level of effort as measured by social public expenditure as a percentage of GDP in comparison to other countries.

South Africa's human capital is low. As of 2020, a South African child was expected to attain an average of 43 percent of her potential productivity as a future worker. This result was derived from the World Bank's Human Capital Index (HCI), which quantifies the contribution of health and education to the productivity of the next generation of workers. It captures key stages of a child's trajectory from birth to adulthood, and it includes two basic components: health (infant and adult survival, healthy growth of children) and education (expected years of schooling, harmonized test scores, learning-adjusted years of schooling). In 2020, South Africa's HCI value was 0.43, below the 0.56 average for upper-middle-income countries and just above Sub-Saharan Africa's 0.40 average. South Africa's HCI score was low compared to the resources spent by the government on education and health (Figure 15).

<sup>20</sup> For a description of the complexity of the incentive schemes, see the guide prepared by the Department of Trade, Industry and Commerce: http://www.investsa. gov.za/wp-content/uploads/2021/03/PRINT-Incentives\_compressed.pdf

<sup>21</sup> This centralization was announced in the 2024 Medium-Term Budget Policy Statement,

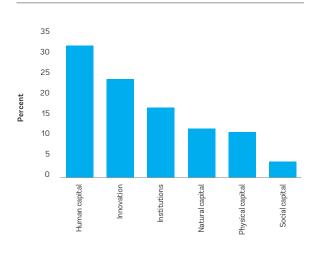
<sup>22</sup> As of 2023, provinces and municipalities had to deal with more than 42 different grants (24 for the provinces and 18 for the municipalities). Many grants have overlapping purposes, and some are for relatively small amounts (12 grants provided less than \$25 million a year to all subnational gov-ernments). 23 Romer (1990).

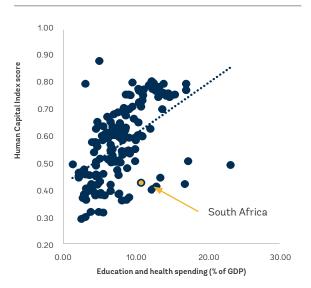
<sup>24</sup> Acemoglu and Zilibotti (2001).

<sup>25</sup> World Government Summit (2024). https://www.strategyand.pwc.com/m1/en/ideation-center/ic-research/2024/potential-productivity-index.html#country-scorecard

Figure 14: Contributing factors to productivity in South Africa

Figure 15: South Africa's HCI is low relative to its spending on education and health





Source: Adapted from Global Alliance Summit, 2024

Source: WDI

According to the World Bank, the differences in the HCI scores across countries are mainly explained by schooling.<sup>26</sup> Disparities in schooling account for three-quarters of the difference between the average scores of low- and high-income economies. In 2020, South Africa was significantly lagging most of the other upper-middleincome countries in both the quantity (as measured by the expected years of schooling) and quality (as measured by harmonized test scores) of education. For example, the expected years of schooling was 10.1 for South Africa, while it was 12.4 in Malaysia and Indonesia and 13.1 in China. Similarly, South Africa's score on harmonized tests was 342, far behind Malaysia (445), China (443), and Indonesia (394).

The second part of this Economic Update focuses on policies to improve the efficiency of the basic education sector in South Africa, which is required to boost the accumulation of human capital and generate inclusive growth.

<sup>26</sup> https://openknowledge.worldbank.org/entities/publication/93f8fbc6-4513-58e7-82ec-af4636380319

#### References



Akkari, A. (2022). Early childhood education in Africa: Between overambitious global objectives, the need to reflect local interests, and educational choices. Prospects. Aug 8;52(1-2):7-19. doi:10.1007/s11125-022-09608-7.

Acemoglu, D. and F. Zilibotti (2001). Productivity Differences. The Quarterly Journal of Economics, May.

N. Batini, L. Eyraud, L. Forni, and A. Weber, (2014), "Fiscal Multipliers: Size, Determinants, and Use in Macroeconomic Projections," Technical Notes and Manuals, Fiscal Affairs Department, International Monetary Fund, September.

Hanushek, E. A. and L. Woessmann, (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation, Journal of Economic Growth 17:267-321.

R. Hausman R., F. Sturzenegger, P. Goldstein, F. Muci, D. Barrios. (2022). "Macroeconomic risks after a decade of microeconomic turbulence: South Africa (2007-2020)," WIDER Working Paper Series wp-2022-3, World Institute for Development Economic Research (UNU-WIDER).

Hausmann, R. (2023). Growth through Inclusion, Harvard Laboratory.

International Monetary Fund (2015), "Policy Paper on Fiscal Policy and Long-Term Growth," June

Leibbrandt et al (2010). Trends in South African Income Distribution and Poverty since the Fall of Apartheid, OECD Working Paper, May.

Romer, P. (1990). Human Capital and Growth: Theory and Evidence. Carnegie-Rochester Conference Series on Public Policy, Volume 32, Spring 1990, Pages 251-286.

T.J. Van Resburg, S. de Jager, and K. Makrelov (2021), "Fiscal Multipliers in South Africa after the Global Financial Crisis, SARB Working Paper, South African Reserve Bank, WP/21/07.,

World Bank (2023a). South Africa: Climate and Development Report.

World Bank (2023b). South Africa's Economic Update: The Cost of Insecurity.

World Bank (2025, forthcoming), Driving inclusive growth in South Africa, including four policy notes: (i) improving the impact of public spending on inclusive growth; (ii) delivering efficient and climate-friendly infrastructure; (iii) making cities an engine of inclusive growth; and (iv) injecting dynamism to the private sector.

World Bank (2025), Estimating the impacts of infrastructure reforms on economic growth and jobs in South Africa, draft.

World Government Summit (2024), In search of Productivity: The next 50 trillion in the global economy.





# PART 2:

The overdue reform and emerging priorities in the basic education sector

Today, Nokuthula, a young South African girl in Grade 3, is unable to read a simple text in her home language or in English. If Nokuthula's teachers and parents don't take steps to address her reading challenge, she will fall behind in learning across subjects in school and will consequently have little chance of finding a job and earning a decent income to provide for her family. For many children in South Africa, the risk of failing to learn is a harsh reality. This situation is likely to create tensions within a country that is among the most unequal in the world.

Given the leading role played by the education system in shaping the country's human capital, the second part of this economic update explores how South Africa could improve the chance for Nokuthula to obtain quality education and a job. It addresses three fundamental questions for every policymaker to consider in South Africa. How big is the current learning crisis? What are the main challenges faced by the educational system? What can be done to address these challenges going forward? The report is organized into two main sections. The first section presents three main challenges faced by the education system and the second, proposes a set of interrelated recommendations to stimulate debate and identify solutions that will make the education system the engine of inclusive growth for Nokuthula and her peers.

While this report focuses on improving outcomes at the basic education level, South Africa also needs to strengthen its Post-Secondary Education and Training (PSET) and ALMPs. The PSET system, particularly the Technical and Vocational Education Training system and Workplace-Based Learning programs, not only needs to strengthen the quality and relevance of its offerings but also improve access to meet the growing demand for technicians and artisans in the economy. There is also a significant number of individuals in the labor market who are neither in education, employment, nor training. These individuals need coordinated and comprehensive support through ALMPs to help them become productive contributors to the economy and earn a decent living.

#### 2.1 THREE KEY CHALLENGES IN BASIC EDUCATION

#### 2.1.1 Challenge 1: The learning crisis - early progress, setbacks, and the urgency to accelerate progress

Improvements in education outcomes must be set against the backdrop of the deep-rooted racial and spatial inequalities that the South African government inherited in 1994. In the two decades that followed the end of apartheid, South Africa made significant progress in unifying a divided education system. In 1994, public spending per child was 4.5 times higher for white learners than for black learners, however, by the year 2000, the expenditure was close to being equal. The education budget increased significantly (largely driven by the equalization of pay between black and white teachers), and by this time, South Africa was amongst the few countries in the world spending 6 percent of its GDP on the overall education system. It is also important to note that South Africa is a deeply multilingual society, and the issue of language of instruction and home language was explicitly minimized during apartheid. Recovering from this history has been difficult, but much progress has been made, as discussed further in this report.

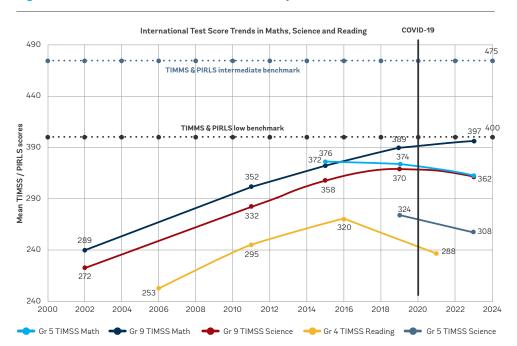
By the early 2000s, South Africa had one of the highest enrollment rates in the Africa region, with more than 12 million learners attending schools. The gross enrollment ratios averaged over 100 percent for primary schooling and over 70 percent for secondary schools, and girls' participation rate was one of the highest on the continent. Concurrently, to improve the quality of schooling and benchmark its performance with other countries, South Africa began participating in international learning assessments such as the Trends in International Mathematics and Science Study (TIMSS)<sup>27</sup> and the Progress in International Reading Literacy Study (PIRLS).<sup>28</sup> South Africa's commitment to participating in these assessments emphasizes its ambition and courage to benchmark its learning outcomes against mostly OECD countries and other upper-middle-income countries. Between 2000 and 2016, South Africa achieved sustained progress in these assessments (Figure 16).29

<sup>27</sup> TIMSS measures learning performance in mathematics and science for Grade 4 and Grade 8 learners every four years. In South Africa, these assessments are done in Grade 5 and Grade 9. The first assessment was completed in South Africa in 1995.

<sup>28</sup> PIRLS measures learning performance in reading in all official languages in Grade 4 every five years and is benchmarked in Grade 5 or Grade 6 in one or more of these languages - English, Afrikaans or Zulu. The first assessment was completed in South Africa in 2006.

 $<sup>29 \</sup>hspace{0.1cm} \textbf{Both TIMSS} \hspace{0.1cm} \textbf{and PIRLS} \hspace{0.1cm} \textbf{measure performance by discrete international benchmarks, where the minimum points required to achieve each benchmark are the same and the same are the same and the same are the$ across the assessments, but the interpretation of these scales vary by assessment, subject and grade level. For example, a learner achieving the low international benchmark (400-474 points) in the Grade 4 PIRLS reading assessment can read to locate and retrieve explicit information; whereas a learner at the low international benchmark in the TIMSS Grade 5 mathematics assessment can show and apply basic mathematical knowledge to solve problems.

Figure 16: Results from International Assessments by South Africa, 2000-23



Source: Gustafsson and Taylor (2022), updated by authors.

Despite the improvements in learning, most South African students are still unable to meet basic reading and mathematics levels in Grade 4. After 2016, progress in learning began to stall, as evidenced by the almost flat line in Grade 5 TIMSS mathematics results from 2015 to 2019, along with a slight downward trend observed by 2023. This decline in learning performance at the primary level occurred before the COVID-19 pandemic and worsened after the pandemic, with reading levels on PIRLS dropping dramatically between 2016 and 2021. In 2016, 78 percent of Grade 4 learners in South Africa were unable to properly understand what they were reading, according to the expected standards set by the national curriculum and the Sustainable Development Goals. By 2021, following several months of school closures, this number had risen to 81 percent, with the most significant decline observed among the socio-economically disadvantaged learners.

As of today, South Africa's learning performance falls behind that of its peers. Despite impressive improvements in learning levels up to 2016 albeit starting from a low base, in 2021, the proportion of South African Grade 4 learners unable to meet basic reading levels was 81 percent.<sup>30</sup> This is significantly higher than 55 percent, 39 percent, and 14 percent of learners reported by Egypt, Brazil, and Turkey, respectively. According to TIMSS 2019, 63 percent of learners in South Africa fell below the low benchmark on mathematics compared to 57 percent, 30 percent, and 16 percent of learners in Morocco, Chile, and Georgia.31 These results are even more concerning given that South African learners were tested in Grade 5, while learners in most other countries were tested in Grade 4 for the TIMSS assessment.

Significant inequalities in learning outcomes continue to exist based on income, gender, and geographical location. In 2021, students in the wealthiest 10 percent of schools in South Africa were 10 times more likely to be able to read and understand a simple sentence by the end of Grade 4 than those in the poorest 70 percent of schools. The variations in outcomes are also visible by gender as boys attending the poorest schools (classified as Quintile1-Qunitile 3 schools in the South African system), had the lowest reading outcomes compared to other sub-groups. There are also differences in learning outcomes by province, with learners in the Western Cape and Gauteng provinces consistently scoring higher than learners from other provinces and learners from the North West, Limpopo, Mpumalanga, and Eastern Cape provinces scoring lower than the average for the country.

As highlighted in Box 2, inequality in learning outcomes is significantly larger in South Africa than in the other countries that participated in the PIRLS in 2021. South Africa's high inequality in learning is partly rooted in high-income inequality within society, with high income correlating with higher learning outcomes. However, it is also linked to poor teaching and learning standards, which are not uniform across schools. This is a hopeful message because addressing income inequality is a long-term challenge. However, improving teaching and learning to meet

<sup>30</sup> The PIRLS 2021 low benchmark' is that students can locate and retrieve explicitly stated information, actions, or ideas from a simple text.

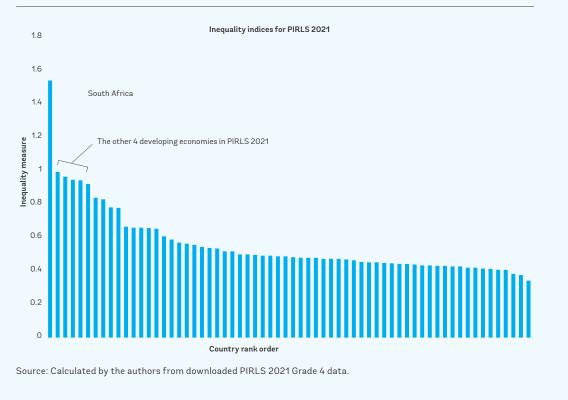
The TIMMS 2019 'low benchmark' indicates that students possess basic mathematical skills, including the ability to add, subtract, multiply, and divide one- and two-digit numbers, among others.

the required standards—while technically more demanding than simply allocating resources to schools based on income—is achievable within a relatively short time frame. South Africa needs to systematically target schools based on both performance and income. International experience has demonstrated that countries that make the most progress in learning are those that focus on delivering strong teaching and learning standards at the lowest ends of the learning distribution (Crouch et al. 2021).

#### Box 2: Measuring inequalities in learning outcomes

A simple index of inequality of outcomes using the 2021 PIRLS data<sup>32</sup> measures total inequality in learning outcomes, including but not confined to differences between income groups and gender, and it confirms that South Africa had by far the highest inequality among the countries that took the PIRLS in 2021 (Figure B3). The index is 50 percent higher than the other four middle income economies, and 200 percent higher than the median across all countries.33

Figure B3: Learning outcomes are the most unequal in South Africa

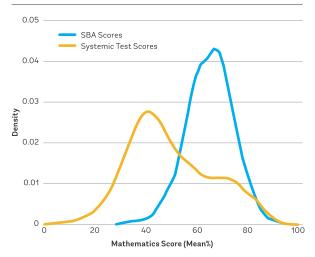


A key challenge for policymakers, educators, and other stakeholders is the absence of regular learning assessments since 2015. National learning assessments are important tools to measure outcomes over time. They have four key functions: (i) to ensure accountability; (ii) to assure quality control; (iii) to provide instructional diagnosis; and (iv) to identify needs and allocate resources (Kanjee and Moloi, 2014). South Africa implemented the Annual National Assessment (ANA) from 2010-2015, which tested all Grade 1 to 6 learners and all Grade 9 learners in languages and mathematics in all the public schools in the country. ANAs were discontinued in 2015 largely due to opposition from the teacher union(s). Schools in South Africa now administer their own School-based Assessments (SBAs), which are not standardized across the country, i.e., teachers set and mark assessments for learners in their classrooms. While SBAs can provide timely feedback to individual schools and teachers aiming to improve the quality of their instruction, by their very nature, they are unable to provide a valid and reliable assessment of the overall health of the education system at any given moment or over time. This role is typically fulfilled by national standardized assessments in many advanced education systems.

<sup>32</sup> This was done by taking the score at the 90th percentile, subtracting the score at the 10th percentile, and dividing by the score at the 50th percentile. This is relatively common among economists as an intuitive measure of inequality. One must take care in interpreting it, as, unlike a Gini coefficient, there is no clear 0 and 1. The interpretation must be relative to other countries, as is done in the graphic,

<sup>33</sup> If one uses Grade 6 data, South Africa would still be the most unequal, but not by as much

Figure 17: Comparing the System Test Scores and School Based Assessment Scores, Western Cape, 2022



Source: Author's calculations based on WCED SBA scores for Grade 3 for term 4 in 2022: Systemic Test Scores. Grade 3, 2022.

Evidence from the Western Cape makes this point clear. The Western Cape is the only province that continues to use annual standardized learning assessments, known as the Systemic Test, while also administering SBAs. A comparison of learner's abilities as measured by the Systemic Test and the SBAs shows a wide contrast between the two (Figure 17). The Systemic Test data for learners in the Western Cape in 2022 shows that most learners are failing to reach the required standard, but the SBA data indicates that teachers believe most learners are reaching it.

At the time of writing this report, the results of a new assessment in mathematics and language for a sample of learners in Grades 3, 6, and 9, known as the South African Systemic Evaluation (SASE), were released by the government. As the first standardized national assessment since the ANAs, it is a breakthrough. However, SASE is sample based, while ANA was run across all schools. Sample-based

assessments have many advantages related to reduced cost and better-quality control in administering the assessment; they cannot be used operationally to identify schools that are struggling or to promote system-wide school accountability. Moreover, the utility of SASEs for teachers, heads of departments, district officials, parents, and policymakers is uncertain as it is unclear how often it can be administered going forward. Its timeliness is also of concern, as the assessment was conducted in 2022, but partial results were only released in late 2024.

#### 2.1.2 Challenge 2: The increasing financing constraint of the State

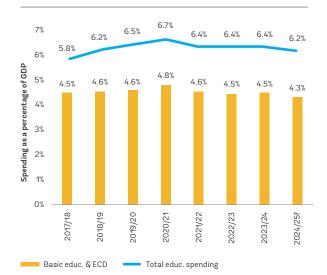
South Africa's strong commitment to education (basic and higher education) is apparent in the significant share of budgetary resources allocated to this sector every year, over 6 percent of GDP (Figure 18). This is higher than the average for upper-middle-income countries (4 percent of GDP in 2018) but comparable or even lower than in other countries that also suffer huge inequalities, such as Brazil (6.1 percent of GDP in 2018) or Botswana (8.1 percent in 2021). The significant level of public spending on education is justified because it helps to support many poor and vulnerable households in accessing educational services. This includes initiatives such as school fee exemption, school meal programs, subsidized school transportation, and assistance with learning materials. On basic education alone, South Africa is estimated to spend 4.3 percent of GDP in 2024-25, less than that spent by Botswana and Brazil on basic education at 5.1 percent in 2019 and 4.5 percent in 2021 of GDP, respectively.

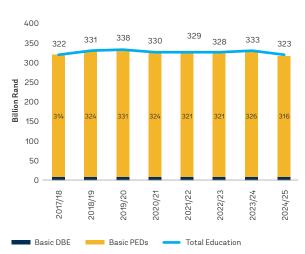
However, such public commitment toward education is under threat, due to the reduced fiscal space of the government and competing priorities for public spending. In real terms, the spending on basic education already declined from R338 billion to R323 billion between 2019-20 and 2024-25 (Figure 19).34 To some extent, this is a result of a shift in spending in favor of post-secondary education (i.e., university and technical vocational education and training) as its share increased from 22 percent of total education expenditures in 2017-18 to 30 percent in 2024-25.

<sup>34</sup> To prevent double counting, conditional grants were not included on the DBE side. PEDs refers to Provincial Education Departments.

Figure 18: South Africa budgetary allocation to the education sector

Figure 19: Real spending on basic education has declined since 2019-20





Source: Author's calculations from National Treasury (2024), Estimates of Provincial Expenditure include post-secondary education and training and pre-Grade R ECD from 2018-19.

Source: Author's calculations from National Treasury (2024), Estimates of Provincial Expenditure (EPRE), Values for 2024-25 are budgeted

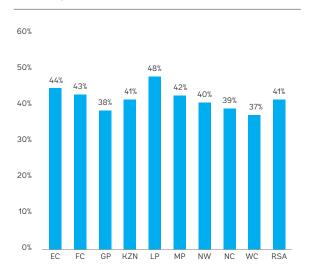
While public spending on basic education is projected to increase nominally by 5.6 percent per year in the government's medium-term framework, such an increase would not be sufficient to compensate for the projected inflation rate of 4 percent during this period, the negotiated increase in wages, and the expected increase in the number of learners. Regarding the latter, there will be growing pressure on the education system to expand and accommodate an additional 1.2 million learners, who are expected to enter the school system by 2030. This increase is driven by factors such as rising population numbers, greater access to secondary education, and full access to Grade R. To meet this demand, an additional 20,000 classrooms and the hiring of 25,000 new teachers will be required.

To fully understand the consequences of the budget constraint faced by the government, it is necessary to explain a specific aspect of the financing of the education system in South Africa. Almost all the financing for basic education is provided by the central government while spending responsibilities remain at the provincial levels. The central government distributes the resources using a series of non-allocated (through the provincial equitable share) and allocated transfers (through six conditional grants in 2024-25). 35 The provincial government, in theory, has substantial autonomy in decision-making on the allocation of the equitable share across sectors, but in practice, most of the funds are earmarked for salaries of public workers.

Provinces in South Africa allocate, on average, 40 percent of their total budget to basic education, varying between provinces; for example, Limpopo allocates nearly 50 percent, while Gauteng and Western Cape allocate 38 and 37 percent, respectively. However, this is not the best indicator of the provinces' commitment to supporting education as it does not account for the number of learners (Figure 20). A better indicator is the level of public spending per learner in Grades 1 to 12, which reveals that the provinces of KwaZulu-Natal, Mpumalanga, Limpopo, and Eastern Cape spend less than the national average of R25,000 per learner annually in South Africa (Figure 21). Nonetheless, this indicator is also an imperfect measure of the province's commitment to education, as the cost of delivering education services varies depending on contexts. For example, in sparsely populated areas like the Northern Cape, the cost of delivering services to remote areas may be more expensive, for example, a classroom needs one teacher regardless of whether there are five learners or thirty learners. In poorer provinces such as Limpopo and the Eastern Cape, the cost of education service delivery per learner is also potentially higher, given additional support requirements for learners such as transportation, school meal programs, and more fee-exempt schools. Further analysis is needed on provincial-level spending with improved access to disaggregated data on recurrent wage and non-wage expenditures, which is currently not available to the public.

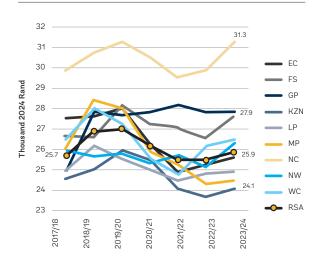
<sup>35</sup> Conditional grants are allocated for the purpose of achieving particular national government policy objectives and have conditions attached with regards to what it can be spent on and how it must be reported on.

Figure 20: On average, provinces allocate 41 percent of their budget to education, 2023-24



Source: Author's calculations from Estimates of Provincial Expenditure

Figure 21: Variations in public spending per learner in Grades 1-12 across provinces



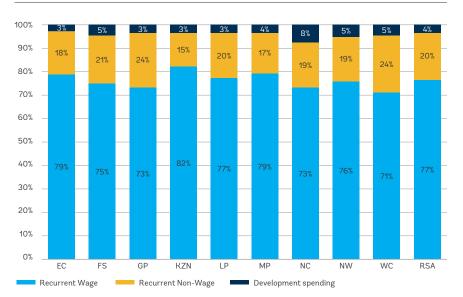
Source: Author's calculations from National Treasury (2024), Estimates of Provincial Expenditure (EPRE). Unit costs exclude costs for ECD/ Grade R, subsidies for independent schools, and subsidies for special needs education. It includes all other spending at the national and provincial level related to wages, recurrent non-wage, and development.

On average, provinces allocated a little more than 75 percent of their education budgets to teacher and administrative staff wages, close to 20 percent to recurrent non-wage expenditure, and less than 4 percent allocated to development expenditures such as school infrastructure (Figure 22). The 20 percent recurrent non-wage expenditure includes teaching and learning materials, school meals, transport subsidies, subsidies for learners with special needs, subsidies for independent schools, and other operating expenses and is expected to be allocated to each learner equitably through the Norms and Standards for School Funding (NSSF), which is not fully achieving its goal of improving equity in financing. Box 3 provides more information on the NSSF.

#### Box 3: Explaining the Norms and Standards for School Funding (NSSF)

The main pro-poor, financing redistribution mechanism used by the government is the Norms and Standards for School Funding (NSSF), which was established in 1996 and came into effect in 2007. This mechanism classifies schools in five categories (from the poorest (Quintile 1 (Q1) schools) to the richest (Quintile 5 (Q5) schools)) and then allocates funding proportionally. For example, in 2023, the minimum threshold amount per learner was set at R1602 annually for learners in poorer Q1-Q3 schools and R803 and R277 for learners in Q4 and Q5 schools respectively. Q1-Q3 schools are 'no-fee' schools and cannot charge fees to parents while Q4-Q5 schools can charge fees.

Figure 22: Provinces spend, on average, about 75 percent of their education budget on wages, 2024-25



Source: Authors calculations from Estimates of Provincial Expenditure (EPRE). Numbers are rounded to the nearest integer

The declining education budgets in real terms since 2020-21 have put pressure on provinces to cut spending.

This pressure has been accentuated by the increase in teachers' salaries negotiated at the central level (Box 4), leaving provinces with the only options to either cut back on teaching posts or recurrent non-wage spending per learner, all of which will negatively affect their capacity to deliver services. Provinces like KwaZulu-Natal, Mpumalanga, and Eastern Cape are protecting teacher's wages while cutting the agreed minimum per learner allocation. For example, KwaZulu-Natal spent only 60 percent of the minimum NSSF threshold for learners in the poorest Quintile 1 schools, and Mpumalanga and Eastern Cape spent 69 percent and 66 percent of the minimum threshold, respectively, for learners in Quintile 1 schools. In other words, some of the poorest provinces in the country are not spending the minimum amount required for the poorest learners in schools because they are trying to accommodate teacher's wages. In contrast, other provinces like the Western Cape have already announced that they will be cutting teaching posts in the province by as many as 2400. Cutting teaching posts or reducing recurrent non-wage spending for learners could result in dire consequences such as overcrowded classrooms, which could further affect the quality of teaching and learning, or less spending on school transportation or school meals, which could reduce school attendance.

#### Box 4: How are wages negotiated in the education sector?

In South Africa, teacher salaries are negotiated centrally- along with the salaries for rest of the public service- between national government and all recognized public sector unions (teachers, police, health, and others). National government is represented in these negotiations by the Department of Public Service and Administration (DPSA) and National Treasury (NT), and the government's position is informed by a mandating committee, which includes Cabinet and Provincial Premiers. However, the burden of paying wages is the responsibility of the provincial Treasuries and the provincial Departments of Education.

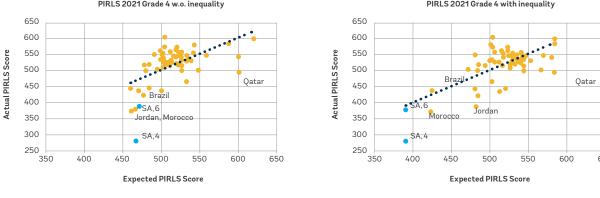
While the central government is supposed to cover the payment of teachers' salaries through the equitable share transfers, this is not always the case. Even when central governments adjust provincial equitable shares upwards to compensate provinces for the cuts made to provincial education and health departments, provinces do not always allocate this additional budget to the education sector. Research by Spaull et al. (2020) reveals that provinces are under fiscal pressure due to teacher salaries rising more rapidly than the Consumer Price Index. If the provincial governments do not have sufficient resources to pay the centrally negotiated salaries, they have no other choice than to freeze/cut teaching posts and/or reduce other expenditures. Such pressure is exacerbated when central government further reduces province's fiscal space, as seen in recent years.

#### 2.1.3 Challenge 3: Limited efficiency and equity of public spending on basic education

South Africa is spending more resources on education than most upper-middle-income countries yet achieving fewer results. Measuring the efficiency of an education system is a challenge, but comparing the 2021 PIRLS results of South Africa with those of other countries provides valuable insights. South Africa stands out as a significant negative outlier, (Figure 23) as its learning score was approximately 180 points lower than predicted by its income per capita and level of education expenditure. South Africa's weak performance can be partly attributed to high levels of inequality and partly to poor teaching and learning practices. When inequality is accounted for, the gap between the actual and the expected score is reduced to about 100 points, but it remains significant (Figure 23, right panel).

PIRLS 2021 Grade 4 w.o. inequality PIRLS 2021 Grade 4 with inequality 650 650 600 600 550 550 500 500

Figure 23: South Africa's underperformance: Expected vs actual PIRLS 2021 Grade 4 scores



Source: Analysis by authors from downloaded PIRLS data and World Bank data on GDP per capita, education expenditure, and the Gini coefficient. SA 4 refers to the grade 4 assessment, and SA 6 to the grade 6 assessment.

The inefficiencies in public education spending arise from multiple sources, but two are considered the most important: insufficient accountability of teachers and poor management of the school infrastructure development program. Given more than 75 percent of the public education spending goes to wages for teachers and administrators, the first source of inefficiency is the quality of teaching. The DBE itself, in its Annual Performance Plan 2016-17, identified 'poor teaching, leadership and lack of accountability' and 'no consequences for poor performance and wrongdoing' as major challenges.

While consensus is emerging that accountability of teachers in South Africa needs improvement, it is important to clarify what the concept of accountability entails, as it includes at least four distinct forms: (i) Market-based accountability. This occurs when parents choose to leave underperforming schools for better ones, which in turn affects the budgets of both types of schools, potentially eliminating inefficiencies in the system; (ii) Local voice accountability. This refers to organized parent pressure through parent-teacher associations or, in the case of South Africa, School Governing Bodies (SGBs); (iii) Bureaucratic accountability. This involves teachers being accountable to inspectors and supervisors who set standards and may provide teaching support; and (iv) Professional accountability. This requires teachers and school staff to acquire specialized knowledge, pass certification examinations, and adhere to professional standards of practice. This may also include a desire to perform well in front of coaches and inspectors who offer support rather than merely enforcing standards. Some forms of accountability will be more suitable for certain tasks, and the optimality of them- or a combination of them- will depend on cultural context and the history of what has been tried before.

Teacher's underperformance in South Africa is primarily associated with weak professional and bureaucratic accountability. The experience from South Africa suggests that local voice accountability via SGBs is unlikely to be effective (Levy et al. 2018), especially in less privileged communities that face chronic difficulties voicing their concerns. To some extent, market-based accountability already exists as students have a certain degree of choice, and, in principle, resources are allocated based on enrollment. It may be that more could be done to provide meaningful choice, with more data publicly available on school performance and more consequences for schools that consistently underperform. Bureaucratic accountability remains underdeveloped in South Africa despite the introduction of the Quality Management System (QMS) in 2021.36 The QMS does not hold teachers sufficiently accountable for addressing the individual needs of their learners 37 as there are few consequences for underperformance.Salary increases are largely standardized and negotiated centrally with the teachers' unions, which diminishes accountability for teachers at the school level. The most significant gap is the lack of professional accountability largely due to resistance to developing Teacher Professional Standards (TPS) that would drive this kind of accountability through the acquisition of specialized knowledge, certification examinations, and upholding professional standards of practice. Unlike bureaucratic accountability, professional accountability means that professionals are obliged to do whatever is best for the client/learner, not what is easier, most convenient, or even sometimes what the client(s) may want.38

The second source of inefficiency stems from poor management of the school infrastructure development program, which does not maintain or upgrade existing schools and build new ones to satisfy the country's needs. In 2021, 22 percent of toilets in schools at pre-primary, primary and secondary levels did not meet the minimum standards, approximately 10 percent of schools had no access to clean water and 9 percent of schools did not have access to adequate electricity. Several classrooms require renovation to fix floors and restore ceilings while some classrooms need to be rebuilt because they are made of non-permanent materials. In addition, new classrooms and schools will have to be built to accommodate the growth in enrollment, but last year the national DBE was only able to build one out of a target of six schools, and in 2023-24 Limpopo and Eastern Cape provinces were underspending on school infrastructure.

Unfortunately, there has been no systematic and comprehensive evaluation of the value for money obtained from the R124.5 billion Government investment in school construction over the last 10 years. Data available from a few recent school construction projects that the DBE, World Bank, and the Development Bank of Southern Africa reviewed in 2022 estimated a very high unit cost, averaging USD 119,000 (R1.8 million) per classroom. Other large school construction projects managed at the provincial level and contracted out to the Department of Public Works or via a School Governing Body (SGB)-based Trust, came in at a lower but still high unit cost by regional standards, averaging USD48,800 (R700,000) per classroom (value 2020).39

Beyond spending categories, the efficiency of education expenditures is further negatively affected by two cross-cutting challenges:

• An excessive number of uncoordinated programs: South Africa's education sector has promoted a wide range of interventions at a local level, often reusing similar inputs. However, it lacks collaborative leadership to accurately identify and prioritize key issues that need to be addressed and draw on past lessons and experiences from within South Africa and other countries. This is particularly evident for early childhood development and early grade reading (EGR) programs. The ECD sector has multiple programs (center-based and home-based) with weak systematic quality assurance processes. While different types of ECD programs are needed to target different age groups, they are often not properly monitored and evaluated. For example, for parenting programs that are delivered through multiple private providers, there is a lack of data on the services being provided. Data available for accessing the quality of early learning services is often incomplete or entirely lacking, and there are currently no assessments in place to measure outcomes for younger children.<sup>40</sup> Similarly, while there are many EGR programs in South Africa, they are often inadequately evaluated. There are some rigorously evaluated EGR programs, and even though some of these have been successful at improving reading outcomes, they fail to transition from operational research to large-scale, systematic implementation, primarily as they are mostly funded and managed by external parties. Many of these interventions churn the same inputs with limited movement towards consolidation of lessons learned, particularly regarding which inputs could be phased out and which could be scaled up. Currently, the insights, challenges, and successes of these interventions are largely tied to their implementers and funders, and there is limited clarity on how they have shaped curriculum standards, teaching plans, and assessments.

<sup>36</sup> The QMS replaced the Integrated Quality Management System (IQMS), which was initiated in 2005.

<sup>37</sup> Taylor (2017)

<sup>38</sup> L. Darling-Hammond (1989).

<sup>39</sup> World Bank (2023)

<sup>40</sup> Data on center-based early learning services are more readily available but the Thrive by Five Index, which measures child outcomes for 4 to 5-year-old children, has only been collected once to date.

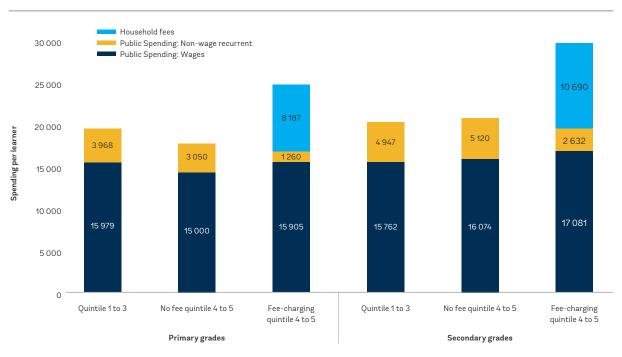
· Data that is not utilized effectively. There is a long tradition in South Africa of collecting huge amounts of data from schools that are not used effectively. In some instances, there are concerns about the reliability of the data collected, which is often why the data is not used effectively or used at all. Annex 1 summarizes some of the key datasets in the basic education system related to learner numbers, learning performance, and management, including human resources and infrastructure, and others. However, there is no integrated system consolidating this information for planning and evidence-based decision-making. The Data Driven District (DDD) Program is an example of an integrated data system being used at the provincial level to collect data from each school. While this is a promising digital system providing relevant information from the school level in a timely manner, it has not been adopted by all provinces, and there are insufficient mechanisms in place to quality assure the data that is entered into the system. What's more, much of the education data in South Africa is not publicly accessible, limiting its use by external researchers. Capacity constraints further hinder effective data analysis.

Lastly, the inefficiency of education spending is evident in its limited ability to achieve equitable financing of learners. While based on good principles, the NSSF has not fully achieved its objectives for three main reasons: 41

- The size of the redistribution package is limited since it is funded from the non-recurrent non-wage budget, which is only 20 percent of the total education budget and is dwarfed by funding going to the wage bill.
- ii. The classification of schools into quintiles deviates in practice since some provinces reclassify Q4 schools as 'no fee' schools because a large proportion of learners they enroll are from poor households, which calls into question the design of the equitable financing mechanism using the quintile system; and
- iii. The capacity of Q5 schools to leverage private funds from middle and upper-middle-class communities has accentuated the difference in overall spending by learners across schools.

The weak effectiveness of the NSSF in reducing inequalities among learners can be illustrated by showing the differences in spending per learner across schools. Although the data is available for only one province (Figure 24), the NSSF at the primary level only marginally favors learners attending Q1-Q3 schools (R19,947 per learner) compared to those attending Q4-Q5 schools (R17,165). The reason is that the bulk of public spending on learners is for teacher wages, which is almost equivalent across Q1-Q5. The public spending allocated to recurrent nonwage spending is supposed to be the mechanism to improve equity by allocating more funding for Q1-Q3 schools and 'no-fee' Q4 schools, but the amount remains too small to achieve this objective. As a result, when fees that are collected from households are added, the total spending per Q5 primary school learner is R25,352, which is 27 percent more than spending on a Q1-Q3 learner.

Figure 24: The differences in spending per learner are not always corrected by public funding, results for one province in 2021-22



Source: Data collected from one province in South Africa

<sup>41</sup> As per Jansen and Taylor (2003), which remain relevant two decades later.

The NSSF is even less effective at correcting the inequalities in spending per learner at the secondary level, compared to the primary level. The total public spending per learner is merely 2 percent higher for learners in Q1-Q3 schools (R20,194) compared to Q4-Q5 schools (R19,713). When looking at the composition of this spending, spending on teachers is higher for Q4-Q5 fee-charging schools than Q1-Q3 schools, possibly because contributions from the School Governing Boards enable Q5 secondary schools to attract more experienced teachers. While the recurrent non-wage spending, guided by the NSSF, partially compensates for this imbalance, which favors wealthier learners, it is only able to get to a point where there is close to equal public spending per learner across school quintiles. This data confirms that the amount for redistribution through the non-recurrent wage spending is dwarfed by teacher wages, which is skewed by Q5 schools' ability to attract more experienced teachers. Moreover, when household fees are added to public spending, total spending per learner in secondary school in Q4-Q5 feecharging public schools is about 47 percent higher than the spending per learner in Q1-Q3 schools.

Ultimately, the government through the NSSF appears unable to correct the spending inequalities across learners, at least in one province where the data is available. The public resources per learner on basic education are largely equal across all schools, irrespective of which quintile they are. When household fees are added, the system is unequal and inequitable, in favor of learners from the wealthiest households.

#### THREE ACTIONS FOR BETTER LEARNING 2.2

While the learning crisis is already negatively impacting the economy, the costs to individuals and society are expected to increase exponentially over time unless bold actions are taken. To contribute to the debate and encourage policymakers to act urgently, three lines of action are proposed to address the current learning crisis, the lack of available financing, and the low efficiency of public spending. Figure 25 summarizes the challenges and recommended actions supported by this report.

Although these three proposed actions are presented separately, they are strongly interdependent and mutually reinforce one another. If implemented together, they can lead to significant improvements in learning. What's more, these actions can be implemented relatively quickly because they require minimal funding—primarily political commitment—and can build on initiatives that the South African government has already piloted. Achieving shortterm results is crucial for creating momentum for change, as demonstrated by the successful experiences in Sobral in Brazil and Mississippi in the United States (discussed in Annex 2).

# Challenges

# Recommended actions

#### Learning crisis

- 81% of Grade 4 learners cannot read for meaning
- Grade 5 mathematics outcomes declining
- · High levels of inequality
- No professional standards for teaching
- No regular national learning assessment

#### Sustainability of financing

- Declining education spending in real terms
- Spending shift in favor of postsecondary education and training
- Public spending on education under threat-economic slowdown and competing priorities

#### Efficiency & equity

- Need for greater accountability of big spending items - wages and infrastructure
- Multiple uncoordinated programs and a lack of integrated data systems
- Pro-poor financing to schools (norms and standards for school funding) less equitable than it could be

# Strengthen foundational learning

- Focus on pedagogy
- Measure learning against benchmarks
- ECD-foundational learning connection essential

# Improve efficiency of and equity in public spending on education

- Start building towards professional accountability of teachers
- Move from pilots and small programs to system scale
- Better targeting of resources and structural change to underperforming schools and learners
- Improve coordination and utilize data better

## Better learning outcomes

Leverage private sector to expand access to, quality of, and competition in education service delivery

Explore public private partnership options targeting schools supporting learners from poor communities

#### 2.2.1 Action 1: Focusing on learning outcomes, starting with foundational learning

Learning is cumulative and is subject to strong longitudinal effects. It is almost impossible for children to learn algebra or read a history text in Grade 9 if they have weak number sense starting in grades 2 or 3 or are very slow readers in Grades 1 or 2. Perhaps the most comprehensive and longest-running (two decades) longitudinal study in education, Young Lives, <sup>42</sup> provides substantial evidence of how early experiences can shape learning outcomes over time. It shows that early childhood malnutrition can have lasting effects on socio-emotional skills such as self-esteem, self-efficacy, and a decreased propensity for crime. Poor development of skills and lower aspirations can negatively impact access to higher education and the ability to secure decent employment. Conversely, stronger skills and higher aspirations are linked to reduced levels of risky behavior and lower rates of teenage pregnancy" (Young Lives, see also Lopez et al. 2024). There is some evidence suggesting that similar trends can be observed in South Africa and that poor and extremely unequal performance of Grade 4 students in the PIRLS assessment seems to be influenced by earlier educational experiences, including those from early childhood development (ECD). This performance is also predictive of matric Grade 12 pass rates and success in gaining entry to higher education and the labor market.

<sup>42</sup> Young Lives is a longitudinal study of poverty and inequality that has been following the lives of 12,000 children in Ethiopia, India (Andhra Pradesh and Telangana), Peru and Vietnam since 2001.

#### Aside from these general concerns, there are at least four reasons to focus on foundational learning that could be of particular interest to South Africa.

- · Strong empirical evidence from South Africa (van der Berg, 2015) documents the "Matthew Effects", which refers to situations where children who start out with weaker skills than others lose ground in relative terms compared to their initially better-skilled peers. So, even if they are all progressing, those who started out lower progress less. It emphasizes that most of the damage related to learning is done by Grade 4 so learning deficits need to be addressed early on.
- Improvements in academic achievement in the lower grades can help prevent students from repeating years or dropping out of school. This could lead to substantial fiscal savings: for example, as much as R2 billion annually if repetition rates were reduced from 6.8 percent to 3.4 percent across grades. This estimate excludes the economic gains in terms of wages and work opportunities that would be offered to more successful students. Therefore, improving students' foundational skills could also make fiscal sense, not just economic sense.
- There is now considerable technical knowledge on how to improve learning in the foundation years, and much of it is South Africa-specific.
- The lessons on improving foundational learning can be applied to other subjects and later grades, however, should be done with caution. The success achieved by a "Structured Pedagogy"<sup>43</sup> approach could be beneficial for later grades in "hard" subjects like mathematics and science. However, this approach is less relevant for "softer" subjects such as social studies, history, and literature, where student engagement in the construction of their own knowledge, in a "discovery" mode, makes much more sense, and where critical thinking can be exercised more.44

How can learning at the foundational level be improved? First and foremost, it is necessary to remain optimistic that quality schooling for all South Africans is within reach. While many South Africans are understandably impatient for change given the current low levels of learning performance, it is important to recognize that the educational system can and does respond to change, as it did in the two decades following the end of apartheid. Secondly, policymakers must be bold and steadfast in their decisions, based on evidence from both South Africa and globally to effectively improve foundational learning on a large scale. Thirdly, all relevant stakeholders, including teachers, school leaders, district and provincial officials, and parents must understand and fully support improvements in foundational learning for any proposed interventions to be successful. Lastly, it will take patience and determination to stay the course with improvements in foundational learning. Over time, these efforts will contribute to systemic changes that strengthen the entire basic education system.

#### A menu of three measures is proposed based on the emerging evidence in South Africa and lessons learned from international experience

• Focus on the pedagogical. While attention has traditionally been given to funding and incentives for teachers and school management to deliver better education services, evidence shows that it is pedagogy that makes the most difference to learning. Though structural issues such as pro-poor funding through the funding norms or the increased supply of non-pedagogical and pedagogical inputs, such as school meals and a one-to-one workbooks/pupil ratio, may have played a role in improving learning outcomes, the evidence is increasingly clear that it is certain pedagogical factors that seem to make the most difference. A coordinated intervention (or "triple cocktail" as it has been dubbed) consisting of: (i) structured (and at least partially scripted) daily lesson plans; (ii) appropriate and high-quality educational materials; and (iii) one-on-one instructional coaching to help teachers transform their instructional practices. This triple cocktail needs to be zippered down to the classroom level as a truly integral package.<sup>45</sup> A longer and more inclusive list of interventions is internationally known as "the 5 Ts," which includes "teaching, text, testing (evaluation), time, and teacher knowledge" (the 'testing' part is elaborated under the next point). As part of this focus on pedagogy, particular attention needs to be paid to having a complete and systematic phonics approach for all home languages in the curriculum. This needs to be accompanied by in-classroom support for teachers from Grade R to Grade 4 to teach effectively and ensure there is an abundance of reading material in different home languages.

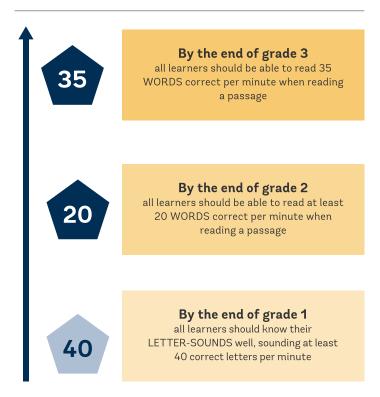
<sup>43</sup> Structured pedagogy is a package of well-organized interventions that work together to change instructional practice.

<sup>44</sup> The reason for the superiority of direct instruction in certain subjects has to do with their inherent nature: they are based on well-defined concepts (e.g., mass, force, speed, acceleration, in physics) whose relationships amongst each other must be completely mastered; they are highly sequential (difficult to study calculus if you do not dominate algebra); and there is a mutual dependence between practice-based skilling and conceptual understanding

<sup>45</sup> The reader may find the analogy of a zip in clothing useful: a set of vertical locking teeth where all the teeth must interlock for the whole tool to be ideally effective, and where if none interlock the tool is not at all effective. The two sides of the zip would be, say, curriculum and assessment. But in education the zip is ideally multi-dimensional: curriculum, scripted lesson plans, books, effective pedagogy, assessment, coaching, and sufficient instructional time.

· Measure learning against benchmarks that can be understood by stakeholders. Both internationally and in South Africa, one of the factors accounting for progress is the use of data to drive policy attention and a mild form of professional accountability. Forms of assessment such as the Early Grade Reading Assessments (EGRA)

Figure 26: Reading benchmarks in Nguni languages



Source: Department of Basic Education, 2024

have been deemed useful, as these have a direct bearing on instruction (Crouch 2020). Knowing the minimum number of letters sounds or words a learner should be able to read per minute at the end of each grade can help all stakeholders in the system, teachers, principals, district and national officers and parents, to monitor progress quickly and effectively. South Africa is one of the very first countries to develop these benchmarks in non-Western languages, though they are yet to be used at scale in any province (Figure 26). The Gauteng Department of Education does use its own simple benchmarking in oral reading fluency. South Africa could explore the implementation of more widespread benchmark-based assessments in foundational reading and mathematics (while benchmarks for foundational mathematics do not currently exist, developing them would likely be less challenging than it would be for reading assessments in multiple languages). It would also be important to ensure that the right degree of tie-in to accountability is in place to prevent schools from manipulating the indicators for better results.

• Promote the Early Childhood Development (ECD) connection: During the last twenty years, South Africa has significantly increased access to one year of pre-primary education (Grade R) but was less successful for young children (ages 0-5) as only half of them have access to an early learning program (such as a creche, nursery, pre-school, playgroup or day mother). The quality of learning is also problematic: 54 percent of children enrolled in early learning programs are unable to do the learning tasks expected of children their age. Global evidence shows that quality ECD services have benefits in terms of improved school readiness, reduced repetition and drop-out rates, and higher achievement in school (Heckman and Masterov 2007; Engle et al. 2011). Improving access to quality ECD services through early learning programs (children aged 3-5 years) or parent support programs (children aged 0-2 years), particularly for children from poor families, is a priority in South Africa. This will develop children's cognitive and socio-emotional skills, helping them to build language and pre-literacy skills that can carry them through the rest of their education. Achieving this will require: (i) increasing access to—and the amount of—the subsidy the Government provides to early learning programs that support children from poor families, (ii) building a quality assurance system that can track the performance of early learning programs to meet the cognitive and non-cognitive needs of young children and; (iii) streamline ECD program registration and subsidy application processes through the Bana Pele ECD registration drive.

Furthermore, technocrats and practitioners "in charge" of early learning services for children aged 0-4 years old and those in charge of Grade R to Grade 3 could work more closely together. The problem of low learning in Grades 1 to 3 cannot be entirely "solved" by just focusing on these grades- it requires better alignment in pedagogy between Grades R and Grade 3 (these grades being 'joined-up'), increased access to quality early learning services before entering pre-school (pre-Grade R), and better transitioning from Grade 3 to Grade 4 when children move from being taught in their mother-tongue to English or Afrikaans as their language of instruction. 46 The transfer of responsibility for coordinating ECD services from the Department of Social Development to the DBE in April 2022 is an important administrative step in this direction. However, further coordination and collaboration are needed with all relevant Departments, including the Department of Health and the Department of Social Development. While there are existing coordination structures, such as the Inter-Ministerial Committee, they are not functioning as well as they could. These multi-sectoral coordination structures will need to be strengthened to provide quality and holistic services that are essential for young children's learning and development.

#### 2.2.2 Action 2: Leveraging the private sector to expand access to, quality of, and competition in education service delivery

South Africa is not alone in its fiscal difficulties while facing the need to deliver improved education services to a growing learner population. Globally, many governments have addressed this fiscal pressure by strengthening partnerships with the private sector. Today, 19 and 27 percent of primary and secondary school enrollments worldwide are private. Among upper-middle-income countries, there is more of a range; for example, private secondary enrollments are at 25 percent in Argentina, 15 percent in China, 10 percent in Georgia, and 7 percent in Turkey with private schools serving a large array of households, from extremely low-income to the rich.

The rise of private school enrollments worldwide has been driven by households and governments alike. Households opt for private schooling based on their perceptions of quality, proximity, cost, availability of places, and accountability, while governments increasingly use private schools as a vehicle to provide publicly funded education by creating partnerships with non-state providers. These contractual arrangements between a public authority and a private supplier for the delivery of education provision are known as Public Private Partnerships (PPP), and PPP contracts can be stipulated in terms of the number of children served or the quality of education provided. Some models of education PPPs are described in Box 5 below.

<sup>46</sup> For children in Grade R, a paper by Stipek et al. (2017), though aimed mostly at the USA, could serve a useful reminder to South Africa; that the alignment of Grade R with other foundation grades (Grades 1-3) is not just about curricular content; but also (more importantly) about how children are taught across these grades, emphasizing children's developmental pathways with academic teaching and learning through play.

#### Box 5: US Charter Schools, Colombian Concession Schools, and UK Academies

The charter school model, which has been widely implemented in the US, is a publicly funded school that is typically governed by an independent organization under a legislative contract with the government. The charter exempts them from certain regulations and assigns them the responsibility over several tasks, including management, training, supervision, monitoring, and maintenance, among others. In return for higher flexibility and autonomy, charter schools agree to meet specific accountability standards and follow state policies. The performance of PPP varies by the type of charter school, operator, authorizer, and organizational and instructional conditions under which they operate. The no-excuses model is often cited as innovative and successful because it targets disadvantaged and minority students and is characterized by frequent teacher feedback, data-driven instruction, high-dosage tutoring, increased instructional time, and high expectations. No excuses charter schools exhibit higher achievement in mathematics and literacy contributing to the reduction of the achievement gap.

Another type of charter model with successful results are the concession schools in Colombia. Under this model, the public sector provides school buildings and invites top independent schools to run them on a contractual basis. These schools have been shown to reduce dropout rates and increase educational achievement in subjects such as mathematics and literacy, particularly for disadvantaged students, while also being cost-effective.

In England, academies are independent state funded schools that are allowed to run in an autonomous manner outside of local authority control (Eyles et al., 2016). Almost all academies are conversions from already existing state schools. The first round of conversions took place in the 2000s, where poorly performing schools were converted to academies. The impact on secondary school pupil performance is positive and significant. Pupils who attend an academy gain on average 0.12 of a standard deviation compared to otherwise similar pupils who attend traditional schools. This effect increases over time, with pupils who attend for four years reaping gains of 0.28 standard deviations - that is, more than a year's worth of learning.

South Africa is an outlier by international standards, with only 5.5 percent of all learners enrolled in private schools for primary and secondary education. This percentage varies among provinces, with only 2.2 percent of learners in KwaZulu-Natal and 13.2 percent of learners in Gauteng. 47 Such low figures are explained by the traditional resistance to PPPs in South Africa on the grounds that: (i) they redirect public resources that could be used to improve public schools to the private sector; (ii) they could exacerbate inequality because private operators often serve learners who come from relatively wealthier backgrounds and; (iii) there is a widespread belief that private operators are motivated by profit, which many argue should not be the case for essential services like education and health.

However, recent provincial initiatives have demonstrated that PPPs can be part of the solution. In the Western Cape, public schools known as 'Collaboration' schools are managed jointly by the provincial education department in partnership with a private, not-for-profit School Operating Partner (SOP). The school is jointly funded by the provincial government and private donor. The SOP has 50 percent representation on the School Governing Board (SGB) and assists with the management and governance of the school while introducing a range of innovations to improve teaching and learning, such as teacher coaching and mentoring, supply of various instructional tools, materials and resources and regular learning assessments. The Collaboration Schools program began with five schools in 2016 and expanded to 13 primary and secondary schools and seven operating partners by 2019 and all these schools serve the poorest quintiles of learners and are no-fee schools. In addition to Collaboration schools, there are about 100 schools in the Western Cape (over 60 percent of which are Q1-Q3) that receive government funding.) Data from the Western Cape indicate that language scores of learners attending these governmentsubsidized independent schools and Collaboration schools increased by between 8 and 12 percentage points (0.4 and 0.6 of a standard deviation) over three years, compared to learners in similar public schools (World Bank, 2024). The existence of affordable independent and Collaboration schools may encourage public schools to improve their quality in response to the increased competition.

<sup>47</sup> World Bank (2024).

One of the main challenges identified by the Education Partnership Group (2022) with the PPP models in South Africa is the limited flexibility of private operators who manage public schools, to make the final decisions on curriculum methodologies and the hiring and firing of teachers, which, under South African law, is a complex co-responsibility between the School Governing Board (SGB) and the provincial government. Going forward, this issue needs to be resolved if more high-quality, experienced private operators are to be enticed into the education sector. This could entail more management flexibility than in public schools. For example, PPP schools may have more autonomy on teacher recruitment, salaries, and work rules. They may also have more leeway concerning financial incentives, such as the implementation of performance-based or attendance-based financial bonuses for teachers, which potentially could increase the quality of the service provided. Nonetheless, PPP contracts must include clear accountability systems because private providers might prioritize certain visible quality metrics over others, leading to a situation where not all aspects of quality, especially those that are less observable or contractible, receive adequate attention.

#### The recommendation of this report is for the Government to further explore different PPP contractual options.

The focus could be on encouraging non-state providers to compete in a well-structured manner, to expand the network of schools, and to improve learning outcomes at minimal cost through systematic support to schools. This approach does not mean outsourcing the management of schools, as seen in some past experiments in Liberia. Instead, it might mean outsourcing specific aspects of the delivery system and evaluating which forms of support are most effective. Again, caution should be taken to ensure there are no perverse incentives subject to Campbell's Law, 48 for example, payments to private operators should not be too simplistically tied to performance. One alternative could be to try to design indicators that are inherently not capable of being gamed or use some indicators to gauge contingent payment and others to audit (Campbell's advice is to use different indicators for different purposes).

Given the need to expand the number of classrooms and schools in South Africa, the government could consider going beyond traditional PPP models in South Africa. These arrangements could take the form of: (i) independent schools serving poor communities receiving government funding; (ii) strengthening the existing Collaboration school model with a legislative framework that provides a clear mission, establishment and closure processes, roles and responsibilities, and oversight mechanisms, including school reporting and evaluation; or (iii) introducing new models (such as Concession, Charter, Academy, or Free schools). For example, underperforming public schools could be supported by bringing in non-state providers to manage the school under a new model (in line with the Charter School model), or disadvantaged learners in over-subscribed schools/under-served areas could be supported to transfer to well-performing independent schools that have excess capacity. For new schools, the government could consider building the school, and non-state providers could bid to manage the schools through contracts that require they commit to high levels of accountability in exchange for greater autonomy. This approach would require secure funding and a diverse range of providers and investors.

#### 2.2.3 Action 3: Improving the efficiency and equity in public spending on education

Improving the efficiency of public spending cannot be achieved overnight, but five entry points can deliver significant improvement in the short term.

(I) Building towards professional accountability of teachers.

The authorities could prioritize addressing the challenge of improving classroom teaching. As explained earlier, one effective approach is to focus on improving teacher accountability, especially professional accountability, through the development of Teacher Professional Standards (TPS). 49 These standards could focus on (i) standards for Initial Teacher Education (ITE), which encompasses pre-service teacher training at the higher education level, and (ii) standards for continuous professional development of currently employed teachers. While both standards are necessary, the initial focus could be on ITE. South Africa is currently at a critical juncture, as a significant number of older teachers are expected to retire in the next decade. In 2021, approximately 46 percent of all educators and 69 percent of senior educators in South Africa were 50 years of age or older (Böhmer et al, (2023) and Gustafsson (2023)). If the opportunity to train teachers properly before they enter the workforce is overlooked, the country will face ongoing challenges with poorly trained teachers that will need remediation indefinitely (or at least until the retiring cohort is replaced by properly trained educators), using coaching models that can be quite expensive.

<sup>48</sup> The Campbell's Law posits that "the more important a metric is in social decision making, the more likely it is to be manipulated".

<sup>49</sup> All the forms of accountability bring information, justifying the effort to improve the collection and dissemination of data on learning levels. However, one should be mindful of raising the stakes on any form of measurement too much by rigidly linking indicators to accountability (e.g., any crude form of merit pays or pay-for-performance), to avoid Campbell's Law. There are many examples of scandals in schooling, worldwide, due to over-reliance on indicators or overtying them to financial rewards.

To improve ITE, education authorities (mostly the DBE) will need to work more closely with other key stakeholders including the Department of Higher Education and Training, key teachers' unions such as the South African Democratic Teachers' Union, and the National Professional Teachers' Organization of South Africa, as well as the South African Council of Educators to establish standards for initial teacher education that support effective practices for training teachers in foundational reading and mathematics. Such dialogue could help build more consensus on what works and what can be done to improve teaching based on evidence accumulated by each stakeholder in South Africa.

It is worth remembering that teachers, individually and collectively, were at the forefront of opposition to apartheid. Habits of contestation were appreciated and became institutionally rooted in South Africa. Consequently, the issue of accountability in South Africa is fraught with complexity yet it seems that more of it, of the appropriate type, is needed. It would seem beneficial for South Africa to engage in deep, formalized, collective thinking regarding types and levels of accountability tailored to its own experience and history while drawing inspiration from global practices. This kind of endeavor would likely require the active participation of unions, the government, and civil society including parents.

#### (II) Review of school infrastructure and educational materials costs

Given the focus on improving conditions in numerous existing schools and building new ones, the South African government may need to closely examine the cost-effectiveness of current school construction models. This analysis could involve studying the variations in costs and benefits among different contractors, school infrastructure designs, implementing agencies, and provinces. The analysis could also explore the industrial organization and market structure of contractors -specifically, competitiveness and transparency of their relationships with various levels of government. Comparisons with nearby countries and other sectors might also provide valuable insights into these cost issues. A similar analysis could also address another key input, the costs associated with books and learning materials, which appear to be high in South Africa, yet there seem to be few analytical studies that compare these costs with those of other countries or assess the market structure of the book sector in South Africa.

While it may be that compared to the wage bill, the costs of classroom construction and teaching and learning material are relatively minor, investigating these costs would not be overly expensive. Achieving a better social consensus around how to reduce—or prevent further increases in—these costs may be less complex than addressing issues related to teacher efficiency, cost, and accountability.

#### (III) Moving from pilot and small programs to system-wide implementation

The authorities could be more selective in their program choices, scaling up those that have proven effective and discontinuing those that have not. South Africa has implemented various small to medium-scale tightly integrated "triple cocktail" interventions that incorporated structured, at least partially scripted lessons, support, and a mild form of accountability through coaching, alongside regular learning assessments. Many of these programs have demonstrated impressive gains in learning outcomes. However, there are other programs in South Africa that have not been evaluated but continue to be implemented. There seems to be a failure to scale up evidence-based interventions that have shown success and implement them system-wide, as well as a failure to evaluate other large-scale interventions.

The reasons why South Africa has hesitated to make that leap to scale up effective early-grade reading and mathematics interventions are not fully clear, but four key factors stand out. First, there is insufficient acceptance that interventions can truly make a difference; second, there is a reluctance to incur costs, especially expenses associated with teacher coaching; third, there is fear or reluctance to take accountability (if there is a clear and an implementable package that works, it becomes more difficult to evade responsibility when issues arise); and fourth, there is a lack of what might be termed "pedagogical management" capacity to provide all the support in an integrated, "zippered up" manner from levels outside and above the classroom, from head teacher (or whoever the school-level pedagogical leader is), to circuit, to district, to Province.

One barrier to scale Early Grade Reading (EGR) interventions related to the cost of coaching teachers deserves special focus. At a moment of fiscal pressure, the suggestion to simply add more personnel (coaches) is unlikely to be well received. However, South Africa could consider repurposing some existing personnel who are currently less productive in their roles to become effective coaches. Furthermore, Spaull and Taylor (2022) propose more creative ways to think about this issue: for example, it may not be necessary to have coaches in every school permanently, and technology could be leveraged to reduce costs.

South Africa, perhaps using the National Reading Panel,50 ought to reach greater consensus on how to scale up early-grade reading and mathematics programs while supporting the DBE in implementing necessary changes. It is important to guard against the politicization of promising alternatives, which may be dismissed by politicians seeking quick fixes that lack evidence. Such quick solutions often have to do with the promises of "edtech" vendors.51 These issues must be tackled with applied political economy techniques such as building better coalitions, leveraging influential political leaders, improving social marketing via social media, and utilizing successful teachers as influencers—an area that seems overlooked in education.

(IV) Better targeting of resources and structural change in underperforming schools and for learners.

Improving the targeting of resources to schools based on income levels and learning performance should be a priority moving forward. As described above, currently, the system for equitable public budget allocations to schools has several weaknesses. The supply of teaching ability (as opposed to merely the number of teachers), is unequal for at least two reasons: (i) wealthy schools (Q5) can raise additional funds to supplement teacher benefits and attract the most productive teachers, and (ii) schools that charge fees have the discretion to hire additional teachers funded by SGB resources.<sup>52</sup> While the inequalities in learner-teacher ratios are well-understood and measured, the inequality in terms of actual teaching ability that results both from publicly paid teachers with greater teaching ability and accountability, or SGB-paid teachers, is under-researched, because of difficulties in measurement.

What can be done to address these weaknesses? One approach might be to reduce the funding for teacher wages in schools that do not serve low-income communities, specifically, those categorized as Q5 schools that can raise additional funds through SGBs. Alternatively, more centralized deployment of teachers to schools by the province, for example, could support better targeting of more productive teachers to poorer performing schools. Yet another option is targeting individual learners based on their family's income rather than which schools they attend. For example, every learner who benefits from the Child Support Grant (CSG) program could automatically qualify for a fee exemption rather than the geographical targeting of schools through the quintile system. However, these options may face resistance from stakeholders in the short term as the quintile system and teacher recruitment by SGBs are deeply entrenched in South Africa and serve the needs of parent groups in Q4 and Q5 schools who have significant sway over these policies.

Another option could be to reform the conditional grants provided to provinces by making them more performancebased and consolidating the six existing grants. While this may not greatly reduce costs, it could increase the value for money spent and encourage provincial education departments to improve service delivery. Similar provincial performance models have proven successful in countries like Brazil; however, implementing such performance measures in South Africa in the short term will be difficult due to the limited technical and managerial skills of mid-level officials, as well as the absence of an effective integrated data monitoring system described earlier.

The options proposed above all have merit and would improve equitable financing of education in South Africa. Careful consideration could be given to their design and implementation. However, one short-term policy intervention that could address multiple issues is to apply lessons learned from experimental experiences on a larger scale, starting with learners in the poorest schools who also demonstrate the lowest levels of academic performance. One could argue that poor learning performance is so widespread that targeting interventions makes no sense. Thus, the suggestion in this report is a dynamic one: start with targeting schools based on poverty and performance, and as the system learns and as the fiscal situation improves, expand the skills and accountability improvements to other schools. Specifically, one could start with Q1 to Q3 schools that struggle with learning outcomes, though this would require a standardized learning assessment system, as discussed elsewhere in this report. The goal would be to integrate all effective inputs identified through experimental results and apply them intensively in these schools. So, target schools and learners not only on income or wealth but also on performance. The idea would be to enhance teaching ability with targeted initiatives, which could include coaching or employing specially trained resource teachers who are knowledgeable in effective teaching techniques and who could serve clusters of schools. Additionally, these initiatives could be combined with public-private partnership (PPP) models aimed at boosting learning in existing schools by providing support to teachers without taking over the entire school. For example, private providers could be brought in with the sole purpose of training and coaching teachers or introducing blended learning options.

 $<sup>50\ \</sup> The \ National\ Reading\ Panel\ is\ an\ independent,\ high-level\ panel\ of\ eminent\ and\ respected\ South\ African\ leaders\ in\ civil\ society,\ business,\ and\ formerly\ government,\ business\ governme$ who, over their ten-year term, will provide long-term apolitical leadership to ensure that all South African children learn to read for meaning in their home-language, and in English, by age 10 by 2030.

<sup>51</sup> Taylor (2024).

<sup>52</sup> Aside from the wage incentive, parents of learners in these schools are most likely to be more demanding, well-educated, and can bear the transaction costs of coordinating among themselves with school management in the selection of teachers. On the opposite side of the income spectrum, teachers that are allocated to schools with weaker SBGs and weaker school management may end up being bureaucratically allocated in a way that does not distinguish real teaching ability from qualifications on paper.

#### (V) Improving coordination and utilization of data

South Africa has many programs and datasets that require better coordination, along with better utilization of data. There is a need to strengthen the education department's capacity for data collection, research, monitoring and evaluation, as existing data is not being fully utilized. Digital data systems have been established in some provinces but require better quality assurance mechanisms to ensure that the data entered into the system is reliable, analyzed, and made available to stakeholders in a timely manner. Political leaders can leverage this data to set clear and ambitious goals for sector stakeholders and the public, such as establishing a target for children to read for meaning by a certain age. Regular data collection and analysis will enable the prioritization and adjustment of policy reforms and interventions to meet these established goals. Additionally, anonymized data from various education databases could be made publicly available, allowing researchers to connect it with other relevant datasets. This approach would foster collaboration in analyzing and improving outcomes in the education system.





#### **Basic education datasets**

#### **Education Management Information System** (EMIS):

- · South African School Administration and Management System (SA-SAMS)
- · SNAP Survey for Ordinary Schools
- · Annual Survey of Schools
- · Learner Unit Record Information and Tracking System (LURITS)
- · Centralized Education Management Information System (CEMIS)

#### Performance:

- · National Senior Certificate (NSC)
- South African Systemic Evaluation (SASE)
- TIMSS, PIRLS, SEACMEQ

#### Management:

- Quality Management System (QMS)
- · Education Facility Management System
- · Personal and Salary System (PERSAL)

#### Other:

- School Monitoring Survey
- Teaching and Learning Survey (TALIS)





# Key lessons from the Sobral experience in Brazil

At first glance, it may seem unusual to try to learn from a single municipality in Brazil, but this case is truly remarkable and well-studied, and the conditions are not too different from those of South Africa. Research shows that the same tactics have been used in other cases where foundational learning has been a driver of overall educational quality improvement. The remarkable nature of these achievements, despite not having a huge level of resources, is easily summarized. While we do not have GDP data for Sobral itself, GDP per capita in its home state of Ceará is only two-thirds that of South Africa. So, in terms of resources, comparisons make sense. Sobral went from being ranked 1366th (out of 5570) among municipalities in Brazil's municipal index of educational quality to 1st in just over 12 years. Some of its public schools now even outrank private schools in Brazil's richest state despite having only one-third of the per capita income. Some 85 percent of Sobral students performed at least at an 'adequate level' (this percentage went up by 60 points in 12 years), as opposed to about 50 percent in Brazil as a whole. Finally, Sobral led the way for the whole state of Ceará (population 9 million) where it is expected to successfully implement similar reforms. This example strongly supports that these sorts of reforms are scalable.

The first lesson from the Sobral experience is a meta-lesson highlighting the importance of the sequence and simultaneity of coordination in implementing measures. All the specific measures taken in Sobral, as well as in other case studies that strongly reinforce its findings, were executed in a sequence that proved to be optimal or nearly optimal. Once a steady state was achieved, all measures operated effectively, both individually and in a coordinated manner. This meta-lesson is easily overlooked if one concentrates only on the specific measures implemented, as outlined in the table below. Given the importance of sequence, we have listed the measures (more or less) chronologically as they were taken, with the first ones providing supportive context before the measures began. We present the measures in a table format to make it easier to explain which measures South Africa is already implementing, and which ones need further attention.

Measure	Degree of implementation in South Africa
Correct sequencing of initial measures, followed by simultaneity and coordination at scale. This is a metalesson and was operational during the whole process. The measures below are sequential (more or less).	South Africa seems to have followed a similar sequence in the initial stages (see rows below), but it appears to have faced challenges with scaling, particularly regarding simultaneous operations at scale.
Political commitment from the highest executives (at national, provincial, and municipal levels) to do whatever it takes was achieved prior to the technical discovery of the precise formula, and thus initially focused on common-sense and more generic measures.	South Africa's leaders appear to be aware of the existing issues; however, there seems to be a lack of firm commitment to taking the necessary actions. "To do what it takes" would involve strongly fostering a consensus on what constitutes sufficient evidence for scaling up initiatives, identifying that evidence (such as around structured pedagogy), understanding the economic and financial returns on the necessary investments, and dedicating focused and targeted resources required for scaling.
Ensure at least the basic material conditions in terms of spending, targeting of resources.	South Africa has established most of these through targeted finance, provision of learning materials, reasonable pay for teachers, etc. Sustainability could be an issue.
Focus on attendance, reducing dropouts, ensuring student tracking.	South Africa has worked on some aspects of this, but it is, arguably, not as big a problem as it was in Brazil.

Measure	Degree of implementation in South Africa
Raise awareness of the learning crisis, by firstly measuring the situation. This measurement could focus on foundational learning and could be a part of a broader assessment and accountability strategy. The measurement system will enable the establishment of goals or benchmarks that can be effectively used at the teacher level, while also providing valuable information to report at higher levels.	South Africa has made significant progress in measurement, including establishing foundational reading benchmarks. There are excellent examples, such as Gauteng oral fluency benchmarks which demonstrate the effective use of simple metrics. However, measurement in mathematics remains more challenging. The implementation of a comprehensive and sustained measurement approach, which includes foundational learning assessment, seems to be difficult to achieve.
Use of the measurement system to allocate support for schools.	South Africa has experience with this, but primarily through pilot programs, and at a systemic level, but these efforts are not consistently aligned with other measures listed in this table, such as explicit or structured pedagogy and coaching.
Design an accountability framework that connects performance with rewards avoiding a simplistic merit pay system. This framework should promote mutual accountability between teachers and the state, rather than placing the responsibility solely on teachers.	While South Africa has emphasized the importance of supporting teachers, there is no clear consensus on the need to link this support to improved accountability for its use. There also appears to be little agreement that accountability should be reciprocal e.g., that the effectiveness of teacher support must also be evaluated.
Create a structured pedagogy which emphasizes direct and explicit instruction of fundamental skills and follows a clear scope and sequence and utilizes an evidence-based curriculum. While it may require some trial and error initially, once an effective model is identified, there should be a commitment to using administrative authority to implement it consistently.	This has been demonstrated to work experimentally in South Africa, and there have been some limited successes at scale. However, there is no consensus on how best to scale these efforts or what strategies to prioritize.
Teacher support via some form of coaching or school-based instructional leadership.	Although South Africa has experience with teacher support at an experimental level, there is room for more creative thinking regarding how to make effective and evidence-based measures, like coaching, more affordable on a larger scale. Alternatively, tackling the political and economic factors at play may be necessary if achieving complete affordability seems unattainable.

Sources: Crouch (2020), Cruz and Loureiro (2020), Loureiro, Cruz, Ildo and Evans (2020)

# Annex 3



### The Mississippi Miracle

Mississippi, once near the bottom of national education rankings, has made remarkable strides in improving student literacy. Through targeted, evidence-based reforms, the state now ranks among the top 20 for Grade 4 reading, a dramatic rise from 49th place in 2013. This success offers valuable lessons not only for the United States but for the global community as well.

In 2013, Mississippi implemented the Literacy-based Promotion Act, a strategy that focused on early literacy and teacher development. The state invested in the science of reading, providing K-3 teachers with training and support to help students master reading by the end of Grade 3. This comprehensive approach also included targeted support for struggling readers and, controversially, retention for students who failed to meet reading standards. The state also aligned the state test to the National Assessment of Education Performance (NAEP).

These reforms have paid off. Mississippi has seen improvements in both reading and math, with Grade 4 students improving significantly on national assessments. Recent research confirms that Mississippi significantly improved Grade 4 reading and math scores on national tests. A study by Noah Spencer looked at how a specific literacy strategy affected students and found strong evidence that it boosted scores. Spencer's findings show that students who were exposed to this strategy from kindergarten to Grade 3 gained about a year's worth of learning in both reading and math by the time they took the Grade 4 tests. Other previous research supports these results.

What's more, these changes were achieved despite being one of the lowest spenders per pupil in the nation, proving that strategic investments in teacher development and early literacy can yield impressive results even with limited resources.

Mississippi's approach shows that early interventions in literacy can have a lasting impact—and could provide a solution for other regions facing similar challenges.

The progress made in Mississippi—the second poorest and lowest income state—could be a wake-up call. Just as the U.S. responded to the launch of Sputnik by reassessing its educational priorities, it now needs to address the educational setbacks caused by the pandemic and long-standing learning gaps. By adopting policies focused on early literacy and investing in teacher training, states and countries can give students the foundation they need for future success.

# References

Akkari, A. (2022). Early childhood education in Africa: Between overambitious global objectives, the need to reflect local interests, and educational choices. Prospects. Aug 8;52(1-2):7-19. doi:10.1007/s11125-022-09608-7.

Angrist, N., Beatty, A., & Crossley, C. (2023) 20 for 20: The tutor is calling - Targeted instruction by phone boosts learning across six countries. J-PAL Blog. https://www.povertyactionlab.org/blog/5-8-23/20-20-tutor-callingtargeted-instruction-phone-boosts-learning-across-six-countries

Bashir, S., Lockheed, M., Ninan, E. & Tan, J.P. (2018). Facing Forward Schooling for Learning in Africa. Washington, D.C.: The World Bank. https://openknowledge.worldbank.org/server/api/core/bitstreams/e68bf6f9-8496-54f5a003-45505560a346/content

Bruns, B., Schneider, B.R. and Saavedra, J. (2023). The Politics of Transforming Education in Peru: 2007-2020. RISE Working Paper Series. 23/135. https://doi.org/10.35489/BSG-RISE-WP\_2023/135

Böhmer, B. & Wills, G. (2023). COVID-19 and inequality in reading outcomes in South Africa: PIRLS 2016 and 2021. COVID-Generation working paper. https://resep.sun.ac.za/wp-content/uploads/2023/12/2023-12-22-Bohmer\_ Wills\_PIRLS\_inequality.pdf

Burgess, S., Greaves, E., Vignoles, A., and Wilson, D. (2015). What parents want: School preferences and school choice. Economic Journal 125(587): 1262-1289.

Cooper, A., Mahali, A., de Kock, T., Radasi, Z., Mcata, and B., Soudien, C. 2021. Evaluation Prepared for the Pilot Support Office of the Public-School Partnerships Programme Evaluation of the Public School Partnerships (PSP) Pilot Programme. Human Sciences Research Council. Pretoria, South Africa.

Crawford, M., Raheel N., Korochkina, M., & Rastle, K. (2024). Inadequate foundational decoding skills constrain global literacy goals for pupils in low-and middle-income countries. Nature Human Behaviour, 1-10. https://doi. org/10.1038/s41562-024-02028-x

Crouch, L. & Hoadley, U. (2018). The transformation of South Africa's system of Basic Education. In Levy at al. (2018).

Crouch, L. (2020). Systems Implications for Core Instructional Support Lessons from Sobral (Brazil), Puebla (Mexico), and Kenya. RISE Insight Series. 2020/020. https://doi.org/10.35489/BSG-RISE-RI\_2020/020

Crouch, L., King, K., Olefir, A., Saeki, H. & Savrimootoo, T. (2020). Taking Preprimary Programs to Scale in Developing Countries: Multi-source Evidence to Improve Primary School Completion Rates. IJEC 52, 159-174. https://doi. org/10.1007/s13158-020-00271-7

Crouch, L., Rolleston, C., and Gustafsson, M. (2021). Eliminating global learning poverty: The importance of equalities and equity. International Journal of Educational Development. Volume 82, April 2021. https://doi.org/10.1016/j. ijedudev.2020.102250

Cruz, L. & Loureiro, A. (2020). Achieving World-Class Education in Adverse Socioeconomic Circumstances: The Case of Sobral in Brazil. Washington, D.C.: World Bank. https://documents1.worldbank.org/curated/ en/143291593675433703/pdf/Achieving-World-Class-Education-in-Adverse-Socioeconomaic-Conditions-The-Case-of-Sobral-in-Brazil.pdf

Dallavis, J.W. and Berends, M. (2023). Charter schools after three decades: Reviewing the research on school organizational and instructional conditions. Education Policy Analysis Archives 31.

Darling-Hammond, L. (1989). 'Reading 8: Accountability for professional practice.' Edited extract from Hammond, L. Teachers College Record, Volume 91, Number 1, Fall 1989. New York: Teachers College, Columbia University: 1989. New York Teachers College, Columbia University: 59-67



Darling-Hammond, L., Ascher, C. (1991). "Creating Accountability in Big City School Systems." New York: Columbia University. Urban Diversity Series No. 102. https://files.eric.ed.gov/fulltext/ED334339.pdf.

Dulvy, E., N., Devercelli, A., van Der Berg, S., Gustafsson, M., Pettersson, G., Kika-Mistry, J., & Beaton-Day, F. (2023). South Africa Public Expenditure and Institutional Review for Early Childhood Development (ECD PEIR) (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099192001242341964/ P1756791e5e59bde1ad6714d311b6261dd284d0e6d65

Education Partnerships Group (EPG). 2022. Western Cape Education Partnership Research: Identifying success factors for school improvement.

Education Partnerships Group (EPG). 2021. Collaboration Schools Policy Review Process: Education Partnership Governance Structures.

Eyles, A., Hupkau, C., and Machin, S. (2016). Academies, charter, and free schools: do new school types deliver better outcomes? Economic Policy 31(87): 453-501.

Fleisch, B. (2023). Theory of Change and Theory of Education: Pedagogic and Curriculum Defects in Early Grade Reading Interventions in South Africa. Education as Change, 27(1), 1-14.

Fleisch, B., & Schöer, V. (2023). Storybooks in hand: A randomized control trial of a classroom library model. International Journal of Educational Development, 96, 102705. https://doi.org/10.1016/j.ijedudev.2022.102705

Fleisch, B., & Scher, V. (2024). The effects of teaching assistants on letter knowledge of foundation phase students in South Africa: Findings from an exploratory trial. International Journal of Educational Research Open, 7, 100383. https://doi.org/10.1016/j.ijedro.2024.100383

Glazerman, S. and Dotter, D. (2017). Market signals: Evidence on the determinants and consequences of school choice from a citywide lottery. Educational Evaluation and Policy Analysis 39(4): 593-619.

Gove, A. and P. Cvelich. (2011). Early Reading: Igniting Education for All. A report by the Early Grade Learning Community of Practice. Revised Edition. Research Triangle Park, NC: Research Triangle Institute.

Gustafsson, M. (2024a, 2 Jul). Achieving quality schooling for all South Africa's learners is within our reach. Daily Maverick. https://www.dailymaverick.co.za/article/2024-07-02-achieving-quality-schooling-for-all-south-africaslearners-is-within-our-reach/

Gustafsson, M. & Nonkenge, K. (forthcoming, draft 2024b). Basic education policy: From 1994 to now. Cape Town, Economic Research Southern Africa.

Gustafsson, M., & Taylor, S. (2022). What lies behind South Africa's improvements in PIRLS? An Oaxaca-Blinder analysis of the 2011 and 2016 data. Stellenbosch: Stellenbosch University.

Gustafsson, M. & Taylor, N. (2022). The Politics of Improving Learning Outcomes in South Africa. Research on Improving Systems of Education. PE03. https://doi.org/10.35489/BSG-RISE-2022/PE03

Hanushek, E., & Woessmann, L. (2012). Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation. Journal of Economic Growth, 17(4), 267-321.

Hanushek, E, & Woessmann, L. (2015). The Knowledge Capital of Nations: Education and the Economics of Growth. MIT Press.

Hastings, J. & Weinstein, J. (2009). Information, School Choice, and Academic Achievement: Evidence from Two Experiments, The Quarterly Journal of Economics, Volume 123, Issue 4, November 2008, Pages 1373-1414, https:// doi.org/10.1162/qjec.2008.123.4.1373

Hoadley, U. & Boyd, C. (2022). Early grade reading instruction in South African classrooms: 2010-2020. In Spaull, N. & Taylor, S. (2022). Interventions. Early Grade Reading and Mathematics Interventions in South Africa. Cape Town: Oxford University Press South Africa. https://www.calameo.com/oxford-university-press-south-africa/ read/006710753e7d90d4a4755

Hoadley, U. & Boyd, C. (2022). Reading Instruction in South African classrooms, 2010-2020. In: E. Pretorius and N. Spaull, (Eds.), (2022, forthcoming). Early grade reading and writing. Oxford University Press. ISBN: 9780190751715

Jansen, J., & Taylor, N. (2003). Educational change in South Africa 1994-2003: case studies in large-scale education reform.

Kanjee, A., & Moloi, Q. (2014). South African teachers' use of national assessment data. South African Journal of Childhood Education, 4(2) 90-113. ISSN: 2223-7674

Kirby, S. N., & Stecher, B. (2004). Introduction. In S. N. Kirby & B. Stecher (Eds.), Organizational Improvement and Accountability: Lessons for Education from Other Sectors (1st ed., pp. 1-10). RAND Corporation. http://www.jstor. org/stable/10.7249/mg136wfhf.7

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. Educational Psychologist, 41(2), 75-86.

Klahr, D., & Nigam, M. (2004). The equivalence of learning paths in early science instruction: Effects of direct instruction and discovery learning. Psychological Science, 15(6), 661-667.

Le Houerou, P. & Taliercio, R. (2002). Medium Term Expenditure Frameworks: Preliminary Lessons from Africa. The World Bank. Africa Region Working Papers No. 28. https://documents1.worldbank.org/curated/ en/720841468741912384/pdf/multi0page.pdf.

Levy, B., Cameron, R., Hoadley, U., & Naidoo, V., eds. (2018). The Politics and Governance of Basic Education A Tale of Two South African Provinces.

Lindblom, C.E. (1959). "The science of "muddling" through," Public Administration Review, 19(2): 79-88.

Lopez, J., Behrman, J., Cueto, S., Favara, M. & Sánchez, A. (2024). Late-childhood foundational cognitive skills predict educational outcomes through adolescence and into young adulthood: Evidence from Ethiopia and Peru. Economics of Education Review, Volume 100, Article Number 102543.

Loureiro, A., Cruz, L., Ildo, L. & Evans, D. (2020). The State of Ceará in Brazil is a Role Model for Reducing Learning Poverty. World Bank, Washington, DC. http://hdl.handle.net/10986/34156

Mayer, R. E. (2004). Should there be a three-strike rule against pure discovery learning? American Psychologist, 59(1), 14-19.

McKay, V. & Spaull, N. (2022). Changing the 'grammar of schooling' in South Africa: The case of the DBE Workbooks. In Spaull, N. & Taylor, S. (2022).

Mohohlwane, N. L. (2016). The contribution of randomised control trials (RCTs) to improving education evaluations for policy: Evidence from developing countries and South African case studies (Doctoral dissertation, University of the Witwatersrand, Faculty of Humanities, School of Education).

Mohohlwane, N., Wills, G., & Ardington, C. (2022). A review of recent efforts to benchmarkearly reading skills in south African languages. In Early grade reading in South Africa (Vol. 1, pp. 83–108). Oxford University Press.



Mohohlwane, N., Taylor, S., Cilliers, J., & Fleisch, B. (2023). Reading Skills Transfer Best from Home Language to a Second Language: Policy Lessons from Two Field Experiments in South Africa, Journal of Research on Educational Effectiveness, DOI: 10.1080/19345747.2023.2279123

Morgan PL, Farkas G, & Hibel J. (2008). Matthew Effects for Whom? Learning Disabilities Quarterly. Nov 1;31(4):187-198. PMID: 26339117; PMCID: PMC4554759.

Motilal, G. & Fleisch, B. (2018). The triple cocktail programme to improve the teaching of reading: Types of engagement. South African Journal of Childhood Education, 10, No 1. DOI: https://doi.org/10.4102/sajce.v10i1.709

Piper, B., & Dubeck, M. (2024). Responding to the learning crisis: Structured pedagogy in sub-Saharan Africa. International Journal of Educational Development, 109, 103095.

Piper, B. & Zuilkowski. (2015). Teacher coaching in Kenya: Examining instructional support in public and nonformal schools. Teaching and Teacher Education 47. 173-183.

Pritchett, L. (2001). Where has all the education gone? The World Bank Economic Review. Vol. 15, No. 3. https:// documents1.worldbank.org/curated/pt/859821468180273788/pdf/773740JRN020010l0the0Education0Gone.pdf

Qvist, J. (2023). Learning profiles and reading benchmarks: Trends from South African data on early grade reading. Master's Thesis. University of the Witwatersrand.

Ramadiro, B., & Porteus, K. (2017). Foundation phase matters: Language and learning in South African rural classrooms. Magic Classroom Collective Press.

Sapire, I., Isaac, P., Mpofu, S., Sako, L., Seoloana, M., Ndamase, T., & Mafilika, V. (2022). The implementation of the Bala Wande programme in Grade 1 in three provinces: Lessons learned, in Spaull, N. & Taylor, S. (2022).

Snilstveit, B., Stevenson, J., Phillips, D., Vojtkova, M., Gallagher, E., Schmidt, T., & Eyers, J. (2015) 'Interventions for improving learning outcomes and access to education in low-and middle-income countries: a systematic review.' http://www.3ieimpact.org.

Spaull, N. (2016). Shaky data skews literacy results (M&G article on SACMEQ IV). https://nicspaull.com/2016/09/25/ shaky-data-skews-literacy-results-mg-article-on-sacmeq-iv/

Spaull, N. & Taylor, S. (2022). Early Grade Reading and Mathematics Interventions in South Africa: Interventions. Cape Town: Oxford University Press Southern Africa. https://www.calameo.com/oxford-university-press-southafrica/read/006710753e7d90d4a4755.

Spaull, N. & Taylor, S. (2022). Impact or scale? The trade-offs of early grade reading and mathematics interventions in South Africa. In Spaull and Taylor (2022).

Spaull, N. & Pretorius, E. (Eds). (2022). Early Grade Reading in South Africa. Oxford University Press. ISBN: 9780190751715

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. Reading Research Quarterly, 21, 360-407.

Stipek, D., Clements, D., Coburn, C., Franke, M. & Farran, D. PK-3: What Does It Mean for Instruction? Social Policy Report. Vol. 30, No. 2. Society for Research on Child Development. https://www.srcd.org/research/what-doespk-3-instructional-alignment-mean-policy-and-practice

Stern, J., Jukes, M., Cilliers, J., Fleisch, B., Taylor, S. & Mohohlwane, N. (2024). Persistence and Emergence of Literacy Skills: Long-Term Impacts of an Effective Early Grade Reading Intervention in South Africa. Journal of Research on Educational Effectiveness. https://doi.org/10.1080/19345747.2024.2417288

Taylor, N. (2017). 'Towards Teacher Professional Knowledge and Practice Standards in South Africa, 'Commissioned paper for Centre of Development and Enterprise. Johannesburg, South Africa. https://cde.org.za/wp-content/ uploads/2018/06/CDE-Insight-Teacher-Professional-Standards-For-South-Africa.pdf

Taylor, N. (2021). The dream of Sisyphus: Mathematics education in South Africa. South African Journal of Childhood Education, 11(1), 1-12. http://dx.doi.org/10.4102/sajce.v11i1.911

Taylor, N., & Mawoyo, M. (2022). Professionalising teaching: The case of language and literacy. Early grade reading in South Africa, 164-178.

Taylor, N. (forthcoming). "School Foundations: The Role of Initial Teacher Education." Draft. Written as part of the Teacher Demographic Dividend Project, managed by the Socioeconomic Policy Unit (ReSEP) at Stellenbosch University.

Taylor, S., & Spaull, N. (2015). Measuring access to learning over a period of increased access to schooling: The case of Southern and Eastern Africa since 2000. International Journal of Educational Development, 41, 47-59.

USAID and DBE. United States Agency for International Development and Department of Basic Education. (2022). Benchmarking Early Grade Reading Skills in South Africa: Technical Report. Setswana Home Language. https:// www.education.gov.za/Portals/0/Documents/Reports/ReadingBenchmarks22/10.%20Technical%20Report-Setswana%20Early%20Grade%20Reading%20Benchmarks.pdf.

Van der Berg, S. (2015). What the Annual National Assessments can tell us about learning deficits over the education system and the school career. South African Journal of Childhood Education. 5(2): 28-43.

Van der Berg, S., Girdwood, E., Shepherd, D., van Wyk, C., Kruger, Viljoen, J., Ezeobi, O. & Ntaka, P. (2013). The Impact of The Introduction of Grade R On Learning Outcomes. Research on Socio-Economic Policy (RESEP). Department of Economics. University of Stellenbosch.

Van der Berg, S. van der, van Wyk, C., Selkirk, R., & Hofmeyr, H. (2021). Learner flows through schools: Using high quality administrative data to understand education system performance. Available at SSRN 4009654.

Van der Berg, S., Wills, G., Selkirk, R., Adams, C., & van Wyk, C. (2019). The cost of repetition in South Africa.

Van der Berg, S. (2021). Estimating the impact of five early childhood development programmes against a counterfactual. Ilifa Labantwana & ReSEP. No. ECD WP 006/2023. https://resep.sun.ac.za/wp-content/ uploads/2021/11/Estimating-the-impact-of-five-early-childhood-development-programmes-against-acounterfactual-V06.pdf

Van der Berg, S. (2023). The cognitive gains case for ECD: Missing pieces of the puzzle. Ilifa Labantwana & ReSEP. No. ECD WP 001/2021. https://ilifalabantwana.co.za/wp-content/uploads/2023/09/390-Cognitive-case-for-ECD-v03.pdf

Van Wyk, C. (2021). Learner flow through patterns in the Western Cape using CEMIS datasets from 2007 to 2019: A longitudinal cohort analysis. Department of Economics, University of Stellenbosch.

Venkat, H., & Roberts, N. (2022). Children doing mathematics with confidence in the early grades by 2030: what will it take? In Venkat and Roberts (2022).

Venkat, H., & Roberts, N. (Eds.). (2022). Early Grade Mathematics in South Africa. Oxford University Press Southern Africa.

Venkat, H., & Sapire, I. (2022). Early grade mathematics in South Africa between 2000 and 2010: What did we know in 2010, and how did this set the stage for the 2010–2020 decade? (Vol. 2). Oxford University Press.



Venkat, H. and Spaull, N. (2014). What do we know about primary teachers' mathematical content knowledge in South Africa? An analysis of SACMEQ 2007. International Journal of Educational Development. Volume 41, March 2015, Pages 121-130. https://doi.org/10.1016/j.ijedudev.2015.02.002

Wills, G. (2023). Early grade repetition in South Africa Implications for reading. Research on Socio-Economic Policy (ReSEP). University of Stellenbosch.

Wills, G., & Qvist, J. (2023). Repetition and dropout in South Africa before, during, and after COVID-19. Covid-Generation Research Report. Stellenbosch University, RESEP.

World Bank. (2020). Cost-Effective Approaches to Improve Global Learning. https://tinyurl.com/yc4ekta4.

World Bank. (2023). Going Beyond the Infrastructure Funding Gap: A South African Perspective. Basic Education Report. https://www.dbsa.org/sites/default/files/media/documents/2023-08/Beyond%20the%20Gap%20-%20 Basic%20Education%20Report%20-%202023.pdf

World Bank (2024). Western Cape Education Sector Analysis. https://documents1.worldbank.org/curated/ en/099091624103524415/pdf/P5021141b03f880bc1a7881909a0c8f5950.pdf



View this report online: https://www.worldbank.org/en/country/southafrica

