# The Impacts of COVID-19 on Education Spending in Africa and Possible Recovery Pathways



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#### UNICEF AFRICA

# EDUCATION AND SOCIAL POLICY WORKING PAPER

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# The Impacts of COVID-19 on Education Spending in Africa and Possible Recovery Pathways

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**Keywords:** Education funding, education spending, education expenditure, human capital investment, public finance, government revenue, government debt, fiscal space, COVID-19

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# **Acronyms**

CCRT Catastrophe Containment and Relief Trust

CEMAC Central African Economic and Monetary Community

DSSI Debt Service Suspension Initiative

G20 Group of 20

GDP gross domestic product

GNI gross national income

HIC high-income country

IMF International Monetary Fund

LIC low-income country

LMIC lower-middle income country

ODA official development assistance

PBB program-based budgeting

PER Public Expenditure Review

PPP purchasing power parity

SDG Sustainable Development Goal

SDR Special Drawing Right

UMIC upper-middle income country

UIS (UNESCO) Institute for Statistics

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations Children's Fund

WAEMU West Africa Economic and Monetary Union

WASH water, sanitation and hygiene

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# **Executive Summary**

This working paper discusses the impacts of COVID-19 on government spending on the education sector in Africa. It does so by presenting a comprehensive picture of education expenditure over the 2017-19 period, which, combined with analysis of the macroeconomic and fiscal effects of the pandemic together with recent survey information from education ministries, allows for estimating the trajectory over the 2020-22 period. The paper also reviews evidence of education funding gaps and opportunities for the continent.

**Overall, there are three main findings.** First, most governments in Africa did not invest enough or well in their education systems before the pandemic. Second, COVID-19 caused a dramatic decline in education spending across the continent, which has yet to recover. And third, although funding shortfalls continue growing in many places, governments have options to immediately boost investments in their education systems. These are unpacked below.

- Most African governments were not fulfilling their financial commitments to education prior to COVID-19. Whether comparing to the size of the economy (4% of gross domestic product [GDP], on average), the budget (15% of total expenditure, on average) or on a per person basis (around \$234 in purchasing power parity [PPP] constant 2017 values, on average), only a dozen of the 52 countries with data achieved at least one of the Incheon Declaration spending targets during 2017-19.
- Education budgets mainly supported salaries. On average, 90% of expenditure was on current items – largely staff compensation – with very little invested in learning infrastructure and equipment, which are critical to enhancing access to and the quality of education services.
- Early learning received almost no investment attention. Only around 2% of education budgets were directed to pre-primary education services, on average. This starkly contradicts a wide range of studies that confirm that investments in the early years yield significantly higher returns than those made later in life.
- Lots of education funding was not spent, especially for capital budgets. Driven by low absorption capacities, late disbursements and other implementation bottlenecks, around 30% of funding made available for capital items was not utilized based on data from 15 countries.
- Education spending patterns also exacerbated inequities. Children from wealthier households and urban areas benefitted from significantly higher levels of investment than those from poorer families and rural areas. Education spending further favored boys over girls as well as older age groups over younger ones.
- COVID-19 caused a massive drop in education expenditure across Africa, which has yet to recover. In 2020, per capita spending is estimated to have declined by -8%, on average, and as much as -25% in some places. Projections further indicate that spending

increased by only 1% between 2020 and 2022, on average. These trends are confirmed by recent survey information from education ministries, which means that the pandemic pushed education investment levels back an entire decade.

- Education funding gaps continue widening. The pre-pandemic shortfalls have grown significantly due to lower levels of spending alongside rising needs, both to address lost learning from school closures and the new demands for digital learning services.
- The continental learning crisis will become an irreversible development catastrophe in the absence of better spending and significant external support. Countries have yet to recover from the largest economic contraction ever recorded in 2020. At the same time, the growth outlook continues to be revised downward due to climate shocks, rising interest rates, the cost-of-living crisis, COVID-19, basic health emergencies and political instability. In this context, the potential for domestic resource mobilization will remain extremely limited, which means that governments must maximize value for money in education sector budgets as well as secure external funding support.

To catalyze an education recovery, African Union Member States are encouraged to prioritize six actions:

- 1. **Recommit to making education a budget priority:** As an immediate step to reverse chronic underinvestment in education systems and declining spending trends, all governments can progressively increase annual spending on education to reach 20% of the budget by 2025.
- 2. Increase policy and budgetary attention to early learning: The investment case evidence is overwhelming: not investing in the early years squanders vast resources each year and perpetuates the learning crisis. In addition to ensuring at least 10% of the overall budget for pre-primary education and 25% of recurrent pre-primary budgets for non-salary expenditures, governments should explore building and/or expanding new public and private partnerships (PPPs) to expand successful pre-primary learning models.
- 3. Strengthen the credibility and execution of education budgets, especially for capital items: Among other measures, governments should improve the planning, contracting and management of infrastructure projects as well as monitoring the release and use of funds. Regular dialogues between education and finance ministries on cash flow, procurement procedures, accounting requirements, etc. can help identify and remove spending bottlenecks. There are also important roles for Parliament and civil society to review new proposals and track progress.
- 4. Make the case for greater external support for the education sector: In a context of lackluster economic growth, domestic revenue constraints and debt distress, especially in lower income countries, governments need to leverage international public and private resources, especially grants and highly concessional loans from international financial institutions (IFIs). Other options available to many governments include converting some of

- the recently allocated Special Drawing Rights (SDRs) to invest in the education sector as well as negotiating for debt relief that directly benefits education (e.g. debt-for-education swaps).
- 5. **Invest more in strengthening the education workforce:** The lack of qualified teachers continues to be one of the major challenges to improving learning across the continent. In response, governments should refine plans for funding the recruitment, retention and professional development of teachers and support staff.
- 6. Enhance transparency, accountability and public participation in planning, budgeting and transforming the education system: While more funding is urgently required to close widening gaps, it is equally important to maximize the impact of available resources by optimizing the design and implementation of annual education budgets. This requires reflecting inputs from different stakeholders during the budget preparation process, generating timely and reliable expenditure information throughout the budget cycle, addressing inefficiencies throughout the spending chain, including in procurement processes, and ensuring that teachers are paid on time to avoid strikes and learning disruptions. Piloting or expanding program-based budgeting (PBB) practices in the education sector can also strengthen the visibility and monitoring of spending on priority areas as well as link spending plans to results for improved value for money and equity.

The stakes could not be higher. If implemented swiftly, these actions can prevent the ongoing learning crisis from transforming into a learning catastrophe. If actions are delayed or pursued half-heartedly, the human capital base will continue to deteriorate along with the economic growth and development potential of the continent.

# **Chapter 1: Introduction**

This working paper discusses the impacts of COVID-19 on government spending on the education sector in Africa. It does so by presenting a comprehensive picture of education expenditure over the 2017-19 period, which, combined with analysis of the macroeconomic and fiscal effects of the pandemic together with recent survey information from education ministries, allows for estimating the trajectory over the 2020-22 period. The paper also reviews evidence of education funding gaps and opportunities and concludes by offering recommendations for African Union Members States to catalyze an education recovery for the continent.

#### 1.1 Background

Governments in Africa face daunting challenges to ensure that no child is left behind of learning and skills development. The list was long prior to COVID-19, which contributed to a learning crisis across much of the continent. Four of the main pre-pandemic challenges are outlined below.<sup>1</sup>

A first challenge was children not attending school. Despite progress in recent decades, the proportion of children out of school remains high across Africa. In 2019, around 20% of primary school age children, 33% of lower secondary school age adolescents and more than 50% of upper secondary school age adolescents were not in school, on average. This amounted to more than 100 million children across the continent.

A second challenge was low completion rates. As of 2019, completion rates for primary and lower secondary education for the continent stood around 75% and 50%, respectively, on average. These figures confirm that less than one out of every two children in Africa were not completing the minimum of 12 years of basic education.

A third challenge was poor learning outcomes. Before COVID-19, nearly 90% of ten-year old students in Sub-Saharan Africa were considered 'learning poor.' This means that, despite going to school, they could not read and understand a simple text. Turning to older students, more than one in every five adolescents (aged 15 to 24) was illiterate across Africa, on average. The historic legacy of weak education systems further meant that close to one in every three adults (aged 25 and 64) were illiterate on the continent. Parental illiteracy, in particular, is a key factor that hinders both school attendance and the quality of learning, especially among marginalized groups.

A fourth challenge was shortages of qualified teachers. Estimates indicate that the continent needs 17 million additional teachers to achieve universal primary and secondary education by 2030. Inadequate investment and poor teacher management practices, including teacher training,

<sup>&</sup>lt;sup>1</sup> The challenges draw on information contained in African Union Commission & UNICEF (2021) and World Bank (2019).

teacher deployment, pedagogical support and supervision, compensation, career management and accountability, among others, stand as major barriers to expanding the supply of good teachers.

All the above challenges grew exponentially during COVID-19. At the start of the pandemic, schools were closed nearly everywhere across Africa, which forced around 300 million students out of classrooms, many for longer than a year. Despite the efforts of governments, nearly half of all students had no opportunity to connect to remote learning services through radio, television or the internet (UNICEF 2020).

One of the biggest impacts was on learning. While learning losses are impossible to quantify, the World Bank estimates that, globally, students lost up to one-half a year's worth of learning during the first wave of the pandemic (Patrinos et al. 2022). UNICEF, UNESCO & World Bank (2022) further show that four out of every five countries experienced learning loss in terms of academic performance due to the disruption of education services.

The out of school situation also got markedly worse. Post-pandemic estimates indicate that Sub-Saharan Africa is the only region where the number of children and youth not going to school continues to rise (UNESCO 2022). This reflects two factors: (i) millions of students have not returned to the classroom since schools reopened and (ii) low enrolment rates among new schoolage populations, which are growing fast. These trends are exacerbating the pre-pandemic learning challenges, especially among students in rural areas and vulnerable households (Meinck et al. 2022).

School closures had additional nutrition, mental health and protection consequences. At the peak of school closures in mid-2020, more than 50 million students in 40 countries in Sub-Saharan Africa were missing out on a daily meal or more of nutrition (Cummins 2020), with potential long-term implications on physical growth and learning potential. Millions of students further missed out on mental health, psychosocial support and other services provided through schools, as well as the protective environment offered by schools, which contributed to notable increases in violence against children, teenage pregnancies and early marriage in many African communities (Warah 2022, UNESCO 2021).

In short, the pandemic exacerbated the pre-existing learning crisis. The compounding impacts mean that a large portion of the current generation of school-age children is now experiencing a learning catastrophe, which can be defined as children impacted by significant lost learning, learning poverty or being out of school. Addressing the multitude of challenges and putting the continent back on track to achieve Sustainable Development Goal (SDG) 4² will require governments to immediately start investing more and better in their education systems.

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<sup>&</sup>lt;sup>2</sup> SDG 4 aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

#### 1.2 Methodology

This paper is based on a desk review and analysis of information on education financing and spending issues in Africa. Most of the historical expenditure data are drawn from UNESCO's Institute for Statistics (UIS). This is complemented by information from select national and global sources, including budget briefs produced by UNICEF and Public Expenditure Reviews (PERs), especially related to the efficiency, equity and transparency of education spending. Additional information was drawn from recent studies that assess the impacts of COVID-19 on learning as well as simulations on education funding gaps before and after the pandemic.

As more recent expenditure estimates are unavailable for most countries, the evolution of education spending since 2020 is based on projections. Specifically, it applies the methodology developed by Muchabaiwa (2020a), which looks at the elasticity of education spending to changes in per capita gross domestic product (GDP). The elasticity analysis entailed several steps. First, per capita education expenditures were calculated for 49 countries in Africa from 2000 to 2020. Here, the share of GDP spent on education – from UNESCO UIS – was applied to GDP per capita in PPP, constant 2017 international dollars – from the International Monetary Fund's (IMF) World Economic Outlook database (April 2022 edition). Missing education expenditure data points were estimated using nearest neighbor imputation and interpolation techniques. Second, natural logarithms were calculated for per capita education expenditures and GDP per capita for all countries and years. Third, the logged per capita spending was regressed against logged GDP per capita using the fixed effects regression model, which generated an elasticity coefficient unique to each country. Lastly, the elasticity coefficients and the projected percentage change in GDP per capita from the IMF were used to forecast per capita education spending for 2020 (where data were unavailable), 2021 and 2022.

#### 1.3 Limitations

First, education expenditure data were drawn from global sources and presented in constant international dollars. As a result, there are likely discrepancies with national data in government budget books.

Second, gap-filling techniques were used to address missing education expenditure information. This was the only way to derive a comprehensive picture for most African countries that would allow cross-country and time series analyses. Per capita education spending for most countries should therefore be understood as estimates rather than actual expenditures.

Third, the education spending projections are based on a simple linear regression model. Specifically, GDP per capita growth was used as the main factor that influences the size of education spending (via elasticity coefficients). In practice, there are many factors that impact the levels of government investment in education, which makes this approach overly simplistic. Moreover, GDP projections by the IMF are highly uncertain and subject to change.

Lastly, it was difficult to obtain cross-country data on the equity of education expenditures and on budget credibility. This information is critical to understand a range of value for money and quality of spending issues. Given this constraint, a case study approach was adopted whereby a small set of data points was used to illustrate general trends.

Despite the above challenges, the estimates presented in this paper provide a general picture of historic and recent education spending trends in Africa. The analyses and conclusions resonate with other studies as well as findings from education budget analyses produced by UNICEF offices and partners across the continent.

#### 1.4 Structure of the paper

The rest of the paper is divided into four chapters. Chapter 2 examines education spending trends before the pandemic, including the size, priorities, execution, equity and transparency of education budgets over the 2017-19 period. Chapter 3 then unpacks the macroeconomic and fiscal effects of COVID-19, which are also used as a basis to project the trajectory of education spending over the 2020-22 period. In Chapter 4, the paper reviews the literature on education funding gaps globally and discusses possible options for governments to boost education spending. Chapter 5 concludes with the main findings and recommendations.

# **Chapter 2: The Education Spending Context in Africa Before the Pandemic**

This chapter presents an overview of education spending trends in Africa prior to 2020. It starts by looking at total investment in the sector, including by comparing education expenditure to the size of the government budget and the economy as well as on a per capita basis. It then unpacks the priorities of education budgets, specifically by the type of expenditure and level of education, which is followed by a review of budget credibility and execution. Next, the chapter briefly discusses different equity dimensions of education spending, including by age, income status and geography. This segues into a short discussion on budget transparency, both overall and within the education sector. The chapter concludes by summarizing the key takeaways.

#### 2.1 Total spending on education

Spending on education in most African countries was below international benchmarks prior to the pandemic. Through the Incheon Declaration and Framework for Action for the Implementation of SDG 4 (UNESCO 2017), governments across the world re-committed themselves to invest at least 4-6% of their GDP to education and/or allocate at least 15-20% of their national budgets to education. At the same time, lower-income governments, which characterize most of Africa, agreed to reach or exceed the higher threshold. Looking at spending patterns over the 2017-19 period, governments in Africa invested 4% of their GDP in education, on average (Figure 2.1). Only seven governments achieved the target – Algeria, Botswana, Lesotho, Namibia, Sierra Leone, South Africa and Tunisia. A similar picture emerges for the priority of spending. Again focusing on 2017-19 trends, governments spent an average of 15% of their budgets on education (Figure 2.2). Under this metric, eight governments fulfilled their financial commitment – Burkina Faso, Eswatini, Ethiopia, Namibia, Senegal, Sierra Leone, Tanzania, Togo and Tunisia.

Similarly, the amount of expenditure on education was insufficient to address the learning crisis facing the continent. On a per capita basis, governments in Africa spent an average of \$234 (in PPP, constant 2017 values) on all levels of education over the 2017-19 period (Figure 2.3). The median value is even lower, at around \$110 per person. There is a strong relationship between income and investment levels, with low-income countries (LICs) spending an average of \$60 per capita on education versus \$250 in lower-middle income countries (LMICs) and \$900 in upper-middle income countries (UMICs). The Democratic Republic of Congo, Central African Republic and South Sudan invested the least on education, at around \$16 per person, compared to Botswana, Mauritius and Seychelles where spending amounted to around \$1,100. But even the investment levels among the best performers pale in comparison to high income countries (HICs) globally, which spend around \$8,000 annually per school-age person (UN 2022).

10 9 8 7 Incheon Declaration target 6 5 4.0 4 3 Cote d'Ivoire Senegal Cabo Verde Sao Tome & Pr Burkina Faso Algeria Cameroon Benin

Figure 2.1: Total government expenditure on education in African countries, 2017-19 average value or latest available (as a % of GDP)

Source: UNESCO UIS (September 2022); Equatorial Guinea, Libya and Somalia are excluded due to data unavailability

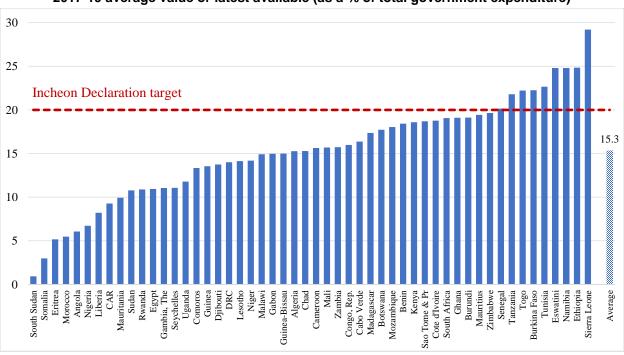


Figure 2.2: Total government expenditure on education in African countries, 2017-19 average value or latest available (as a % of total government expenditure)

Source: UNESCO UIS (September 2022); Equatorial Guinea, Libya and Somalia are excluded due to data unavailability

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Figure 2.3: Per capita education expenditure in African countries by income groups, 2017-19 average value or latest available (in PPP, constant 2017 international dollar)

Source: UNESCO UIS (September 2022); Equatorial Guinea, Libya and Somalia are excluded due to data unavailability

Despite the low levels of commitment and investments in recent years, education spending trended upward over the past two decades. Between 2000 and 2019, per capita expenditure rose from \$185 to \$257, on average, which amounts to a nearly 40% overall increase or around 2% on an annual basis (Figure 2.4). When compared to the size of the economy, education expenditure also moved up over the same period from 3.8% to 4.1% of GDP, on average.

LMIC

UMIC

HIC.

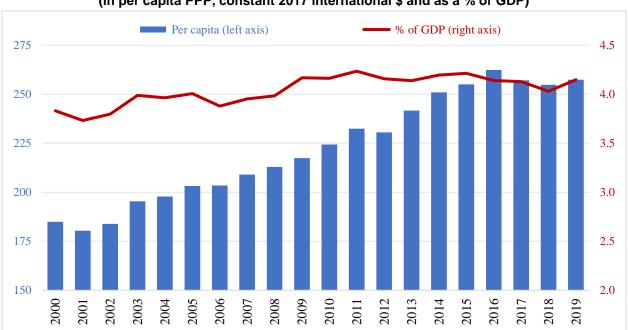


Figure 2.4: Average education expenditure in Africa, 2000-19 (in per capita PPP, constant 2017 international \$ and as a % of GDP)

Source: Authors' calculations based on UNESCO UIS (September 2022) and World Development Indicators (2022) Note: The analyses exclude Equatorial Guinea, Eritrea, Libya, Somalia and South Sudan due to data unavailability

#### 2.2 Education spending priorities

In terms of type of expenditure, education budgets almost exclusively supported current (or recurrent) items. Based on the latest availale data, African countries invested around 90% of their budgets in current items before the pandemic, which largely consisted of salaries (Figure 2.5). In Burundi, Central African Republic, the Comoros, Niger, Sierra Leone and South Sudan, nearly the entire education budget was directed at current items. Of the 40 countries that have reported some information in recent years, only 14 spent at least 10% of their education budgets on capital items. This meant that most governments were investing extremely limited resources in things like new classrooms, chairs and desks, laboratory equipment and other learning materials, drinking water facilities and latrines/bathrooms. This investment trend stands in stark contrast to available evidence that shows a positive correlation between the availability of enabling infrastructure and improved education outcomes (Barret et al. 2019).

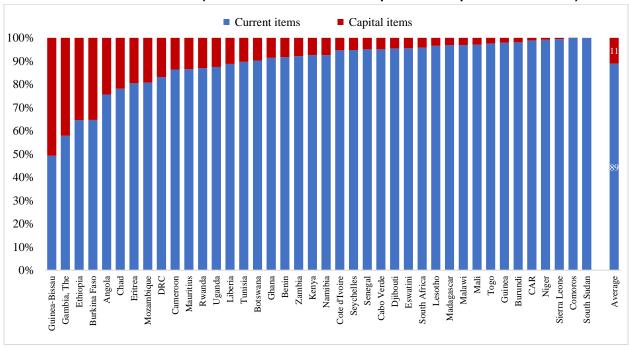


Figure 2.5: Current and capital education expenditure in African countries, 2019 or latest available (as a % of total education expenditure in public institutions)

Source: UNESCO UIS (September 2022); Data unavailable for other African countries

When looking at levels of education, most African governments invested the bulk of their resources in primary and secondary education. The latest available data indicate that close to half of education expenditure (around 44%, on average) supported primary levels (Figure 2.6). Aside from Botswana, Ethiopia, Gabon, Ghana, Liberia, Namibia, Republic of Congo, Rwanda and Senegal, all other African governments spent a third or more of their education budgets on primary education. Similarly, around one-third of total education expenditure went to secondary levels, on average.

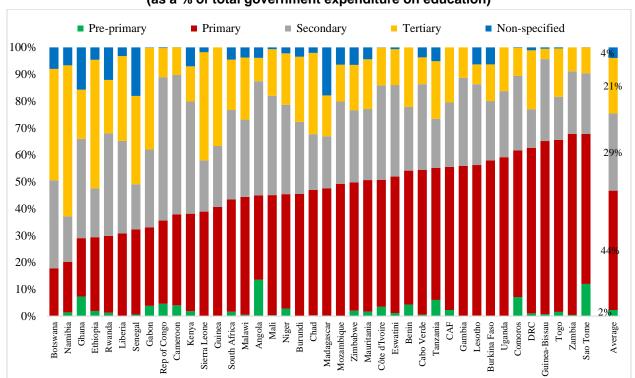


Figure 2.6: Expenditure by level of education in African countries, 2019 or latest available (as a % of total government expenditure on education)

Source: Authors' calculations based on UNESCO UIS (September 2022); Data unavailable for other African countries

A large share of education expenditure also went to tertiary levels. Based on the same dataset, more than 20% of education investments supported tertiary learning services, on average (Figure 2.6 above). In six countries (Botswana, Ethiopia, Gabon, Liberia, Senegal and Sierra Leone), between one third and one half of total investment went to the tertiary level. Given that only a fraction of students that enter the education system complete secondary school (UNESCO 2019), the large share of resources directed to tertiary services emerges as a major spending imbalance with strong equity implications.

Pre-primary education, in contrast, remained severely neglected. Based on the latest available data, governments in Africa invested a meager 2% of their overall education budgets in pre-primary education services (Figure 2.6 above). This is considerably lower than the international recommendation for governments to allocate at least 10% of their education budgets to early learning (UNICEF 2017). Another challenge is the design of pre-primary budgets, which almost exclusively support salaries. This contradicts the recommendation to dedicate at least 25% of recurrent pre-primary budgets to non-salary expenditures to strengthen the quality of early learning services e.g. for teacher training and on-the-job support, curriculum development, teaching and learning materials, quality assurance mechanisms (UNICEF, Education Commission & LEGO Foundation 2022). Even more alarming, of the 40 governments that reported this information, 15 (or close to 40%) invested no resources in pre-primary education. This trend contradicts the overwhelming evidence that investing in the early years delivers significantly higher returns than those made later in life, especially around building the foundation for future learning (Heckman 2006).

#### 2.3 The credibility and execution of education budgets

While the design of education budgets and allocation of resources are important, ultimately committed resources need to be disbursed and spent well. Regrettably, most governments in Africa face challenges both releasing the approved amounts to education ministries and then fully spending the available funds. To this end, there are two ways to measure the overall extent that higher-level spending bottlenecks may be impacting the education sector. The first is to compare the approved budget to the amount that is spent at year's end, which is known as budget credibility. And the second is to look at the difference between the resources that are actually disbursed to education ministries during the year and the amount spent, which is budget execution.

For the education sector as a whole and for current items, budget credibility rates were generally strong across the continent. If looking at the 23 countries that have recent information, overall budget credibility rates for education were 95% during the 2017-19 period, on average (Figure 2.7). There are some exceptions, with South Sudan's rate below 60% and Angola, Somalia and Tanzania at around 85%, but the overall trend is good. A similarly positive picture emerges when zooming in on current spending, with budget credibility rates for these items very close to 100% in most places. In fact, some governments spent far beyond their approved current education budgets, such as in Mozambique, Togo and Zimbabwe where budget credibility rates exceeded 110%.

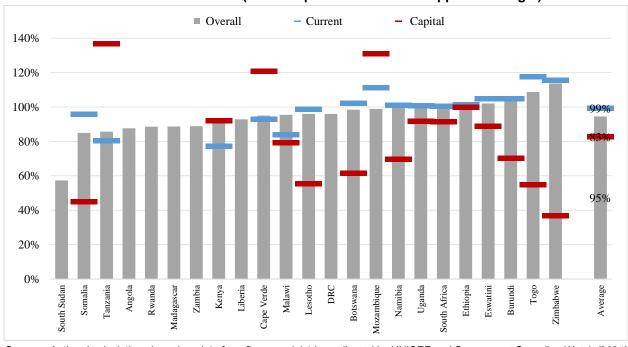


Figure 2.7: Education budget credibility rates by item in select African countries, 2017-19 average value or latest available (actual expenditure as a % of approved budget)

Sources: Authors' calculations based on data from finance ministries collected by UNICEF and Government Spending Watch (2021)

Capital items, in contrast, presented many spending challenges for education ministries in Africa, starting with budget credibility. For the 16 countries that have recent data, the budget

credibility rate for capital items was just over 80% during 2017-19, on average (Figure 2.7 above). This means that approximately 20% of the capital budget that was approved at the start of the year was not transformed into improved school infrastructure or learning equipment and materials. Some countries, however, performed much worse than the regional average. For example, Zimbabwe was not spending more than 60% of its approved capital budget, which varies between 45% and 55% in Lesotho, Somalia and Togo, and around 40% in Botswana. While this may partially be explained by finance ministries not releasing the full amount of the approved budget for different reasons, these trends may also reflect budget absorption capacity constraints among education ministries, as discussed below.

Budget execution trends revealed additional spending challenges for capital items. While it is difficult to acquire comparable data across countries, merging different information sources provides a broad picture of budget execution performance of overall, current and capital items across 16 countries around 2019. For the six countries with data on current items, budget execution rates were close to 100%, on average (Figure 2.8). This is expected since most of these funds go to salaries, which makes the spending process relatively simple. For the 15 countries with data on capital items, however, the average budget execution rate was 69%, which confirms general challenges. Approximately half of the sample was above 80% and half at 70% or below, with one country under 20% (Benin) and two under 10% (South Africa and Togo). A variety of issues can affect the execution of capital budgets, including poor planning, late disbursements, cumbersome procurement processes and overall weak project management due to staff shortages (CABRI 2011).

■ Overall -Current - Capital 140% 120% 104% 100% 80% 60% 98% 40% 20% 0% Senegal Burundi Benin **Tunisia** Kenya South Africa Burkina Faso Botswana Mozambique Liberia Kenya Uganda Angola Average

Figure 2.8: Education budget execution rates by item in select African countries, 2019 or latest available

Sources: Authors' calculations based on data from finance ministries collected by UNICEF (2021)

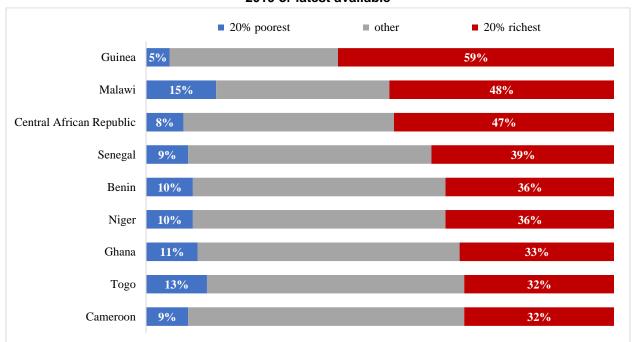
#### 2.4 The equity of education spending

The design and delivery of education budgets often undermine the ability of specific groups of children to access quality learning services across Africa. The most common concerns relate to age, income status and geography. These are briefly discussed below.

First, education spending patterns were generating age-related learning inequities in many places. As recently detailed in countries in Eastern and Southern Africa (Camaione & Muchabaiwa 2021), older children commonly benefit from significantly more public investments than younger children, including for education. To highlight one example, roughly half of all public expenditure on education in Lesotho is consumed by post-secondary students who represent just 15% of the school-age population. Compare that to primary and secondary school students who form 75% of the school-age population yet benefit from only 50% of education expenditure (UNICEF Lesotho 2020).

Second, education spending patterns were often generating income-related learning inequities. Specifically, students from richer families tended to benefit from much more education expenditure than their poorer counterparts. In a sample of nine countries, for instance, students from the wealthiest quintile of the population received more than 40% of total education expenditure, on average, compared to less than 10% for students from the poorest quintile (Figure 2.9). In a country like Guinea, richer students benefited from nearly 12 times more education resources than poorer students. Overall in Africa, the public education resources received by the richest child was nearly four times of that received by the poorest peer, which is a much larger gap than the global average (Figure 2.10).

Figure 2.9: Beneficiaries of education expenditure by income quintiles in select African countries, 2019 or latest available



Source: African Union Commission & UNICEF (2021) and UNICEF Malawi (2019)

% OF EDUCATION RESOURCES
REACHING THE
20% POOREST CHILDREN

GLOBAL

16

26

AFRICA

10

37

Figure 2.10: Average share of public education resources for children from the poorest and richest quintiles, 2019

Source: African Union Commission & UNICEF (2021)

These spending distortions have led to inequitable learning outcomes. In all countries presented in Figure 2.9, there are more children from the poorest 20% of the population who do not attend school compared to the richest 20% (African Union Commission & UNICEF 2021). There are similar patterns elsewhere. For example, 37% of children from the poorest decile in Namibia did not attend school compared to 13% of children from the richest decile (UNICEF Namibia 2019). In Sierra Leone, there was a 15 percentage point difference in the share of children enrolled in primary school between the richest and poorest income quintiles (World Bank forthcoming). In Sudan, although 69% of youth in the richest quintile attended upper secondary school, this falls to less than 10% for students in the poorest quintile (UNICEF MENARO 2022). And in Madagascar, the proportion of children achieving the minimum proficiency level in reading at the end of primary education was 50 times higher among children from the richest families when compared to the poorest (African Union Commission & UNICEF 2021).

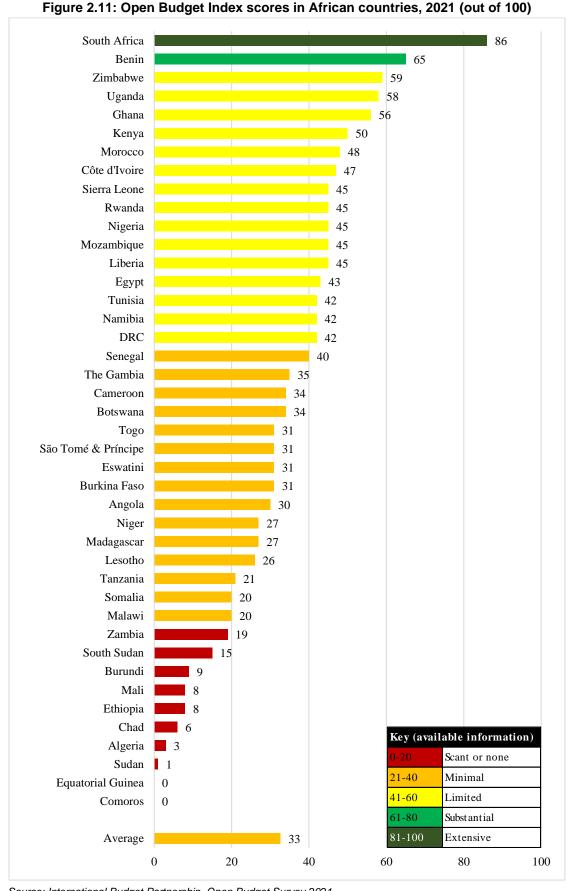
Lastly, geographic-related inequities in expenditures were also widely observed. In many countries in Africa, education spending was disproportionately concentrated in urban and periurban centers at the expense of rural areas, which drives learning disparities. In Tanzania, for example, there were huge variances among regions in the availability of teachers and classrooms because of skewed investments in education infrastructure (UNICEF Tanzania 2018). In Malawi, the pupil qualified teacher ratio varied immensely by location, from 46:1 in Zomba District (urban) to 84:1 in Machinga District (rural) (UNICEF Malawi 2019). In Sudan, the net primary schol atttendance rate was around 30% lower among rural children compared to their urban counterparts (UNICEF MENARO 2022). And, when looking at the continent, around 12% of children living in rural areas completed upper secondary education, on average, versus 34% in urban areas (African Union Commission & UNICEF 2021).

#### 2.5 The transparency of education spending

Many governments in Africa did not routinely track and report on critical expenditure information from the education sector. One of the biggest challenges is pre-primary education. For example, the expenditure data presented earlier in Figure 2.6 is outdated for many countries and/or based on gap-filling techniques. In fact, only 13 of the 54 governments in Africa have reported this information since 2018. Other cross-cutting issues commonly fall through the reporting cracks, like water, sanitation and hygiene (WASH) services in schools – both the capital investments and routine maintenance costs – and school meals. As demonstrated by Figure 2.8, budget execution is another vital source of information that is not often collected and reported by education or finance ministries across the continent. One of the big challenges is that budget classification structures and/or chart of accounts do not enable a clearer identification of these types of expenditure.

**Poor budget transparency in the education sector was commonly a symptom of broader open budget challenges.** As confirmed by the Open Budget Survey 2021, only two countries – Benin and South Africa – out of the 42 African countries included were generating and publishing sufficient information throughout the budget cycle, which is denoted by a score of more than 60 points (out of 100) (Figure 2:11). Eight countries scored less than ten points – Algeria, Burundi, Chad, Comoros, Equatorial Guinea, Ethiopia, Mali and Sudan – which means they were producing very limited or no budget information.

To improve the visibility of spending information in budgets and expenditure reports, several governments were introducing program-based budgeting (PBB) practices. In PBB, the allocation of resources and monitoring of performance is informed by a desire to achieve specific policy objectives and/or program results. The Central African Economic and Monetary Community (CEMAC) and West Africa Economic and Monetary Union (WAEMU), for example, have issued directives to their member countries to transition from traditional line-item based budgeting, which only report on general inputs like salaries, electricity costs, infrastructure, etc. to PBB, which report on programs and activities alongside performance indicators and targets.



Source: International Budget Partnership, Open Budget Survey 2021

#### 2.6 Key takeaways

- Before COVID-19, most governments in Africa were significantly underinvesting in their education systems, which meant that the SDG 4 targets on inclusive, equitable and quality education were already out of reach.
- In addition to low investment levels, available funds mainly supported teacher salaries, with limited attention to the growing needs for more and improved learning infrastructure, equipment and materials.
- The design of education budgets also heavily favored tertiary services commonly at the expense of pre-primary services.
- Weak budget credibility and execution, especially of capital items, compromised the delivery of quality education services.
- Education spending patterns often perpetuated learning inequities among disadvantaged students, especially in terms of age, income status and location.
- Many governments did not routinely track and report on critical expenditure information from the education sector, including on pre-primary learning, WASH services and school meals as well as budget execution, which undermined the ability of governments and citizens to improve learning outcomes.

# **Chapter 3: Education Spending Trends in Africa Since COVID-**19

This chapter assesses the impacts of COVID-19 on public spending on education over the 2020-22 period in Africa. To get a sense of the overarching investment context, it starts by looking at economic growth, government revenue and borrowing trends. It then applies the methodology from Muchabaiwa (2020a) to project total education spending in 2020, 2021 and 2022, both for individual countries and for the continent. The chapter concludes by summarizing the key takeaways.

#### 3.1 **Economic growth and government revenue in 2020**

COVID-19 induced an unprecedented economic decline across most of Africa. Between 2019 and 2020, average economic growth fell by close to -5% on a per capita basis (Figure 3.1). In fact, 2020 marked the first time that the continent had ever recorded negative growth, at least since 1980 when comprehensive information became available (Cummins 2020). Forty-eight of the 54 countries experienced downturns, with the only exceptions consisting of Benin, Egypt, Ethiopia, Guinea, São Tomé and Príncipe, and Tanzania.

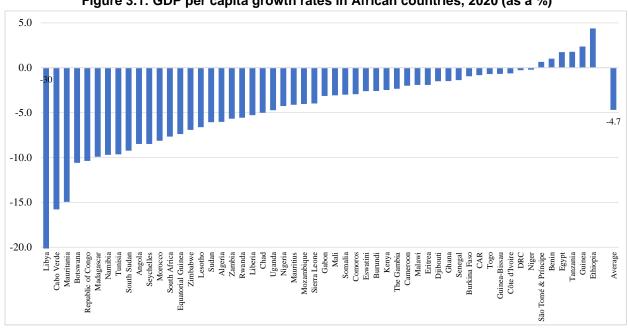


Figure 3.1: GDP per capita growth rates in African countries, 2020 (as a %)

Source: Authors' calculations based on IMF World Economic Outlook Database (October 2022 Edition)

The economic contraction had severe knock-on effects on government revenue. In 2020, general government revenue, which captures taxes, social contributions and grants, among others, declined by nearly -5% in real terms or -0.5% of GDP, on average (Figure 3.2). Under both indicators, revenue fell in 36 of the 54 countries on the continent, by an average of -13% in real terms and -2.2% of GDP. When looking at absolute change, the biggest declines were experienced in Libya (-61%), Equatorial Guinea, Republic of Congo and Sudan (between -35% and -40%) and in Cabo Verde, Gabon, Nigeria and South Sudan (-20% or more). In addition to shrinking overall government revenue, education sector funding was additionally affected by the reprioritization of official development assistance (ODA) away from education as well as decreasing household contributions via informal and formal education fees (World Bank 2020, Jenkins & Steer 2020).

40% 10% ■ % change (real) (left axis) 8% 30% change as % of GDP (right axis) 6% 20% 4% 10% 2% 0% -2% -10% -4% -20% -6% -30% -8% -40% -10% São Tomé & Príncip

Figure 3.2: Change in general government revenue in African countries, 2020 versus 2019 (% change in real terms and as a % of GDP)

Source: Authors' calculations based on IMF World Economic Outlook Database (October 2022 Edition)

The collapse of revenue forced governments to borrow and seek concessional loans and grants, where possible, to support spending for the crisis response. Between 2019 and 2020, total public debt jumped by 12% in real terms or by more than 10% of GDP, on average (Figure 3.3). Debt accumulation was nearly universal across the continent, skyrocketing by around 30% of GDP in places like Cabo Verde, the Republic of Congo and Seychelles, and by more than 40% of GDP in Zambia and 60% of GDP in Sudan. The crisis-induced borrowing spree accelerated a decade-long trend of debt accumulation across the continent, which reached 72% of GDP in 2020, on average (Figure 3.4). By the end of 2022, around two out of every three countries in Africa were either in debt distress or at high risk of distress, which is especially pronounced among LIC contexts (IMF 2022a, IMF 2022b).

50% 70% ■ % change (real) (left axis) 60% 40% 50% • change as % of GDP (right axis) 30% 40% 30% 20% 20% 10% 10% 0% -10% -10% -20%

Figure 3.3: Change in general government gross debt in African countries, 2020 versus 2019 (% change in real terms and as a % of GDP)

Source: Authors' calculations based on IMF World Economic Outlook Database (October 2022 Edition) Note: Libya and Somalia are excluded due to data unavailability

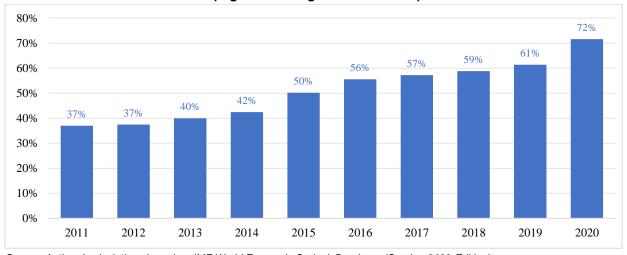


Figure 3.4: General government gross debt in Africa, 2011-20 (regional average as a % of GDP)

Source: Authors' calculations based on IMF World Economic Outlook Database (October 2022 Edition) Note: The analysis excludes Libya and Somalia due to data unavailability

### 3.2 Education spending in 2020

Education expenditures for most countries are estimated to have declined sharply during the first year of the pandemic. Between 2019 and 2020, per capita spending on the education sector is projected to have fallen from \$257 to \$238, on average, which amounts to a -8% drop (Figure 3.5). Relative to the size of the economy, average expenditure is estimated to have

marginally increased from 4.1% to 4.2% of GDP between 2019 and 2020, which is unsurprising since spending and economic output contracted simultaneously. Overall, 37 of the 49 countries with available data are forecast to experience spending cuts (Figure 3.6). These were likely most pronounced in Malawi and Nigeria (around -25% annual changes) followed by Cabo Verde, Lesotho and Mauritius (between -15% and -19%), and Botswana, Djibouti, Namibia, Seychelles and Tanzania (between -10% and -13%).

Figure 3.5: Education expenditure and projections in Africa, 2011-22 (in per capita PPP, constant 2017 international \$ and as a % of GDP)

Source: Authors' calculations based on data from UNESCO UIS, World Bank and IMF

Notes: (i) The analyses exclude Equatorial Guinea, Eritrea, Libya, Somalia and South Sudan due to data unavailability; (ii) The blurred bars in 2020, 2021 and 2022 represent the projected results

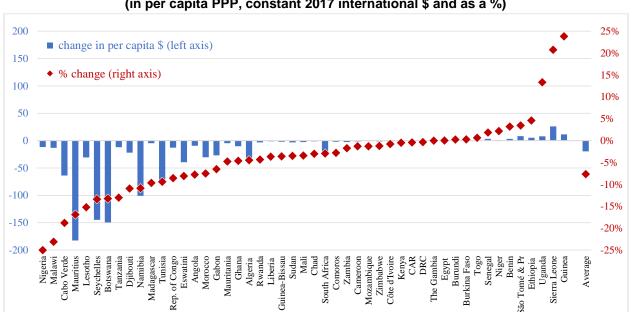


Figure 3.6: Projected change in education expenditure in African countries, 2020 versus 2019 (in per capita PPP, constant 2017 international \$ and as a %)

Source: Authors' calculations based on data from UNESCO UIS, World Bank and IMF Note: Equatorial Guinea, Eritrea, Libya, Somalia and South Sudan are excluded due to data unavailability Schools closures and lockdowns at least partly explain the major downtrend investment.

As learning came to a standstill, some current transactions were scaled back, such as operational expenses. At the same time, movement restrictions caused delays in infrastructure projects and other procurement processes, which made it difficult to utilize capital budgets. This led many governments to reallocate education sector resources to support emergency health, social protection and other respones (Meinck et al. 2022, Muchabaiwa 2020b).

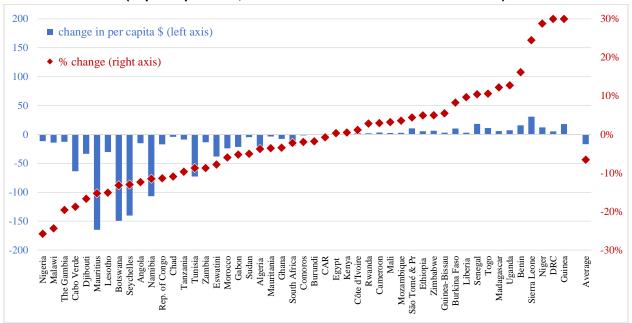
#### 3.3 The outlook for education spending in 2021 and 2022

Since 2020, spending on the education sector likely flatlined and remained far below prepandemic levels. Projections indicate that per capita expenditure on education only marginally rebounded, rising from \$238 in 2020 to \$241 in 2022, on average (Figure 3.5 above). This amounts to just over a 1% increase, with 2022 projections showing that investment levels remain more than 6% below 2019 levels. Relative to the size of the economy, overall investment in education declined from 4.2% of GDP in 2020, on average, to 4.1% of GDP during 2021-22. In practice, the pandemic appears to have pushed investment levels back a decade, with real per capita education expenditure in 2022 equalizing levels last experienced in 2012-13.

As of 2022, most African governments are predicted to be investing less in education than before the pandemic. Of the 49 countries with data, 27 (or 55% of the sample) are projected to be spending less in 2022 than in 2019, by more than -10%, on average, on a per capita basis (Figure 3.7). The average decline in spending in these countries is close to \$30 per person. Based on these estimates, the recovery in education spending is expected to be longest in Malawi and Nigeria, where per person spending in 2022 remains -25% below pre-COVID-19 levels, followed by Cabo Verde and The Gambia (close to -20%), and Djibouti, Lesotho and Mauritius (around -15%). While these estimates present a general picture of how expenditures have may evolved since 2020, they are based on projected changes in GDP and do not consider other factors that influence resource allocation decisions.

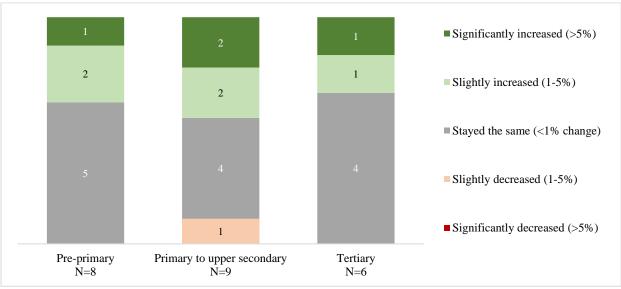
Importantly, the education expenditure projections are confirmed by recent information from African education ministries. The latest round of the Survey on National Education Responses to COVID-19 School Closures, which was administered by UNESCO, UNICEF, the World Bank and OECD, collected responses on spending changes in the education sector between 2020 and 2021. Among African countries with valid survey responses, only three in eight reported an increase in their budgets for the pre-primary level, four in nine for primary to upper secondary levels, and two in six for the tertiary level (Figure 3.8). Nearly all other African countries' budgets remained the same in nominal terms, with one respondent reporting a slight decrease (1-5%) in their budget for primary to upper secondary levels.

Figure 3.7: Projected change in education expenditure in African countries, 2022 versus 2019 (in per capita PPP, constant 2017 international \$ and as a %)



Source: Authors' calculations based on data from UNESCO UIS, World Bank and IMF Note: Equatorial Guinea, Eritrea, Libya, South Sudan and Somalia are not included due to data unavailability

Figure 3.8: Changes in public education resources in fiscal year 2021 in select African countries (in number of countries reporting year-on-year nominal changes)



Source: Authors' calculations based on data from UNESCO UIS, UNICEF, World Bank & OECD (2022) Note: Country names are anonymous for this survey

#### 3.4 Key takeaways

- The impacts of COVID-19 on economic growth, government revenue, spending priorities, school operations and budget implementation capacity, especially for capital items, caused a dramatic decline in education investment across Africa.
- Since 2020, education investment has not rebounded, with projected spending in 2022 remaining far below pre-pandemic levels and on par with levels from a decade ago, on average.
- In addition to expanding funding gaps, the knock-on effects of COVID-19 have hurt the delivery of quality education services and significantly increased the risk of the pre-pandemic learning crisis transforming into a learning catastrophe for Africa.
- Unless quickly redressed, the current investment situation will further erode the human capital foundation of the continent with severe long-term development implications.

# **Chapter 4: Education Funding Gaps and Options in Africa**

This chapter explores the literature on education funding gaps and opportunities for mobilizing additional resources for the education sector. It starts by reviewing different cost estimates for developing countries to achieve SDG 4 targets. Although information is unavailable by geographic regions, global trends offer a general picture of the likely resource needs across Africa. This is complemented by a discussion of how the pandemic significantly expanded the pre-pandemic funding shortfalls. The chapter then highlights seven broad options that most governments on the continent can explore to increase resources for the education sector. It concludes by summarizing the key takeaways.

#### 4.1 Education funding gaps

Long before the pandemic, the funding gap facing the education sector in Africa was astronomical. Although there are not specific estimates for the continent, global costing models suggested that the total resource shortfall for all LICs and LMICs to achieve SDG 4 by 2030 amounted to \$39 billion/year in 2015, which was updated and re-estimated at US\$148 billion/year in 2020 (UNESCO 2020a). Other methodologies estimate the annual resource gap between \$44 billion (Education Commission 2016) and \$75 billion (Theirworld 2021).

**COVID-19 immediately added to the education funding deficit.** As described in Chapter 3, the collapse in economic growth in 2020 impacted government revenue just as rising debt limited borrowing options. ODA flows further amplified the income challenges, as bilateral donor direct support to the education sector declined by US\$359 million in 2020 (World Bank & UNESCO 2022). These forces, coupled with the reprioritization of national resources to contain the health emergency, led to a historic contraction in education spending across the continent, which significantly widened pre-pandemic shortfalls.

Education funding gaps have continued to widen in 2021 and 2022. The anticipated recovery in growth and revenue was short-lived and highly disappointing, while the expiration of the Debt Service Suspension Initiative (DSSI) at the end of 2021 followed by the rapid rise in interest rates globally increased debt servicing costs and further constrained government resources (Cummins forthcoming). At the same time, although ODA to Africa may have increased in 2021 to some countries, grant support to the continent is likely declining. This reflects many factors among donor governments, including the global economic slowdown, which has constrained their revenue base and the potential pool for ODA, the reallocation of humanitarian assistance to support the conflict in Ukraine, including for hosting refugees, and the growing demands to cushion their citizens from the high energy costs during the winter period (African Development Bank 2022a). The result is that education spending has not returned to pre-pandemic levels in much of the continent just as the investment needs continue rising to address the accumulated learning losses and school dropouts. In short, the overall education funding gap is still expanding.

**COVID-19** also created new funding needs for the education sector, especially for digital learning. While around two-thirds of governments in Africa used radio, television and/or the internet to ensure continuity of learning when schools were closed, it was impossible to reach nearly half of all learners on the continent with digital platforms (UNICEF 2020). One of the biggest challenges is infrastructure. For example, in places like Burkina Faso, Burundi, Central African Republic, Chad, the Democratic Republic of Congo, Malawi, Niger and South Sudan, less than 20% of the population has access to electricity (World Bank 2022). Responding to the demand for digital education services therefore requires major new investments. Globally, the rollout of universal digital learning services between 2021 and 2030 is estimated to cost around \$1.34 trillion for connectivity, data and electricity, which should be mainly financed by the telecommunications and energy sectors, as well as close to \$50 billion for delivering digital learning services, which should be financed by the education sector (Yao et al. 2021). Of the latter, African governments are estimated to need around \$15 billion or \$1.5 billion per year.<sup>3</sup>

There are additional funding demands for human resources. For example, if government spending on teachers at the pre-primary level does not increase in Eastern and Southern Africa, the average pupil-to-teacher ratio is projected to increase from around 40:1 in 2020 to more than 110:1 in 2030 as classrooms absorb the growing number of school-age children as well as out of school children. To achieve global goals throughout the education system would require governments in this sub-region to pay for more than five million new teachers by 2030, which amounts to doubling the pre-pandemic levels of spending on teacher salaries, on average (Cummins 2021).

In total, the pandemic may have caused the annual education funding gap to reach more than \$50 billion in Sub-Saharan Africa. In 2022, UNESCO updated its costing model for LICs and LMICs to achieve SDG 4 targets by 2030, which accounts for recent changes driven by COVID-19, including slower government revenue growth, lower ODA for the education sector and delayed graduation rates. This approach points to annual funding needs of approximately \$400 billion over the 2020-30 period, with domestic resources and ODA able to cover around \$200 billion (Global Education Forum Secretariat 2022). This results in a global funding gap of slightly more than \$200 billion/year, which is a large jump from the pre-COVID estimate of \$148 billion/year (UNESCO 2020a). Zooming in on Sub-Sahara Africa, the annual resource requirements from 2020 to 2030 were estimated at US\$118 billion, with an annual gap of US\$53 billion (Global Education Forum Secretariat 2022). Although these projections are underpinned by a range of methodological caveats, they generally confirm that the education funding needs for the continent are massive and rising.

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<sup>&</sup>lt;sup>3</sup> Calculated from the costing tool accompanied to Yao et al. (2021).

#### 4.2 Funding options

Despite the widening gaps and weak macroeconomic outlook, there are funding options that African governments can pursue to expand investments in their education systems. Seven of the main opportunities are summarized below.<sup>4</sup>

- Re-prioritize budget allocations: The budget is inherently a political process, and more
  resources can be devoted to the education sector if there is political will. During the design,
  debate and approval of the annual budget, this requires convincing senior policymakers to
  allocate fewer resources to high-cost, low social impact areas, such as national defense, fuel
  subsidies and questionable infrastructure projects, and more to education services.
- 2. Improve spending efficiencies: While more funding is direly needed, it is equally important to maximize the impact of resources already released to the education sector. Low-hanging fruits commonly include focusing the annual budget on the right priorities, removing budget implementation bottlenecks, especially within procurement systems, tackling waste (e.g. removing ghost teachers, selecting market-based cost proposals), ensuring salaries are paid on time to avoid strikes, etc. Addressing inefficiencies in other sectors can also create savings that could be potentially redirected to the education sector.
- 3. Increase tax revenue through progressive measures: Expanding domestic tax revenue is the most sustainable strategy to ensure adequate funding of education services. For example, it was estimated that a two-percentage point increase in the tax base (from 16% of GDP to 18%) could close the SDG4 funding gap in Sub-Sahara Africa (Lewin 2020). This can be achieved by increasing existing tax rates or introducing new taxes, such as on corporate profits, financial transactions, property, tourism, natural resources, the digital economy, etc. Given the high and rising levels of income inequality, which were exacerbated by COVID-19 (Narayan et al. 2022), it is important that new approaches are progressive and focus on economic actors that have more income rather than penalizing vulnerable populations.
- 4. Make the case for more ODA: This requires engaging with different donor governments, international financial institutions and regional organizations to increase the amount of external support provided to the education sector through grants and/or highly concessional loans. Importantly, the share of 'allocable aid' that went to education was declining long before COVID-19, falling from 15% of total ODA in 2003 to less than 10% in 2012 and averaging 9% over the 2010-19 period (World Bank & UNESCO 2022). If all donor countries achieved the SDG 17.2 target of committing 0.7% of their gross national income (GNI) for ODA, and if 10% of those resources were transferred to education, the current education funding gap could be closed significantly (UNESCO 2020b).
- 5. Convert and spend Special Drawing Rights (SDRs): In August 2021, the IMF approved a general allocation of SDRs equivalent to \$650 billion to help member countries address their

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<sup>&</sup>lt;sup>4</sup> This section draws from Ortiz & Cummins (2022) and Ortiz et al. (2019).

rising funding needs due to the socioeconomic impacts of COVID-19 (IMF 2021). Governments in Africa received around \$33 billion or 5% of total allocations (African Development Bank 2022b). SDRs can be used by governments to shore up central bank reserves, pay down debt and support the national budget, including for education. Based on available data as of July 2022, 31 of 47 African governments had converted at least a portion of their SDRs to support spending (Arauz & Cashman 2022). However, only 13 governments used some of these resources for social services, while most went to general budget support and/or to service debt.5 Zimbabwe stands as one of the positive examples, where it withdrew \$311 million of its \$958 million SDR allocation in the second of half of 2022 to support socioeconomic investments, including to construct education infrastructure in vulnerable regions (IMF 2022c, Vinga 2022). Moreover, most Group of 20 (G20) members along with China pledged to re-channel around \$50 billion worth of SDR holdings to vulnerable LICs and MICs, most of which are in Africa (Arauz & Cashman 2022). If these commitments are fulfilled and/or if the IMF were to issue another allocation of SDRs as many groups have called for (Shalal 2022), these additional resources could go a long way to addressing current resource gaps in the education sector.

- 6. Explore public-private partnerships (PPPs) and blended finance arrangements: Through PPPs and strategically using government revenue and/or ODA to attract private capital, African governments can develop mutually beneficial relationships with the private sector to deliver education services. If well designed and operated, PPPs and blended finance approaches can extend the reach and effectiveness of government funds, encourage innovation in the education sector and enhance learning outcomes (Aslam et al. 2019, Patrinos et al. 2009). However, it is imperative that governments carry out comprehensive due diligence before moving forward with a PPP to ensure value for money and that there are no access, quality or accountability issues, which have failed vulnerable students and deepened inequality in many contexts (Bous 2019).
- 7. **Restructure debt:** There are five general strategies for governments to reduce sovereign debt: (i) debt relief/cancellation; (ii) re-negotiating debt; (iii) debt swaps/conversions; (iv) debt repudiation; and (v) defaulting. In recent years, more than 60 governments have successfully re-negotiated debts, over 50 have implemented debt swaps and more than 20 have defaulted or repudiated public debt following social audits. Each of these approaches has distinct tradeoffs but can effectively lower debt servicing costs and free resources for other priorities, including education. Since COVID-19, the G20's DSSI and the IMF's Catastrophe Containment and Relief Trust (CCRT) provided some temporary debt service relief to highly-indebted poor countries. While these were steps in the right direction, they could be extended and significantly expanded, which could free up large resources for education.

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<sup>&</sup>lt;sup>5</sup> Authors' calculations based on Arauz & Cashman (2022).

#### 4.3 Key takeaways

- The funding gaps facing the education sector in Africa were massive before the pandemic.
- Driven by lower spending, new demands, including for digital learning and more teachers, and a shrinking resource base, the funding gaps have widened significantly since 2020.
- Despite the challenging context, there are ways that governments can boost education spending, including re-prioritizing the budget, improving spending efficiencies, increasing tax revenue, attracting more grant and concessional lending support, taking advantage of SDRs, exploring PPP and blending financing opportunities, and/or restructuring debt.

# **Chapter 5: Conclusions and Recommendations**

This paper analyzed education spending trends in Africa before COVID-19 and since its arrival. Analysis of available data and the macroeconomic and fiscal context of the region, coupled with an expenditure projection exercise, reveal three main conclusions. These are summarized below.

First, most African governments did not invest enough or well in their education systems before the pandemic. Whether comparing to the size of the economy (4% of GDP, on average), the budget (15% of total expenditure, on average) or on a per person basis (around \$234 in PPP, constant 2017 values, on average), African governments were not fulfilling their financial commitments to education. Moreover, education budgets mainly supported salaries with limited investments in learning infrastructure and equipment. They also tended to overprioritize tertiary education commonly at the expense of pre-primary services, which were severely neglected (only around 2% of education budgets, on average). Moreover, due to low absorption capacities, late disbursements and other operational bottlenecks, lots of available funding was simply not spent, especially for capital budgets (based on the average of 15 countries, around 30% of capital funds were not utilized). Another worrisome trend was that education expenditure often perpetuated learning inequities among disadvantaged students in terms of age, income, gender and location, while many governments did not routinely track and report on critical expenditure information from the education sector.

**Second, COVID-19** caused a dramatic decline in education expenditure across the continent. Between 2019 and 2020, the impacts of the pandemic on economic growth, government revenue, budget priorities, school operations and budget implementation capacity likely caused education spending to fall by an average of -8% in per capita terms. Thirty-seven of the 49 countries with data are projected to have experienced spending declines in education, which may have reached as high as -25% in some places. Since then, a spending rebound has remained elusive, with education investment levels in 2022 equaling the same levels from a decade ago, on average.

Third, education funding gaps are widening across Africa, but there are options for governments to immediately boost investment levels. The education sector faced major funding shortfalls long before the onset of COVID-19. These have since expanded significantly due to the decline in education spending and the rising needs to address lost learning from school closures and the new demands for digital learning services. Despite the challenging macroeconomic and fiscal situation in most places, there are at least seven options that can enable governments to increase education spending. These include: (i) re-prioritizing the budget; (ii) improving spending efficiencies; (iii) increasing tax revenue; (iv) attracting more grant and concession lending support; (v) taking advantage of SDRs; (vi) exploring PPP and blending financing opportunities; and/or (vii) restructuring debt.

To catalyze an education recovery and reinforce the recommendations from the 2022 Transforming Education Summit 2022 (UNICEF 2022, United Nations 2022), African Union Member States are encouraged to prioritize six actions:

- Recommit to making education a budget priority: As an immediate step to reverse chronic underinvestment in education systems and declining spending trends, all governments can progressively increase annual spending on education to reach 20% of the budget by 2025.
- 2. Increase policy and budgetary attention to early learning: The investment case evidence is overwhelming: not investing in the early years squanders vast resources each year and perpetuates the learning crisis. In addition to ensuring at least 10% of the overall budget for pre-primary education and 25% of recurrent pre-primary budgets for non-salary expenditures to improve the quality of learning, governments should explore building and/or expanding new PPPs to expand successful pre-primary learning models.
- 3. Strengthen the credibility and execution of education budgets, especially for capital items: Among other measures, governments should improve the planning, contracting and management of infrastructure projects as well as monitoring the release and use of funds. Regular dialogues between education and finance ministries on cash flow, procurement procedures, accounting requirements, etc. can help identify and remove spending bottlenecks. There are also important roles for Parliament and civil society to review new proposals and track progress.
- 4. Make the case for greater external support for the education sector: In a context of lackluster economic growth, domestic revenue constraints and debt distress, especially in lower income countries, governments need to leverage international public and private resources, especially grants and highly concessional loans from IFIs. Other options available to many governments include converting some of the recently allocated SDRs to invest in the education sector as well as negotiating for debt relief that directly benefits education (e.g. debt-for-education swaps).
- 5. Invest more in strengthening the education workforce: The lack of qualified teachers continues to be one of the major challenges to improving learning across the continent. In response, governments should refine plans for funding the recruitment, retention and professional development of teachers and support staff.
- 6. Enhance transparency, accountability and public participation in planning, budgeting and transforming the education system: While more funding is urgently required to close widening gaps, it is equally important to maximize the impact of available resources by optimizing the design and implementation of annual education budgets. This requires reflecting inputs from different stakeholders during the budget preparation process, generating timely and reliable expenditure information throughout the budget cycle, addressing inefficiencies throughout the spending chain, including in procurement processes, and ensuring that teachers are paid on time to avoid strikes and learning disruptions. Piloting or

expanding PBB practices in the education sector can also strengthen the visibility and monitoring of spending on priority areas as well as link spending plans to results for improved value for money and equity.

The stakes could not be greater. If implemented swiftly, these actions can prevent the ongoing learning crisis from transforming into a learning catastrophe. If actions are delayed or pursued half-heartedly, the human capital base will continue to deteriorate along with the economic growth and development potential of the continent.

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