

African Economic Outlook 2020

HIGHLIGHTS

Developing Africa's
Workforce
for the Future



AFRICAN DEVELOPMENT BANK GROUP

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ISBN 978-9938-882-92-6 (print)

ISBN 978-9938-882-95-7 (electronic)

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HIGHLIGHTS

This year's African Economic Outlook examines recent macroeconomic developments and the prospects for inclusive growth (chapter 1). It next discusses developing education and skills for the workforce of the future and identifies success stories for countries to emulate (chapter 2). It then looks at the four main sources of finance for education and training—governments, households, the private sector, and external donors—and recommends ways to mobilize additional resources and increase the efficiency of spending (chapter 3).

AFRICA'S GROWTH: PERFORMANCE, OUTLOOK, AND INCLUSIVENESS

Growth is stable and forecast to pick up

Economic growth in Africa is estimated at 3.4 percent for 2019, about the same as in 2018. Although stable, this rate is below the decadal average of 5 percent growth for the region. The slower than expected growth is partly due to the moderate expansion of the continent's big five—Algeria, Egypt, Morocco, Nigeria, and South Africa, which jointly grew at an average rate of 3.1 percent, compared with the average of 4.0 percent for the rest of the continent. Growth is forecast to pick up to 3.9 percent in 2020 and 4.1 percent in 2021.

Africa's estimated growth masks significant cross-regional and cross-country variation. East Africa maintained its lead as the continent's fastest growing region, with average growth estimated at 5.0 percent in 2019. North Africa is the second fastest, at 4.1 percent. West Africa's growth rose to 3.7 percent in 2019, from 3.4 percent the year before. Central Africa is estimated to have grown at 3.2 percent in 2019, from 2.7 percent the year before. Southern Africa's growth slowed from 1.2 percent to 0.7 percent, dragged down by the devastation of cyclones Idai and Kenneth.

Investments and exports are increasingly driving growth

Growth's fundamentals have improved, as its drivers are gradually shifting toward investments and net exports, and away from private consumption. In 2019, for the first time in a decade, investment expenditure accounts for a larger share (more than half) of GDP growth dynamics than consumption. Net exports were also a strong contributor, especially among commodity exporters, as oil prices recovered. Since 2011, and particularly following the end of the commodity price supercycle in 2014, the divergence between gross savings and total investment has been widening for Africa. Nonresource-intensive countries have driven the widening gap in the continent's average and thus the growing current account deficits.

Although many countries have experienced strong growth episodes, relatively few have posted significant declines in extreme poverty and inequality

Risks to the outlook skew to the downside

Africa's growth materialized despite a challenging external environment. Global trade volumes slowed from annual growth of 5.7 percent in 2017 to 1.1 percent in 2019, with the slowdown especially acute for metals and food, two of Africa's major export commodities. Extreme weather events—particularly the type of devastating storms and floods that afflicted Southern Africa in the first half of 2019 and the expected return of El Niño conditions to East Africa—could usher in severe droughts and suppress agricultural output and growth. In countries holding elections in the next two years, there may be sociopolitical pressures to increase public spending, which could undermine fiscal consolidation plans. And risks associated with terrorism, conflict, insurgency, and social unrest may also weigh on economic activity in some countries.

Overall, macroeconomic stability in Africa improved

Inflation remains persistently high. However, the average inflation rate for the continent inched down by 2 percentage points, from 11.2 percent in 2018 to 9.2 percent in 2019, with notable variations across countries and economies. Central banks reacted by adjusting interest rates to manage domestic demand. In countries with downward inflationary pressures, interest rates were reduced to encourage investment and spur growth.

Fiscal balances improved in the past two years, with the weighted average deficit-to-GDP ratio in Africa declining from 5.9 percent in 2017 to 4.8 percent in 2019. This resulted mostly from a stabilization in commodity prices and higher tax and nontax revenues for large natural resource exporters. The revenue-to-GDP ratio rose by 0.3 percentage point on average for the 54 African economies, but by more than 1 percentage point among oil exporters, such as Angola, whose ratio rose 2.2 percentage points.

Debt continues to rise

Public and publicly guaranteed debt levels are high and rising in most African economies, with the median ratio of government debt-to-GDP

climbing over 56 percent in 2018, up from 38 percent 10 years earlier. The upward trend in external debt ratios is partly driven by the end of the commodity supercycle and the slowing growth and export revenues, especially among commodity producers. But it also stems from a more stable macroeconomic and governance environment, which allowed more African countries to tap international bond markets for the first time, some at 30-year maturities.

African governments have had a structural shift in the composition of debt, with less reliance on concessional lending from multilateral institutions and official Paris Club creditors, broader access to long-term finance from international capital markets, and financing from emerging bilateral creditors, such as China. Similarly, higher domestic borrowing (reaching more than 35 percent of GDP) in part reflects elevated government spending and capital investment to close the infrastructure gap. But it also reflects gradually slowing inflation, greater monetary credibility, and stronger ability to market domestic currency debt to international creditors.

Only a few countries have achieved inclusive growth

Although many countries have experienced strong growth episodes, relatively few have posted significant declines in extreme poverty and inequality, which remain higher than in other world regions. On average, between 2000–05 and 2010–17, the consumption of Africa's poor has been growing slower than for the average population. While the average per capita consumption on the continent has been growing at 3.3 percent a year over the two subperiods, the mean growth rate of the poor reached only 3.0 percent. So, although poor populations have benefited from the continent's unprecedented economic growth between 2000 and 2016, their consumption growth has not been fast enough to escape poverty, which declined at much lower pace in Africa than elsewhere in the developing world.

Growth has been inclusive—registering faster average consumption for the poor and lower inequality between different population segments—in only 18 of 48 African countries with data. Considering only countries where the average

consumption growth was positive between 2000 and 2017, just 12 of 37 achieved inclusive growth. Although faster growth for most countries since 2000 was associated with increases in the living standards of poor populations, it did not significantly reduce the consumption gap between rich and poor.

If current trends persist, Africa will not eliminate extreme poverty by 2030

On current trends, Africa will remain off track to meet the target of eradicating extreme poverty by 2030. The extreme poverty rate (weighted by population) will fall from 33.4 percent in 2018 to only 24.7 percent in 2030, which is far above the 3 percent Sustainable Development Goal target. And the number of extreme poor will fall slightly by close to 8 million people, from 429.1 million in 2018 to 421.2 million in 2030. In addition, poverty rates in all regions but North Africa are expected to remain well above the 3 percent target by 2030.

However, improving the quantity and quality of growth could accelerate the pace. Africa's per capita consumption would need to grow by 10.25 percent a year to meet the 3 percent Sustainable Development Goal target by 2030. This suggests that if historical trends persist, an average African country would have to more than double its average annual consumption growth between 2018 and 2030. Unless bold policy measures are implemented to improve both the quality and quantity of growth, Africa would meet the 3 percent target only by 2045.

Policy recommendations

Deepen structural reforms to diversify Africa's productive base and revive growth

Although forecasts point to continuing recovery in 2020 and 2021, the pace of growth is weaker than previously anticipated and lower than its historical trend. Policymakers thus need to carry out deeper structural reforms that can bolster the current expansion, strengthen resilience to risks, and raise medium-term growth. Policymakers should:

- *Improve productivity by alleviating constraints in the business environment.* Growth in the region has been driven mainly by factor accumulation, while the contribution of total factor

productivity has been limited and in some cases declined. The large and persistent gaps in output per worker between Africa and other world regions can be explained by inefficiencies in the allocation of production factors. Improving productivity to revive growth will require cultivating a dynamic and competitive private sector by alleviating the most binding constraints to business operations.

- *Foster structural transformation and economic diversification to speed up growth.* Growth in many countries is still driven by primary commodities, which invariably makes it volatile and vulnerable to commodity price fluctuations. Policymakers should continue to strive to diversify their economic base away from primary commodities and expand their export base. Deliberate and carefully targeted policies that seek to move productive resources away from informal low-productivity sectors to formal high-productivity sectors would help increase productivity and unlock untapped growth potential.
- *Improve competitiveness by addressing exchange rate misalignments.* Policymakers should align exchange rate policies in line with their economic structure and support the drive for structural transformation.

Sustain macroeconomic stability and improve public financial management

With more challenges in the external environment, policymakers need to ensure that the gains in the last two years—in macroeconomic stability, including lowering inflation rates, narrowing fiscal balances, and stabilizing exchange rate fluctuations—are sustained. Fiscal policy needs to continue to be prudent to rein in debt buildups. Monetary policy needs to continue to stimulate the economy while stemming inflation and disorderly exchange rate movements. Policymakers should:

- *Improve the quality of fiscal consolidation and create more fiscal space.* This can be achieved through increasing revenues, which is less costly for growth than cutting expenditures. African countries still have huge potential to upgrade their tax policies and tax administration systems thereby mobilize domestic resources for development without significant distortions to economic activities.

Five actionable policy initiatives can help policymakers improve both the level and the quality of Africa's growth

Monetary policy needs to continue to stimulate the economy while stemming inflation and disorderly exchange rate movements

- *Better target the energy subsidies that reemerged in many countries in response to the recovery in oil prices, perhaps using price modulation mechanisms, and targeting the poor and vulnerable in society.*
- *Improve the efficiency of public investment through building capacity, strengthening expenditure governance frameworks, and properly planning and monitoring investment projects.* The efficiency of public investments in Africa is around 65 percent, implying that 35 cents on every dollar invested are lost to inefficiency in implementing a project. By improving governance frameworks, these high levels of inefficiency can be greatly minimized.
- *Find the right tradeoff between public debt and public development financing.* Although many countries still have huge development finance needs, striking the right balance between meeting needs and mitigating rising debt is important. This Outlook argues that there is no systemic risk of debt distress in Africa. Policymakers need to focus more on the types of development projects debt is applied to. When debt finances much-needed human and physical capital, it can lead to GDP gains of up to 10 percent in the medium term.

Strengthen domestic capacity to cushion extreme weather events

Given the recent devastation by extreme weather events—including storms, flooding, droughts, and tropical cyclones, coupled with a coming El Niño wave in 2020 and beyond—policymakers should intensify efforts to build capacity and resilience to withstand weather shocks at macroeconomic, microeconomic, and household levels. Policy actions along these lines include:

- *Adopt climate-smart agricultural production techniques that are more resilient to extreme weather events.* Policymakers should encourage agricultural practices using crop varieties that are resilient to droughts and flooding. Other smart policy options include building infrastructure that can harvest and hold rainwater for the dry seasons and promoting the use of mobile technology by farmers to get weather forecasts.
- *Provide platforms for contingent and aggregate risk sharing by households.* Initiatives such

as the African Risk Capacity mechanism—established by the African Union as a multilateral risk-sharing mechanism to help countries insure against damage and crop failures caused by extreme weather events—can be replicated at the micro-level. Preemptive contingent risk-sharing instruments can protect households, which would be required to make small contributions and get minimum income guarantees in case of an extreme weather event.

Address obstacles to labor mobility to enhance growth's inclusiveness

Within-sector productivity growth and cross-sector labor reallocations reduce poverty in Africa. By simply allowing labor to move freely across sectors, African countries could increase incomes and reduce poverty and inequality. Policymakers should:

- *Reform labor regulations and employment policies to ensure the free movement of labor.* In addition, while labor movement within countries is less prone to restrictions, cross-border labor mobility is often discouraged on the ground of protection of local labor markets. Implementing transnational agreements such as the African Continental Free Trade Area can help remove most obstacles to the free movement of workers between countries.
- *Increase the transferability of skills and qualifications across sectors or the acquisition of sets of new skills and qualifications to meet the requirements of receiving sectors.* Since skills in low-productivity sectors are not necessarily complementary with those needed in high-productivity sectors, scaling up programs facilitating cross-sector skill transitions is important.

Expand social safety nets and increase the efficiency of existing programs

Social safety nets (SSNs)—in the form of conditional cash transfers, social protection programs, targeted subsidies, or supports to address spatial, gender, and education inequality—can complement country efforts to tackle poverty and inequality. SSN transfers have been estimated to reduce the incidence of absolute poverty by 36 percent and relative poverty (the bottom 20 percent) by 8 percent. Clearly, better planning, execution, and

monitoring of existing programs can do much to tackle poverty and inequality.

EDUCATION AND SKILLS FOR THE WORKFORCE OF THE FUTURE

Africa faces daunting education and skills challenges

Many African countries have yet to catch up with the rest of the world in basic skills and education. Literacy and numeracy continue to be binding constraints to competitiveness. Low skills and education lead to low-quality jobs, poverty, and inequality. Developing education and skills to advance economic growth requires clearly defining the type of skills that African countries need. While expanding efforts to develop the basic skills of the workforce is a stepping stone, focusing on the skills relevant for the workforce of the future can lead to faster and more inclusive growth. Key job-relevant skills are problem-solving, learning, communications, and social and personal skills.

The quality of education lags behind other world regions

African students have lower average test scores than students in other world regions. Against global harmonized test scores ranging from 300 to 625, the average African student scored only 374 in 2017. Some countries, however, performed well relative to their income. Kenya and eSwatini, with scores of 455 and 440, respectively, are above the world average of 431 for upper-middle income countries. Similarly, some low-income countries, such as Burundi, Burkina Faso, Guinea, and Senegal had scores above the average for lower-middle income countries in Asia and upper-middle income countries in Latin America.

Quality-adjusted years of schooling are generally lower than completed years of schooling. Comparing education outcomes based only on quantity can overestimate real achievement. To account for the varying quality of education, years of schooling can be adjusted by test scores. Based on the adjusted measure, advanced economies tend to have both high average years of schooling and high test scores. This positive

relationship between quantity and quality is also seen in African countries. For some African countries, the quality of schooling is very low despite having higher than the regional average years of schooling.

Human capital contributes less to labor productivity and economic growth in Africa than in other developing regions

Human capital is a key driver of economic growth, through its effect on productivity. The role of education in increasing labor productivity at the aggregate level has been relatively limited in Africa. This is due partly to the low quality of education, lack of complementary physical capital, and widespread skill and education mismatches. Investing in the quality of education, therefore, can increase the productivity of African workers and firms.

Skills and qualifications are not adequately utilized in Africa's labor markets

Another reason for the low contribution of human capital to labor productivity in Africa is the mismatch between young workers' skills or education and the needs of employers. A skill mismatch is the discrepancy employees perceive between their skills and the skills needed to perform their job competently.

Skill and education mismatches are more prevalent among youth in Africa than in other regions. Close to half of Africa's employed youth perceive their skills as mismatched to their jobs, while around two-thirds of youth are either overeducated or undereducated. The undereducated share (nearly 55 percent) is considerably higher than in other regions (36 percent). So, in addition to skill and education shortfalls, African countries do not appear to be taking full advantage of the available skills and qualifications of their employed youth.

Skill and education mismatches affect wages, job satisfaction, and job search

Skill and education mismatches affect the labor productivity of youth indirectly through wages, job satisfaction, and job search. Overeducated African youth earn on average 18 percent less than

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youth with the same level of education who work in jobs that match their education. In addition, youth who believed that they were overskilled for their job were 3.4 percent less likely to be satisfied with their current job.

Youth who are less satisfied with their job because of a skill mismatch may also be less productive. The dissatisfaction arising from skill–job mismatches is more likely to motivate searching for a new job, particularly among overeducated youth. When asked why they would like to change their current job, 22 percent of overskilled youth responded that they wanted a job that would use their skills efficiently; only 5 percent of underskilled youth mentioned the same reason.

Enrollment in private schools is growing but remains small

Private education service providers also deliver education—from preprimary to higher and aspects of technical and vocational education and training—and such ancillary services as teacher training and supplementary education (after-school tutoring, language learning, and test preparation).

While still a small fraction of total education providers, private schools are catching up quickly in Africa, almost doubling in a decade, but they are less prevalent than in Asia and Latin America. The share of enrollment in private primary schools grew from an estimated 6 percent in 2007 to 11 percent in 2017, and that in secondary schools from 8 percent to 15 percent. Enrollments in private higher education institutions increased five-fold, from 3 percent to 16 percent. The growth of private education may, in part, reflect perceptions about the poor quality of public schools.

Strategies and policies to build the workforce of the future

Make strategic choices to anticipate and build a flexible and productive workforce

African countries will need to anticipate and build a flexible and productive workforce to meet future challenges. To strengthen worker employability, firm productivity, and inclusive growth, African countries need a national strategy for education and skill development, and to make growth more inclusive, these strategies should focus not

only on young people but also on adult workers, school dropouts, workers in the informal economy, and workers in economically and socially disadvantaged groups.

A first step for most countries on the continent will be to integrate education and skill development strategies into their development plans. A poorly skilled and educated labor force is typically the top constraint mentioned by global executives when considering manufacturing investments in Africa.

Because “soft skills” are likely to become increasingly important, education and training institutions should be encouraged to inculcate and reinforce positive values, starting with young children. These attributes include a strong work ethic, honesty, tolerance, respect for authority, punctuality, and pursuit of excellence. These are the intangible characteristics of a high-quality workforce.

Governments will need to invest in building the infrastructure needed to enable the development of appropriate skills. This includes basic infrastructure, such as reliable and affordable power supply, transport infrastructure, and postal address systems—as well as digital infrastructure, such as high-speed internet, mobile virtual networks, and interoperable systems.

Governments can also accelerate investments in the development of critical future skills, such as:

- Job-specific digital skills, including computer programming and technology design.
- Job-neutral digital skills, including data analysis and safe internet browsing.
- Soft skills, including communication and analytical and critical thinking, to enable workers to adapt to different tasks in a rapidly changing technological environment.
- Ancillary skills related to manufacturing that will remain important for supporting the digital economy, including physical skills that require dexterity, and lower skills such as sales, repair, and maintenance.

Improve education outcomes

To reduce dropout rates and improve education outcomes, countries can:

- Improve access to schools in remote areas. One of four children in Africa lives two or more kilometers from the nearest school, with no reliable means of transportation. Conditions are

even worse for households in rural areas and in low-income countries. Irregular attendance eventually leads to grade repetition and dropouts. Increasing access to schools by reducing the average distance to a school and improving ground transportation can reduce dropout rates and irregular attendance, especially in remote areas.

- Offer incentives such as free school uniforms and textbooks and daily meals to improve learning abilities and potentially reduce school dropout rates.
- Introduce mandatory education, at least at the primary school level, and ban child labor (and enforce the ban). Legal mandates can help overcome cultural and other barriers that increase dropout rates, while bans on child labor can increase school completion rates.
- Increase secondary school enrollment and completion. With substantial progress made toward universal primary education, African countries now need to determine how to ensure greater access to secondary education. One policy option to increase secondary school enrollment and completions is to make scholarships available to students in need, which can ease the transition from primary to secondary education.
- Implement pedagogical reforms, increase education standards, reform education governance, and implement effective incentives such as making teachers' contract renewal conditional on performance or encouraging teaching in the local language.

Align education and training with the labor market

To align education and training systems with the labor market and enable better matching of the skills of the workforce with job opportunities, governments need to develop a demand-driven education system in synch with employers' needs. Policies to increase alignment include:

- Partnering with universities, training institutions, and firms to build a workforce that is better synchronized with labor demand.
- Reducing the high transaction costs of job search, particularly in urban areas. High costs (such as transport costs to consult vacancy

boards and to print resumes and cover letters) often prevent youth from learning about job opportunities and from applying for jobs that match their skills and qualifications. By establishing or improving public job search agencies that centralize information on available jobs and provide advice on job opportunities, African countries could reduce job-search costs and improve job matching.

- Ensuring that the education system is in tune with rapidly emerging jobs in high demand in the private sector (such as software engineers, marketing specialists, writers, financial advisors, and data analysts).
- Strengthening public-private sector collaboration. To be more effective, vocational training and apprenticeship programs need to be part of a strong and collaborative system with industry, to ensure that training institutions are demand driven and impart skills that meet labor market demand.
- Emphasizing the digital skills that enable African youth to contribute fully to the digital economy. The African Development Bank, for example, has launched the Coding for Employment program to nurture a new generation of digitally enabled African youth. The program aims to support the establishment of 130 innovation centers across Africa by 2025.
- Making soft skill training an integral part of the national education strategy. Youth entering an increasingly competitive workforce often lack essential soft and interpersonal skills (communication, teamwork, and problem-solving). These skills can be developed as part of the curriculum and also built through government-sponsored internship programs in collaboration with private firms.

Invest in nutrition

The link between nutrition and the cognitive skills of the workforce is straightforward: a hungry child cannot learn properly. Yet nutrition is typically neglected and remains critically underfinanced by both governments and donors. A person's IQ may be reduced by 5 percentage points from low birth weight, by 5–11 percentage points from stunting, and by as much as 10–15 percentage points from iodine deficiency. In 2017, Africa had more than a

Governments need to develop a demand-driven education system in synch with employers' needs

The Fourth Industrial Revolution will place increasing demands on education systems that are not producing graduates versed in these skills

third of the world's stunted children under the age of five, with stunting rates ranging from 36 percent in East Africa to 17 percent in North Africa. And the number of stunted children in Africa has been rising.

To build cognitive skills, African governments need to invest in better nutrition, starting with infants in the womb. While the effects of malnutrition are preventable, they are almost always irreversible, especially in young children. The first 1,000 days from conception to age 2 are a critical window for nutrition. The lack of key nutrients during this time results in stunted children (below-average height for age) who grow into adulthood permanently shorter and weaker and with cognitive deficits.

Governments should also take advantage of the very high economic returns to investing in nutrition. For example, the benefit–cost ratio for investments that reduce stunting is estimated to be at least 15:1. Eliminating anemia results in a 5–17 percent increase in adult productivity, which adds up to as much as 2 percent of GDP in the worst affected countries. As a complement to nutrition initiatives, governments can promote early childhood education.

Invest in science, technology, engineering, and mathematics

Africa needs to build skills in information and communication technology and in science, technology, engineering, and mathematics. The Fourth Industrial Revolution (4IR) will place increasing demands on education systems that are not producing graduates versed in these skills.

Investments in high-speed internet and the spread of smartphones are making it possible for Africa to innovate on digital and mobile fronts. Innovation hubs are burgeoning, with more than 600 active tech hubs across the continent in 2019, up 40 percent from the year before.

Governments have also been accelerating investments in experimental research and development, to push out the knowledge frontier and address local challenges. These investments can be important mechanisms for boosting innovation in Africa, which lags behind other regions in R & D spending. Between 2012 and 2016, average gross expenditure on research and development was about 0.23 percent of GDP in Africa, only one-third of the level in Latin America of 0.68 percent.

Governments can collaborate with the private sector and education institutions in developing apprenticeships and training programs. Approaches include subsidizing internships, co-funding training centers with industries, and corporate funding of research and innovation in universities.

FINANCING EDUCATION AND SKILL DEVELOPMENT

There are four main sources of financing for education and skill development in Africa: government, households, international donors, and the private sector. The government is the largest provider and financier of education, and households also invest their own resources in education and training. International donors have contributed to education financing, especially in low-income countries, and the private sector's role, though small, has been rising. The current amount of financing from these four sources is not enough, however, to meet critical and growing education needs in Africa.

Africa's education spending as a share of GDP is high among developing countries

Over 2010–17, African countries allocated an average of 5 percent of GDP and 16 percent of government budget to education—just above the UN recommended lower limit of 4 and 15 percent, respectively. Twenty countries in a sample of 42 African countries met both UN recommended targets, by allocating 15 percent or more of their government budgets to education and 4 percent or more of their GDP. Seven countries met only one of the criteria, while 15 countries met neither.

Yet per student spending is the lowest in the world

While many African governments are allocating a substantial share of resources to education, the amount spent on education relative to size of the student population is low. Indeed, the amount of government spending per student in Africa is the lowest in the world, at only \$533 for primary

school and \$925 for secondary school (in purchasing power parity terms). The low spending per student can be a result of low GDP and high proportions of school-age cohorts due to rapidly growing youth populations.

At the primary school level, African countries spend on average a quarter of the resources per student, compared with Latin American countries and a fifth compared with Asian countries. At the secondary school level, Africa spends less than half the resources per student that Latin America spends and about a fifth what Asia spends. Such low levels of spending could partly explain the poor quality of education outcomes in many African countries.

African governments allocate the largest share of their education budgets to primary education (38 percent) and secondary education (37 percent), with higher education at 20 percent. Just 4 percent goes to technical and vocational education and training and 2 percent to preprimary education. This pattern is similar to that of other developing regions, such as Asia.

Africa could reach near universal primary enrollment by improving the efficiency of public spending on education

Africa is on average the least efficient region for education spending, with a 58 percent efficiency score for primary and 41 percent for secondary. This low efficiency has important implications. At the primary school level, a 58 percent efficiency score means inefficiency in education spending of around 42 percent, indicating that African countries could improve primary education by 42 percent without increasing spending. More concretely, the primary education completion rate could rise from its average of 79 percent in 2016 to 98 percent if efficiency levels in Africa matched those in developing Asia. In other words, African countries could achieve universal primary enrollment by improving the efficiency of education spending.

Direct household spending on education is high

While more than half of African countries have abolished school fees for primary and secondary school, families still spend a considerable

proportion of their income on their children's education. In 2015, African households spent, on average, 35 percent of the household budget on food, 3.5 percent on out-of-pocket health care, and 2.5 percent on education.

Given that fees have been abolished in many African countries, education expenses—such as books, materials, transport, and private tutoring—make up the bulk of spending. Rising household demand for better quality schooling may also play a part in high household education spending. In some countries, private tutoring accounts for a considerable share of household education spending.

Remittances are a substantial and growing source of income for many African households. Between 2005 and 2018, remittances rose from \$33.4 billion to \$82.8 billion, accounting for close to 3.5 percent of Africa's GDP. Remittances from internal and international migrants are an important source of education financing for many households, and defraying the cost of education is often a key motivation for migration. Households receiving remittances from abroad spent 22 percent of it on education in Nigeria, 12 percent in Burkina Faso, 10 percent in Kenya, and 3 percent in Senegal.

Official donors also contributed an important share of education financing in Africa

After a sharp decline in 2011, donor financing for education began to rise, reaching \$14.8 billion in 2017. Africa received \$5.4 billion, or 36 percent of the total. In some African countries, including Burkina Faso, Mali, and Zambia, the share of aid in government education budgets is higher than 25 percent.

By education level, the largest share over 2013–17 went to postsecondary education, at 30 percent. Next was general support to the education system, at 27 percent, distributed among education facilities and training, education policy and administrative management, teacher training, and education research. Basic education received 25 percent of international aid. The bulk of that went to primary education. Early childhood education and basic life skills for youth received about 13 percent of primary education aid. The lowest share went to the secondary school level,

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at 18 percent. Around 22 percent of aid to education was in the form of scholarships or training in the donor country.

The effectiveness of international aid can be improved

Aid to education, targeting different education levels and using different aid modalities, has been channeled into interventions such as school feeding programs, classroom construction, teacher training, girls' scholarships, programs to reduce student dropout, and curriculum development. An analysis of aid effectiveness in education found that the impact was greatest when aid was used for school facilities and teacher training. In addition, there were complementarities between aid for primary and secondary education, possibly driven by an incentive effect that induces children to complete primary schooling if there are strong prospects for being able to continue at the secondary level.

Private financing is rising but still limited

Private financing can complement government funding in public education institutions. There is limited research on private financing of education in Africa. Case studies reveal that private, nonhousehold sources represent only a small portion of total education funding. For example, nongovernmental organizations and private organizations contributed only 1 percent of total financing for education in Uganda, compared with 57 percent from households and 34 percent from the government.

There are substantial opportunities for private sector financing of education, including by impact investors, philanthropists, and entrepreneurs. Opportunities with social and economic potential abound in low-cost primary and secondary education, where governments have challenges in meeting the demand; higher education; technical and vocational education; and student and institutional finance.

The private sector underinvests in skill training

Although market failures depress private sector financing, private sector involvement is larger in skill training. Since skills acquired through training can be used productively by other firms,

a worker's current firm will not incur the cost of training without an enforceable contract to prevent "poaching" by a competitor. And although workers would be ready to bear the costs of training to fully capture the benefits in higher wages, they may be unable or unwilling to pay for training because of liquidity constraints, risk aversion, or inability to commit to not quitting after employer-financed training. If workers do not take into account the social returns to training (such as higher productivity of coworkers, and higher current and future gains to employers), underinvestment in training can be the result. Similarly, since the benefits to future employers are not taken into account by the current firm, the level of investment by the current firm will be suboptimal from a social perspective.

Policy recommendations

Invest more in both education and infrastructure for the highest returns in long-term GDP growth

Investing in both education and infrastructure will have a greater growth payoff than investing exclusively in either. The reason is that both types of investment strongly complement each other. Because building physical and human capital can be costly, policymakers need to consider both the public finance implications and the macroeconomic and distributional effects.

Modeling undertaken for this Outlook shows that a mixed investment program, featuring a 1 percent of GDP increase in investment allocated across basic education (34 percent), upper-level education (33 percent), and physical infrastructure (33 percent) is superior to any program focusing only on an individual sector due to strong complementary effects. Mixed investment increases net national income by almost 28 percentage points, real wages in the informal sector by 29 percentage points, and real income of the previously poor by 36 percentage points.

Enhance efficiency through education spending audits and reviews

Among developing regions, Africa spends the second highest share of GDP on education. But the efficiency of public spending is low, and government spending on education appears to have

been more successful in boosting the quantity of education than the quality. Africa's challenge is to expand the education and skills of its people by improving both the quantity and the quality of education, despite the government's limited financial space to maneuver. A more effective allocation of resources can benefit both quantity and quality.

Poorly targeted or misused education financing represents a source of inefficiency and can diminish improvements intended to increase education access and quality. While education expenditure diagnostic tools (such as budget and operational audits, public expenditure tracking surveys, and public expenditure reviews) can improve efficiency by reducing "leaks" in education financing and guiding public financial management reforms, they have not always been successful. Some key initiatives to increase the likelihood of success are to:

- Involve the ministries of education at all stages of the process, to build ownership and ensure that recommendations are implemented.
- Avoid analyzing too many flows (expenditures) or combining a tracking survey with other investigations.

Reduce school repetition and dropout rates

Reducing school repetition and dropout rates depends on better quality teaching. Although teacher compensation is typically the largest expenditure item in the education budget, low qualification, absenteeism, and poor performance of teachers contribute to the poor quality of education. To improve teaching quality, governments should:

- Recruit a higher proportion of qualified teachers.
- Provide more professional development for teachers.
- Solicit more feedback on school performance from a range of stakeholders, such as parents, students, and local authorities.
- Give schools more autonomy to allocate resources and recruit the teachers they need.
- Design better policies and strategies for recruiting and retaining able personnel.
- Improve school management and governance support programs.

Use performance-based financing

By aligning incentives with outcomes, results-based financing, which conditions financial

payments on the achievement of a verifiable outcome, is a promising instrument for strengthening education system performance. Independent third-party verification of pre-agreed results is a key component of results-based financing and requires strong monitoring and information systems for tracking indicators of results.

Examples of results-based financing in education include performance-based incentives, pay for performance, performance-based contracting, conditional cash transfers, and cash on delivery. Financing can be used to affect both supply-side agents, such as ministries, provincial authorities, districts, schools, and teachers, and demand-side beneficiaries, such as students and parents.

Results-based financing has recently been used in education projects in several African countries, including Cameroon, Democratic Republic of Congo, Mozambique, and Tanzania, but it is too early to evaluate long-term impacts. (The African Development Bank approved a results-based financing instrument in November 2017.)

Improve aid targeting to enhance education quality

Donor financing for education to developing countries, while rising in recent years to \$14.8 billion in 2017, is still less than half the estimated education financing gap of \$39.5 billion over 2015–30. The effectiveness of education aid needs to be increased as well as the amount. That requires two major shifts in policy thinking: away from project-based aid toward systemic support and a greater focus on education quality and student learning. A shift toward systemic support requires greater use of government budget support for the education sector to align donor and recipient country incentives and objectives as laid out in education sector plans or national development plans.

While basic supports to education (new classrooms, more teachers and instructional materials) are essential, so is a focus on education quality and student learning. This requires systemwide reforms relating to a commitment to education quality from national leaders, relevance of curricula and learning materials, school location and amenities, school management and leadership, teacher training, status of the teaching profession, and parent and community involvement in schools.

Africa's challenge is to expand the education and skills of its people by improving both the quantity and the quality of education

The government's
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Foster public–private partnerships in education and training

Public–private partnerships enable the government and the private sector to join in providing education infrastructure, products, and services and in sharing costs and resources. Examples of public–private partnerships in education include voucher schemes, loans, and scholarships to expand school choice beyond public schools. The private sector is also involved in supporting activities such as teacher training, tutoring, textbook provision, and school construction. Such knowledge and skill exchanges can benefit both parties as well as society.

The government's role in public–private partnerships is as direction-setter, regulator, and partner. As direction-setter, it can work with the private sector to increase the provision of education services in priority sectors or locations, in line with the national development plan or industrial policy. As regulator, it should ensure that the business environment in which firms emerge and evolve is conducive to business and investment in education. As a partner, it has considerable potential to expand access and improve quality and relevance. These collaborations can contribute to education infrastructure, products, and services while sharing related costs and resources, through initiatives such as:

- Exploring the use of service contracts or charter schools, which are publicly funded but independently managed by the private sector.
- Encouraging private firms to forge long-term collaborative partnerships with universities to fund research in specific domains of interest.
- Establishing a regulatory environment and monitoring mechanisms to ensure that public–private partnerships are in line with the country's development objectives, and creating an investment climate conducive to such partnerships in education, including the possibility of long-term finance facilities.
- Establishing reliable standards of quality within public and private education and training institutions, with quality assurance mechanisms for performance monitoring.

Where public technical and vocational education and training budgets are limited, private sector involvement may be needed to cover shortfalls. And the private sector may be more in tune with market

demands for skills. Public policies to improve vocational education and training should include:

- Supporting apprenticeships and training by encouraging partnerships among the private sector, the public sector, and education and training institutions.
- Opening a training market through competitive contracting with private training bodies and nongovernmental organizations.

Facilitate philanthropic financing of private education

Philanthropy is a potential education financing source that has barely been tapped in Africa. Endowments and foundations could be promoted to fund higher education and research on the continent. For example, leading US universities have multibillion-dollar endowments that generate millions in interest annually, while corporations could contribute to education financing through corporate responsibility programs.

African schools and universities could also mobilize funds through alumni associations. Dues and donations can be used to improve the school's facilities and curriculum and provide financial support to members of disadvantaged groups. Alumni associations could also be deployed to lobby governments for more effective education policies.

Develop the student loan market, targeted financial assistance, and cost-sharing mechanisms

Student loan and financial assistance schemes for higher education can be a key component of cost-sharing initiatives aimed at easing the pressure on government budgets. Because student financial assistance and loan programs in Africa have a mixed record, better policies are needed to enhance their effectiveness in expanding access to higher education for disadvantaged groups. Among these should be:

- Diversifying sources of funding to reduce reliance on government financing.
- Establishing a robust monitoring system (by collecting and maintaining reliable data on students) to identify students who are in need of financial assistance.
- Allowing private sector student loans to make education more affordable.

- Reducing the loan default rate through legal reforms that make it easier to recover loans from recipients with a demonstrated ability to repay. A combination of social, practical, and legal incentives can also be put in place to reduce defaults.

Another popular instrument for financing secondary and higher education is the education savings plan, implemented through bank accounts, with specific government-granted benefits. Because the funds are earmarked to finance a child's education in the future, they are typically invested to generate growth over the longer term. As mobile money and banking expand in Africa, more households will be able to benefit from such plans.

Explore innovative finance options to channel more international private capital into education

Additional capital could be leveraged to finance education using such innovative finance options as social or development impact bonds, while maintaining a focus on results. Social impact bonds and pay-for-success financing use private capital to finance social services. Repayment is made by the government conditional on achievement of a specified outcome. Development impact bonds are similar, except that a donor agency or foundation rather than the government repays the loans once the outcome is achieved.

The International Financing Facility for Education (IFFEd) is an important part of international efforts to address the global education financing gap and to attract new funding for education. The IFFEd financial mechanism will be implemented through four participating multilateral development banks (African Development Bank, Asian Development Bank, Inter-American Development Bank, and World Bank). The facility is expected to raise \$2 billion in contingent financing and grants from donor countries and is currently seeking a AAA bond rating from Standard & Poor's. Another innovative financing initiative is the African Education Fund, spearheaded by the African Development Bank.

Address inequality in spending by using "progressive universalism" as a guiding principle for financing education

Progressive universalism includes prioritizing the poor or disadvantaged, prioritizing lower levels of

education first where social returns are highest, and supporting the complementary role for private financing and cost recovery for higher levels of education where appropriate.

To address inequality in education spending, governments seeking to pursue progressive universalism should consider:

- Greater use of formula funding of schools (use of a formula to calculate the public resources school districts will receive, based on specific indicators).
- Needs-based components that can be used to channel resources to geographic locations and schools that most require improvement.
- Expanding research on the use and impact of formula funding and on the distribution of financial responsibilities across levels of government to improve the delivery of education.

Promote education-linked conditional cash transfers to girls and poor families

Children from the poorest backgrounds are more likely to be out of school and less likely to complete primary school than children from better-off households. The factors that prevent the most disadvantaged children and youth from completing school need attention. A root cause is likely to be out-of-pocket education costs that the poorest households cannot afford. Free primary education and conditional cash or nonmonetary transfers could alleviate this constraint.

Many developing countries have used targeted conditional cash transfers to increase household investment in education, health, and nutrition. The transfers are targeted because they identify eligible households who are poor or vulnerable and have school-age children, and they are conditional because households must send their children to school to receive the transfer.

Evidence for Africa shows a positive impact of conditional cash transfer programs on education outcomes. While the financial transfers in most programs represent a significant share of poor households' income, even small transfers can have large effects. Expanding such programs could be an effective demand-side education development tool.

Targeted conditional cash transfers can increase household investment in education, health, and nutrition



Africa's economic growth has stabilized at 3.4 percent in 2019 and is expected to pick up to 3.9 percent in 2020 and 4.1 percent in 2021 but to remain below historical highs.

Growth's fundamentals are also improving, with a gradual shift from private consumption toward investment and exports. For the first time in a decade, investment accounted for more than half the continent's growth, with private consumption accounting for less than one third.

The 2020 Outlook highlights, however, that growth has been less than inclusive. Only about a third of African countries achieved inclusive growth, reducing both poverty and inequality.

The special theme this year is delivering education and skills for Africa's workforce of the future. Despite progress in recent decades, Africa still lags behind other developing regions in education and skill development. Policy actions should include measures to improve both the quantity and the quality of education and align education policy with labor market needs.

This requires expanding access to schools in remote areas, increasing incentives to invest in education, developing a demand-driven education system that caters to employers' needs, investing in nutrition to help poorer children, and building STEM and ICT capacity.

To address inequality in education, the Outlook appeals for progressive universalism in education spending—setting high priorities for the poor and disadvantaged and for basic education, where social returns are highest.

The Outlook shows that public expenditures on education and infrastructure are highly complementary, as investing in both has a much greater payoff than investing exclusively in just one. The efficiency of education spending is much lower in Africa than in developing and emerging Asia. The good news, though, is that by enhancing the efficiency of education spending—now at 58 percent for primary schooling—African countries could almost reach universal primary enrollment, without increasing spending at all. Key policies to improve spending efficiency and education quality include conducting education expenditure audits and reviews, improving teacher quality, and using performance-based financing.

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