

Special edition for the African Union Year of Education 2024

Introduction

The Education Finance Watch (EFW) is a collaborative effort between the World Bank, the Global Education Monitoring (GEM) Report, and the UNESCO Institute for Statistics (UIS). The EFW aims to provide a global analysis of trends, patterns, and issues in education financing. It uses various sources of education, economic, and financial data from the World Bank, the UIS, the International Monetary Fund (IMF), and the Organisation of Economic Co-operation and Development (OECD). The EFW2023 updated the analysis of trends and patterns in education expenditure over the past decade up to 2021. It also shed light on changes in the schoolage population and projected their impact on public finances over the next decade for selected countries. This special edition of the EFW2023 extracts its findings on Africa, marking the declaration of 2024 as the African Union (AU) Year of Education and aiming to provide information to ministers of finance and education. Where possible, the data are disaggregated by each Regional Economic Community (REC) and by each AU regional group.

Key findings:

• In 2021, total education spending (government, households, and development aid) increased by 2 percent in Africa in real terms relative to 2020. This increase was driven by an increase in government spending, which accounts for 69 percent of the total.

- As of 2021, Africa governments' mean spending on education as a share of GDP remained at 3.7 percent showing little change since 2012. Only two out of eight RECs spent above the minimum recommended international benchmark of 4 percent of GDP, outlined in the Education 2030 Framework for Action. Median annual education spending per capita has stagnated throughout the past decade, at around US\$100.
- Aid to education in sub-Saharan Africa fell by 23 percent, from US\$5.6 billion in 2020 to US\$4.5 billion in 2021. The main reason was the reduction of general budget support, which returned to pre-COVID levels. Aid accounts for 5 percent of total education expenditure in Africa and is declining. In 2021, Africa received approximately US\$1.3 billion of direct aid for basic education: while aid to basic education grew by 48 percent between 2014 and 2021, all of that increase was achieved between 2014 and 2017 and levels have remained stagnant since then.
- It is estimated that households contribute 27 percent to total education spending in Africa. Within countries, household spending varies by characteristics, such as socio-economic status, location, and the type of school and level of education children are enrolled in. It costs families 1.5 to 5 times more to send a child to a private rather than a public school.







Total education spending

This section provides a long-term perspective, analyzing changes in spending by source. The EFW uses a coherent methodological approach to impute missing education spending data and estimate total education spending for the past 10 years. The specific methodology and rationale are described in detail in the EFW Technical Note.

1.1 How has total education spending changed over the last ten years, particularly since the COVID-19 pandemic?

In 2020, total education spending stagnated, but it increased again in 2021. The global total real expenditure on education, combining spending by governments, ODA, and households, inched upwards in 2021 to reach US\$5.4 trillion after two consecutive years at US\$5.3 trillion.¹ In Africa, total real expenditure on education rose from US\$147 billion in 2018 to US\$ 156 billion in 2019, fell in the middle of COVID-19 to US\$154 billion in 2020, but bounced back to US\$159 billion in 2021 (Figure 1). Early reports had warned spending would decline (United Nations 2020). Africa accounted for 3 percent of global total expenditure on education.

Spending increased in most regions in 2021. By REC, funding only declined in ECCAS. The largest increase in real terms was witnessed in SADC (9 percent) and EAC (8.5 percent). In contrast, ECCAS experienced a decrease of 7.3 percent (Figure 2a). By AU region, the largest increase between 2020 and 2021 was observed in Southern Africa. In 2021, total education spending was stagnant in Central Africa, which had seen a rapid increase in education spending in 2018–20 (Figure 2b).

Government is the main funding source. The share of government in total education spending has remained relatively stable since 2012; it accounts for 69 percent of total education spending in 2021. In Africa, countries rely significantly on households, which are estimated to have contributed 27 percent of total education spending in 2021. As part of the response for countries affected by the pandemic, donor contributions to education increased by 15 percent from 2019 to 2020 but fell by 7 percent in 2021. Overall, aid accounted for 5 percent of total education spending in 2021.

Figure 1. Total education spending increased again in 2021 after a fall in 2020

Total education spending in Africa, by source, constant 2021 US\$ billion, 2012–21



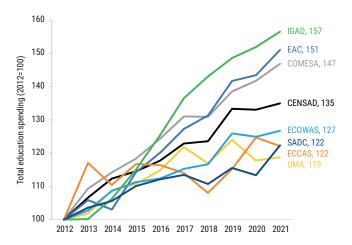
Source: Author estimates using the EFW2023 database.

¹ EFW2023 revised the estimates of total global education spending upward by approximately 8 percent over the past 10 years (total education spending in 2020 was estimated at US\$4.9 trillion in EFW2022, but new estimates in EFW2023 is US\$5.3 trillion in EFW2023). This upward revision was due to a combination of various factors, including the replacement of imputed data last year with newly available data this year, revisions of reported data in the past year, and a rebasing year for constant values from 2020 to 2021.

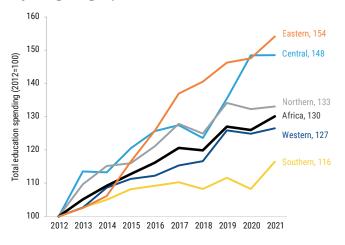
Government contribution to total spending is not uniform across Africa. The share of government in total education spending ranges from 49 percent in ECCAS to 72 percent in UMA and 76 percent in SADC. Accordingly, ECCAS has the highest shares of spending accounted for by households (43 percent) and aid (8 percent), while SADC has the lowest shares of spending accounted for by households (21 percent) and aid (3 percent) (Figure 3).

Figure 2. African regions have increased their education spending at different rates

Total education spending growth in Africa, 2012–21 (2012=100) a. By REC



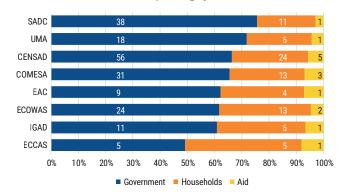
b. By AU regional group (2012=100)



Source: Author estimates using the EFW2023 database.

Figure 3. Governments account for 7 in 10 dollars spent on education in Africa

Distribution of total education spending by source and REC (%), 2021



Note: Each country may belong to more than one REC; therefore total spending in each REC does not add up to total spending in Africa. The volume of aid captured in Figures 1 and 3 is not the same. Figure 1 presents total aid to Africa (including flows unallocated to specific recipient countries), whereas Figure 3 only captures aid flows allocated explicitly to countries in each REC and is therefore a subset of total aid to Africa.

Source: Author estimates using the EFW2023 database.

Regional Economic Communities

CENSAD: Community of Sahel-Saharan States

COMESA: Common Market for Eastern and Southern Africa

EAC: East African Community

ECCAS: Economic Community of Central African States

ECOWAS: Economic Community of West African States

IGAD: Intergovernmental Authority on Development

SADC: Southern African Development Community

UMA: Arab Maghreb Union



Library at Highfield High School in Harare (Zimbabwe). © Arne Hoel / The World Bank Group

Government

Government funding of education makes sense because the returns to education are not only private but also public. Education is a basic service, a human right, and optimal investment is often thwarted by market failures, borrowing constraints, and differences in household incomes and preferences, among others. Schooling is also a mechanism for

enhancing social cohesion and nation-building, producing numerous positive externalities. These are some of the reasons governments do and should continue to invest in education, even in the face of economic, social, climate, and public health-related crises. Education builds human capital, which strengthens countries' ability to overcome challenges and to innovate.

Table 1. Public education expenditure as a share of total public expenditure and as share of GDP, 2022 or most recent year

Strategy		Below 4% of GDP	Above 4% of GDP
Above 15% of total public expenditure	Low income	Chad, D. R. Congo, Ethiopia, Gambia, Sierra Leone	Burkina Faso, Burundi, Mali, Mozambique
	Lower middle income	Benin, Congo, Kenya, Zimbabwe	Cabo Verde, Eswatini, Morocco, Sao Tome and Principe, Senegal
	Upper middle income		Botswana, Namibia, South Africa
	High income		
Below 15% of total public expenditure	Low income	Central African Republic, Liberia, Madagascar, South Sudan, Togo, Uganda	Niger, Rwanda
	Lower middle income	Angola, Cameroon, Comoros, Côte d'Ivoire, Ghana, Guinea, Mauritania, United Republic of Tanzania, Zambia	Algeria, Lesotho
	Upper middle income	Gabon	
	High income		
		Data available earlier than 2020	No data at all
Data availability	Low income	Malawi, Somalia	Eritrea, Sudan, Guinea-Bissau
	Lower middle income	Djibouti, Egypt, Tunisia	Nigeria
	Upper middle income		Equatorial Guinea, Libya
	High income	Seychelles	
Source: UIS database.			

2.1 How does fiscal space vary across countries for mobilizing funding for education?

Governments often do not meet the minimum benchmarks on public education spending. Among the 42 of 54 African countries with data in 2020–23, 12 countries, or 29 percent, met both minimum international benchmarks of at least 15 percent of total public expenditure and at least 4 percent of GDP dedicated to education. In contrast, 16 countries, or 38 percent, did not meet either of two minimum international benchmarks (Table 1).

2.2 How has government education spending changed in the last decade?

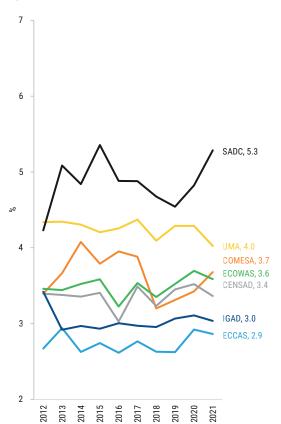
Government spending on education as a share of GDP in Africa has remained flat. The mean level of government spending as a share of GDP was 3.7 percent in 2021 and has not changed since 2012. The median level is also 3.7 percent. Across RECs, SADC

(5.3 percent in 2021) and UMA (4.0 percent) spent the highest, while IGAD and ECCAS the lowest share (around 3.0 percent) (Figure 4a). Across AU regions, Southern Africa spent the highest (a median of 6.6 percent) and Central Africa the lowest share (2.9 percent) (Figure 4b).

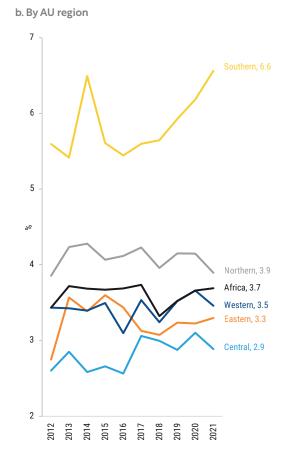
Government education spending per capita has remained stagnant in the past 10 years. The amount a country spends on education per child is the most direct measure to assess whether sufficient resources are devoted to education. While it is difficult to establish a benchmark for the cost of ensuring quality education in different countries, comparisons can be informative. In Africa, the median public education spending per capita stagnated at around US\$100 in the past 10 years. The median spending level was lower in the Central, Eastern and Western regions (between US\$70 and US\$90), while it was twice as high in the Southern region (US\$186 in 2021) and more than four times as high in the Northern region (US\$446 in 2021 (Figure 5a).

Figure 4. Government education spending as a share of GDP has been stable for the past 10 years

Government education spending as a share of GDP, median, 2012–21 a. By REC



Note: Estimates on spending as a share of GDP include interpolated values for missing data. Source: Author estimates using the EFW2023 database.

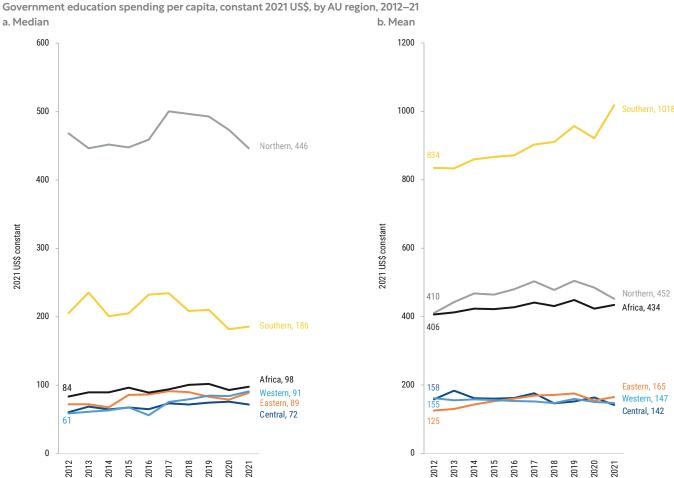


Mean public education spending levels have also remained constant in the past 10 years. At US\$434 in 2021, average spending weighted by GDP is driven up by spending levels in richer economies in Southern Africa. But spending in Central, Eastern and Western Africa is well below the continental average (at around US\$150) (Figure 5b).

2.3 What is the scope for increasing efficiency in spending?

Despite high levels of spending in term of the share of total government expenditure, absolute levels are very low as are the levels of learning outcomes. Education financing plays an important role. Countries may be either spending too little, spending may be inefficient, or both may be happening at the same time. What governments spend on, and how, are key to recovering learning loss brought about by the COVID-19 pandemic. If spending is inefficient, meaning misallocated and misaligned, and/or does not promote effective policies, it will not translate into improved student learning. Education funding must also be equitable to bring and keep all children in school and learning.

Figure 5. Median spending per capita has remained constant at less than US\$100 in the last decade



Note: Estimates including interpolated values of government education spending are used in place of missing country-level data. Per-capita figures use total pre-primary to tertiary school-age population as reported by the UIS and UNSD.

Source: Author estimate using EFW2023 database.

Key learning outcomes are lowest in countries spending the least per school-aged child. EFW2023 updated the analysis done by World Bank and UNESCO (2021) and Arias and Kheyfets (2023), using the latest available public education spending data. The relationship between the learning-adjusted years of schooling (LAYS)³ and spending for each country in Africa shows countries – with few exceptions – achieving a very low number of LAYS with very low levels of spending per child (Figure 6).

These countries could benefit from more spending to adequately fund essential inputs to ensure effective delivery of education services, and from cost-effectively investing to maximize impact on learning. Education spending efficiency can be improved by prioritizing universal foundational learning and spending more resources on high-efficiency educational investments.

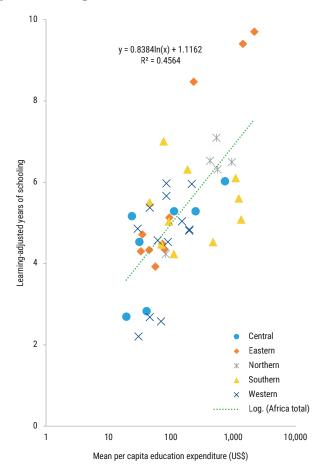
Increasing the cost-effectiveness of education spending could maximize learning returns on education investments. Even before the pandemic, actual learning in low-income African countries was very low. On average, a child living in a low-income African country only learned for 4.2 years equivalent – as measured by LAYS – with a government education expenditure of US\$47 per child a year.



Students at the Methodist Secondary School in Kailahun District (Sieera Leone). © George Lewis / The World Bank Group

Figure 6. Countries differ in how effectively they translate funding into outcomes

Mean per capita education expenditure and learning-adjusted years of schooling, Africa, 2020



Note: The horizontal axis is set to a logarithmic scale. Spending per capita is computed as total public education divided by the school-age population. Estimates on spending per capita include interpolated values. Data for both indicators are available in 45 out of 54 countries in the EFW2023 database.

Source: Author calculations based on the Human Capital Index and EFW2023 database.

² Learning-adjusted years of schooling data refer to 2020.

The learning-adjusted years of education metric combines quantity (expected years of schooling) and quality (harmonized learning outcomes). Expected years of schooling measures the number of years of school a child born today can expect to obtain by age 18. It is based on age-specific enrollment rates between ages 4 and 17 and has a maximum value of 14. Meanwhile, harmonized learning outcomes are calculated using a conversion factor. For more details see Filmer et al. (2018); Kraay (2018); and Patrinos and Angrist (2018).



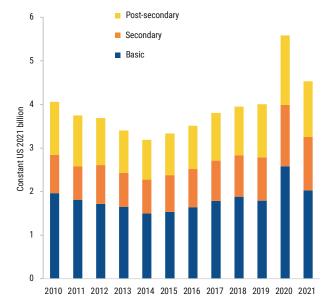
Aid to education levels fell in 2021. Globally, aid to the education sector fell from US\$19.3 billion in 2020 to US\$17.8 billion in 2021, the most recent year with sector and recipient level data, or by 7 percent in real teams, from 2020 to 20214. In sub-Saharan Africa, education aid saw an even more significant reduction, from US\$5.6 billion to US\$4.5 billion, or by 23 percent. Total aid to education includes two components. The first (and by far the largest accounting for over 85 percent of the total) is direct aid that is specifically earmarked by donors for education. The second is general budget support, unearmarked aid provided to governments, 20 percent of which is assumed to be allocated to education. General budget support increased in 2020 to address the consequences of COVID-19 and decreased in 2021 (Figure 7). Continent-wide, including North Africa, the overall trend in total aid to education reflected that in sub-Saharan Africa, stagnating between 2010 (US\$4.9 billion) and 2019 (US\$5.2 billion) but two successive years of increased budget support meant a jump to US\$6.9 billion in 2020 and US\$7.0 billion in 2021.

Direct aid to basic education has increased in recent years.

If 2020 is considered as an exception, aid to education in sub-Saharan Africa grew in fact by 42 percent between 2014 and 2021. Direct aid to education grew by 38 percent (from US\$2.8 billion to US\$3.9 billion), while direct aid to basic education grew by even more (by 48 percent or from US\$850 million to US\$1.25 billion)⁵. However, this increase was achieved between 2014 and 2017 and levels have remained stagnant since, despite the fact that sub-Saharan Africa hosts over half of the world's primary-age out-of-school children, a share that is growing (UIS and GEM Report, 2022). In contrast, not only has direct aid to secondary education grown even more in this period (by 87 percent), but this growth has been constant (from US\$450 million in 2014 to US\$640 million in 2017 and US\$840 million in 2021 in real terms).

Figure 7. Aid to education in sub-Saharan Africa fell by 23 percent from 2020 to 2021 but has increased by 42 percent since 2014

Total aid to education disbursements, by education level, sub-Saharan Africa 2010–21



Source: Own estimates based on the OECD CRS database (2023).

The definition includes ODA grants and loans for education but not other official flows (OOF), such as non-concessional loans (e.g., IBRD loans) or private development finance.

⁵ According to the OECD, basic education covers 'primary education, basic life skills for youth and adults, and early childhood education'.

Most aid to education is disbursed from a select group of donors.

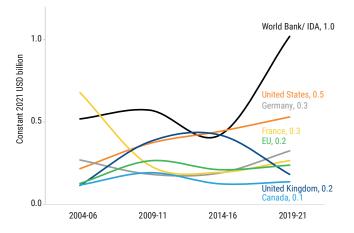
The five largest donors — namely the World Bank, France, the United States, Germany, and the European Union — account for over two-thirds of the total. Between 2019 and 2021, the World Bank was the largest donor to education in Africa, disbursing an average of US\$1.0 billion annually. France, Germany, and the United States followed with about US\$0.4 billion each. However, France and Germany allocate 60 percent of their aid to education at the post-secondary level in their countries. This is because these countries consider scholarships and waived fees to international students as part of their aid. The United States, by contrast, does not include international student scholarships as a form of education aid.

Donor disbursements have followed different trajectories. The World Bank has been the largest donor to education in Africa for most of the past two decades. Aid from the United States more than doubled from the mid-2000s to the mid-2010s but has remained constant since then. In contrast, aid to education from the United Kingdom has dropped by 43 percent since the mid-2010s (Figure 8).

A large part of aid does not go straight to governments. In Africa, donors disbursed one third of their aid to education in 2021 through non-government organizations and universities. France and Germany channel large parts of aid through their own development agencies. World Bank funds are received by governments, while this is the case for no more than 20 percent of aid disbursed by the European Union, Germany, the United Kingdom and the United States.

Figure 8. The World Bank is the largest donor to education in Africa

Direct aid to education in Africa, excluding scholarships and imputed student costs, by donor, three-year averages 2004–06, 2009–11. 2014–16. and 2019–21. US\$ billion



Source: Own estimates based on the OECD CRS database (2023).



 $Ms.\ Helalaila\ Ibrahim,\ who\ teaches\ in\ her\ class\ at\ Kobi\ Primary\ School,\ in\ Bauchi\ (Nigeria).\ \textcircled{@}\ Arne\ Hoel\ /\ The\ World\ Bank\ Group\ Arne\ Hoel\ /\ The\ World\ Bank\ Group\ Hoel\ /\ The\ World\ Hoel\ World\ Hoel\ Noel\ World\ Hoel\ World\ Hoel\$

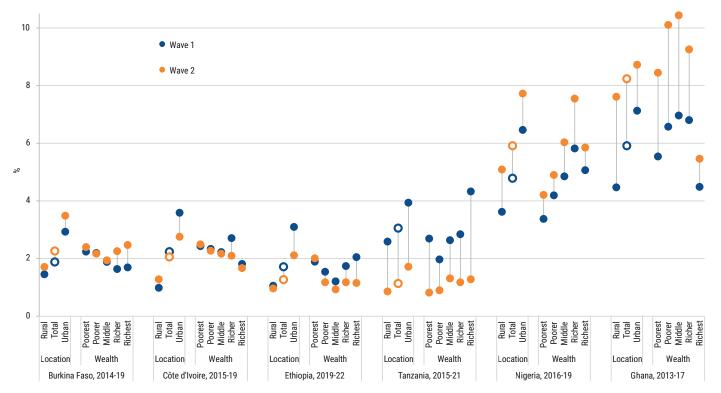
Households

Household spending levels vary widely between and within countries. Among low-income countries, 85 percent of which are in Africa, households accounts for between 5 and 73 percent of total education spending. In general, richer households spend a higher proportion of their income on education than poorer households, as the latter have severe constraints on their budget (Foko et al. 2012; UNESCO 2021; World Bank and UNESCO

2022). Even when governments proclaim 'fee-free' education, households often spend money for items, such as books and uniforms, to send their children to school. These costs represent a regressive tax when education is compulsory, and often exclude poor children from schooling (Hillman and Jenkner 2014; UNESCO 2021).

Figure 9. The share of education in household consumption varies by economic status and location

Share of education in total household consumption expenditure (%), selected countries



Source: Author calculation using household survey datasets https://www.worldbank.org/en/programs/lsms.

Households bear significant costs for schooling. Data from two living standard surveys from six African countries were analyzed in EFW2023.⁶ In two countries where spending levels were compared before and after COVID-19, the share of education in household budgets fell: in Ethiopia (from 1.7 percent in 2019 to 1.3 percent in 2022) and in Tanzania (from 3.1 percent in 2015 to 1.1 percent in 2021). But during the 2010s, the share of education in total household spending appears otherwise to have increased: in Burkina Faso (from 1.9 percent in 2014 to 2.3 percent in 2019), Ghana (from 5.9 percent in 2013 to 8.2 percent in 2017) and Nigeria (from 4.8 percent in 2016 and 5.9 percent in 2019) (Figure 9).

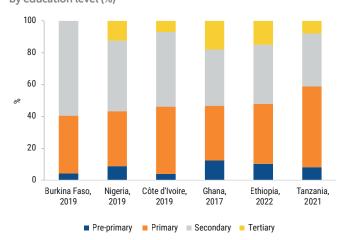
Wealthier families usually allocate a higher share of their consumption to education. In Burkina Faso, urban households (3.5 percent) spent a share of their budget on education that was twice as high as that spent by rural households (1.7 percent) in 2019. In Nigeria, households from the poorest quintile allocated 4.2 percent of their budget to education in 2019, while those from the two richest quintiles allocated 6.7 percent. But the same year in Côte d'Ivoire, the poorest allocated 2.5 percent and the richest 1.7 percent.

Household spending is largely concentrated in primary and secondary education. There is relatively little variation in the allocation of education spending to different levels among the countries analyzed. At one end, households in Burkina Faso allocated 96 percent to primary and secondary education in 2019, while at the other end households in Ghana allocated only 70 percent to these levels in 2019, spending instead large shares to pre-primary (12 percent) and tertiary education (18 percent) (Figure 10).

Not surprisingly, households spend more money on private than on public schools. The per student cost in private over public schools ranges from 1.5 times higher to as much as 10 times higher in Ethiopia and Tanzania. Private costs are especially high in pre-primary and primary education. For instance, in Ethiopia and Tanzania households who sent their children to non-state pre-primary schools paid about 20 times more than peers who sent children to public pre-primary schools.

Figure 10. Most household spending on education went to primary and secondary education

Distribution of household education spending by education level (%)



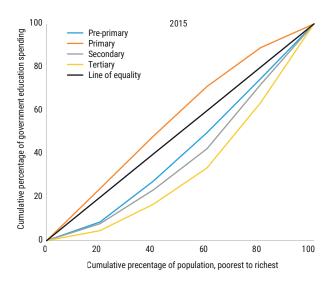
Source: Own calculation using household survey datasets.

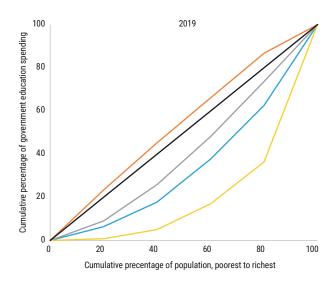
Public education expenditure should equalize opportunities but often it does not. The distribution of public spending to education across wealth quintiles at each education level (pre-primary, primary, secondary, and tertiary) was analyzed in two countries (Côte d'Ivoire 2015 and 2019; and Ghana 2013 and 2017), using household surveys and published data in government budget and expenditure reports. Government spending on primary education is favoring the poor, which means that the poorer received a higher share of government spending. Results are mixed in the case of pre-primary education: wealthier families benefited more in Côte d'Ivoire, while poorer families benefited more in Ghana. Globally, the importance of early childhood development to decrease late entry into primary school and increase learning over the life cycle are increasingly recognized. Countries begin to fund this priority, given its high return on investment and positive impact on human capital development. Finally, expenditure on secondary and, especially, tertiary education levels is skewed to wealthier households. Expenditure on tertiary education is typically skewed as those with access to higher education mainly come from the richest households. Reallocating education budgets from tertiary to basic education can make education financing more equitable (Figure 11).

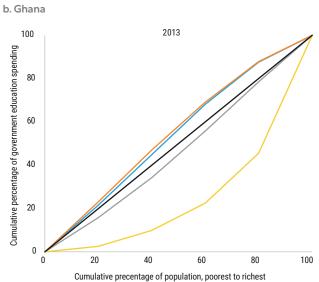
The countries analyzed (Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Nigeria, and Tanzania) had conducted household surveys at least twice in the past 10 years. Household spending was analyzed as share of total household consumption for a particular year, by type of educational institution attended (state or non-state), household location (urban or rural), household wealth (by quintile), and education level (pre-primary, primary, secondary, and tertiary education).

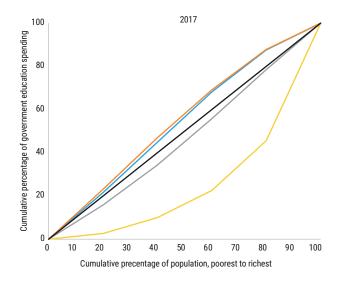
Figure 11. Government education spending is skewed towards richer households

Lorenz curves of public education spending by education level, a. Côte d'Ivoire









 ${\it Source:} \ {\it Author} \ {\it calculation} \ {\it using} \ household \ surveys, UIS, and \ government \ budget \ reports.$

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