

THE IMPACT OF THE COVID-19 PANDEMIC ON EDUCATION FINANCING

MAY 2020

This brief identifies the ways in which the COVID-19 pandemic is likely to affect the availability of funding for education. It summarizes evidence on the negative impact that the pandemic is likely to have on education financing and identifies some policy responses to mitigate this impact.



1 Economic Impact of COVID-19

The economic shock associated with the COVID-19 pandemic is likely to be significantly larger than anything seen since the financial crisis of 2008/09. The spread of COVID-19 has already had a high human cost, and, with public health systems struggling to cope, these costs will continue to grow. The policies put in place by governments to slow the transmission of COVID-19 have led, in many countries, to a massive demand and supply shock. This has led to significant trade disruptions, drops in commodity prices, and the tightening of financial conditions in many countries. These effects have already led to large increases in unemployment and underemployment rates and will continue to threaten the survival of many firms worldwide (Loayza and Pennings, 2020).

The pandemic will create significant fiscal policy challenges. While macroeconomic policy includes other dimensions, this brief focuses on fiscal policy, which will have the largest and most immediate effects on education financing. Government revenues

are projected to fall as a consequence of the pandemic because of declining economic activity. As fiscal space is already limited in many countries, there is a danger that policy responses to the crisis will either be insufficient or will worsen macroeconomic conditions. Moreover, the overwhelming need to give priority to responding to the public health emergency and to strengthening safety nets is likely to reduce the amount of funding that is available for other public investments, including education.

There is considerable uncertainty about the likely overall economic impact of the COVID-19 pandemic. Its duration and severity will depend on the success of measures to stop the spread of the virus and how quickly economic activity can resume, trade can recover, and financial markets and commodity prices can be stabilized. It is clear that the immediate effect will be a slowdown or reversal of economic growth and poverty reduction. However, the longer-term outlook is uncertain.



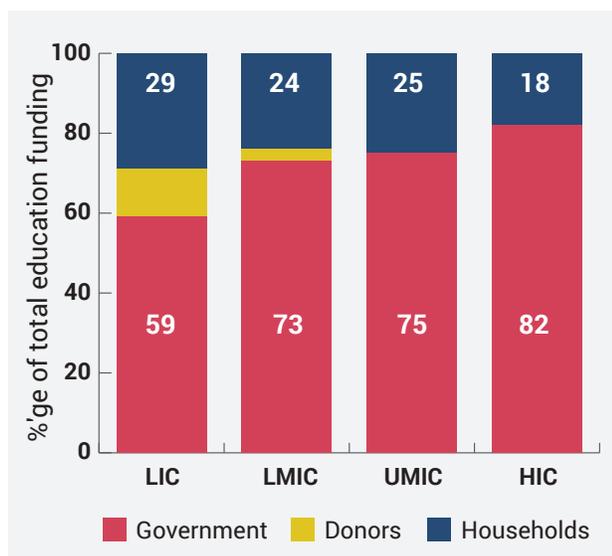
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Education



Governments, households, and development partners—in that order—are the main funders of education. Their contributions differ significantly across country income groups (Figure 1). For example, domestic governments are the largest funders of education in all income groups,

Figure 1: Domestic governments are the main source of funding for education

Funding source as a share of total funding (%)



Source: UNESCO (2019).

while the direct contribution of households to education spending tends to be greater in poorer countries.

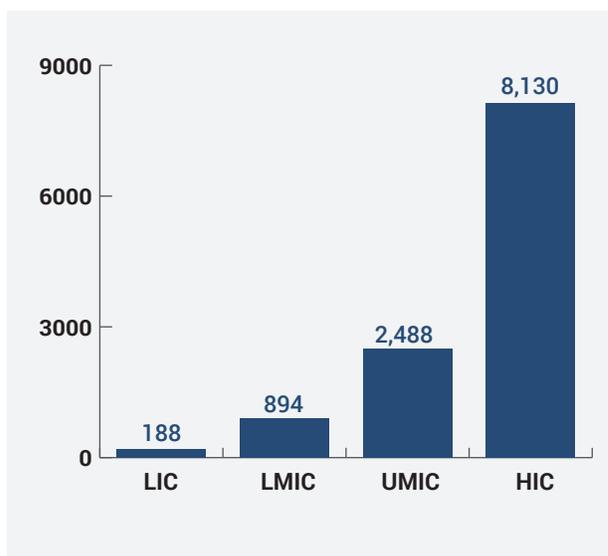
The ability of each group to fund education will be affected by COVID-19 in different ways. While it is difficult to estimate the effects of COVID-19 for each source of funding and for each country, this section summarizes what is currently known.

Government Funding

Before the pandemic, governments were spending vastly different amounts on education. High-income countries on average were spending 43 times as much on the education of primary-school-aged children as the average low-income country (Figure 2). The disparities in spending were even larger when viewed over a child’s entire education career. By the age of 18, the average child growing up in a low-income country will have attended school for only eight years compared to 13 years in a high-income country. Overall, the average low-income country government will have invested about US\$1,300 on the average child’s education, while the average high-income country would have spent about US\$110,000. Despite these vast spending inequalities, substantial progress had been made in increasing

Figure 2: There are vast disparities in education spending across countries

Public primary education spending per child (2015 \$PPP)



Source: Al-Samarrai et al (2019).

education investments in low and lower-middle-income countries and improving access to educational opportunities. It will be seriously difficult to continue to make progress in narrowing these gaps in spending and outcomes because of the COVID-19 pandemic.

The actions being taken to slow the spread of COVID-19 are forecast to result in a large drop in global output. Available forecasts show that there will be a decline in real GDP in 2020 for countries in most income groups and regions (Table 1). Low-income countries are expected to buck this trend and continue to grow, albeit at a much slower rate than before the COVID-19 pandemic. These income group and regional averages mask differences between countries driven by the make-up of their economies and their exposure to COVID-19 related shocks. For example, large commodity exporting countries like Angola, Brazil and Nigeria are expected to experience negative economic growth because of significant drops in commodity prices (IMF, 2020b).

Table 1: Growth is forecast to drop in 2020

Real GDP growth rates (%)

	2020 pre-COVID	2020	2021
High Income	2.1	-6.7	5.7
Upper Middle Income	4.1	-4.4	6.0
Lower Middle Income	4.0	-1.6	4.6
Low Income	5.0	0.5	4.7
East Asia and Pacific	3.4	-3.1	6.0
Europe and Central Asia	2.7	-5.7	5.1
Latin America and the Caribbean	4.4	-4.0	4.5
Middle East and North Africa	2.8	-6.6	8.9
South Asia	5.4	-0.5	6.1
Sub-Saharan Africa	4.1	-1.1	4.5
All Countries	3.6	-3.7	5.4

Source: World Bank calculations from IMF (2019b and 2020b).

Note: Indicators are unweighted country averages.

Despite projected declines in government revenue, government spending is expected to increase as part of the pandemic response. Slowing economic activity will automatically translate into lower levels of tax and other government revenues. For example, between 2019 and 2020, government revenue as a share of GDP is expected to fall from 17.2 to 16.4 percent in Sub-Saharan Africa. However, the pandemic response is expected to increase government spending in the region in 2020 by approximately 13 percent in real terms. Lower revenues and higher spending will result in a deterioration of fiscal balances in most countries during 2020. As a result, spending in low- and middle-income countries is forecast to continue to increase in 2021 but more slowly as countries recover from the immediate effects of the pandemic and attempt to improve their fiscal positions. IMF forecasts suggest that government spending in high-income countries will actually fall in real terms in 2021.

The impact on public education spending can be estimated using forecasts of GDP growth and public spending alongside UN population projections.

Two simple forecasts for 2020 are presented in Table 2. The baseline forecast assumes that the share of the overall budget allocated to education remains the same. The downside forecast assumes that, as part of their pandemic response, governments reprioritize their budgets towards health and social protection in the short run. It assumes that the share of the budget allocated to education will fall by 10 percent. (Table 2). The forecasts for 2021 are based on the assumption that there are no additional changes to the composition of the overall budget. While forecasts of this kind are useful in understanding the potential effects of the COVID-19 pandemic, they should be interpreted cautiously given the significant uncertainty in the underlying assumptions on which they are based.

In low- and middle-income countries, the pandemic is expected to reduce planned increases in education spending in 2020. Forecasts made prior to the pandemic estimated that public education spending in all regions and income groups would grow in real terms (Table 2). However, baseline forecasts that take into account the likely impact of the pandemic estimate that spending will



increase more slowly than in the pre-COVID-19 forecasts for low- and middle-income countries. If governments reprioritize their budgets and reduce the share allocated to education, there is likely to be a downside scenario in which per capita education spending declines in almost all country income groups and regions. For example, per capita education spending in Sub-Saharan Africa would fall by 4.2 percent.

Even though a return to economic growth in 2021 is forecast, education spending is expected to stagnate in most countries and fall in some. Most forecasts suggest that there will be a large rebound in economic growth in 2021 (Table 1). However, forecasts predict that government spending growth will also slow and, in some cases, turn negative. If education's share of the overall budget were to remain unchanged, the net effect on education spending of these opposing trends would be mixed. In some regions, education spending would continue to grow but at significantly lower rates than before the pandemic. In other countries, particularly high-income countries, education spending is forecast to decline in real terms along with overall government spending (Table 2).

The expected impact of the COVID-19 pandemic on education budgets has some similarities with past

Table 2: Forecasts point to a significant slowdown in public education spending

Real growth in education spending per capita (%)

	2020 pre-COVID	2020 (b)	2020 (d)	2021
High Income	1.3	5.4	-5.1	-2.6
Upper Middle Income	1.9	1.8	-8.3	0.4
Lower Middle Income	2.5	1.8	-8.4	0.8
Low Income	14.0	11.1	0.0	2.5
East Asia and Pacific	1.8	5.0	-5.5	0.3
Europe and Central Asia	2.0	4.3	-6.1	-1.7
LACAB	3.6	3.1	-7.2	1.2
MENA	1.9	3.8	-6.6	-2.4
South Asia	7.2	4.0	-6.4	5.3
Sub-Saharan Africa	7.7	6.5	-4.2	0.0
All Countries	3.6	4.8	-5.7	-0.5

Source: World Bank calculations based on IMF (2019a, 2019b, 2020a, and 2020b).

Note: (b) = baseline, (d) = downside.

crises. During the Ebola pandemic in Sierra Leone, public education spending fell sharply both in real terms and as a share of the education budget, falling from 15 to 12 percent of total government spending between 2014 and 2017. However, the impact of the financial crisis in 2008/09 on education budgets was mixed. An OECD assessment of its member countries showed that education budgets were initially protected but that in 2010 a third of countries cut their overall education budgets while just under a half of countries cut teacher salaries (OECD, 2013). Recent public expenditure reviews (PERs) for countries in Latin America have shown that the financial crisis had a mixed effect on education spending. For example, in El Salvador, Guatemala, and Honduras, public per capita education spending declined after the crisis, whereas it continued to grow in Paraguay and Peru. In East Asia, PERs for Indonesia, Myanmar, and Vietnam revealed no discernible effect of the crisis on public education spending. A rapid assessment of the effect of the crisis on education budgets in Sub-Saharan Africa and other developing regions showed that few countries cut their education budgets because of the financial crisis, but it was expected to reduce their planned spending increases (Martin and Kyrili, 2009, and UNESCO, 2009). However, a recent public expenditure review for Zambia showed that public education spending as share of the education budget declined from 20.5 percent in 2009 to 17 percent in 2010 and only returned to pre-crisis levels by 2014.

There is evidence that some countries are already cutting their education budgets to make space for the required spending on health and social protection. For example, in Ukraine, the education budget is set for a cut of around 4 percent or US\$217 million in 2020 to make more space to deal with COVID-related shocks. Reports from Nigeria also suggest that revisions to the federal budget will cut approximately 45 percent (US\$130 million) off the budget for the Universal Basic Education Commission. In Kenya, policymakers have identified both development spending on tertiary education and basic education curriculum reform as necessary cuts to support the country's COVID-19 response. In Canada and the US, education authorities have announced cuts to their education budgets

including layoffs, reductions in staff recruitment, and reductions in agreed salary increases.

Cuts in government education spending can have a detrimental impact on education outcomes. There is limited evidence on the impact of budget cuts on education outcomes, particularly in developing countries. In the US, evidence suggests that cuts in public education budgets have small negative impacts both on learning and on college enrollment rates (Jackson et al, 2018). In a recent analysis of trends in spending and in education outcomes, only two low-income countries had any information on changes in their education outcomes after a decline in per capita education spending, but in both Madagascar and Malawi, reductions in spending led to declines in learning adjusted years of schooling (Al-Samarrai et al, 2019). The link between spending and outcomes in many countries is relatively weak, and this suggests that the effect that spending cuts have on outcomes depends on their size as well as on the types of spending that are cut (World Bank, 2018). Generally, when reductions in government spending result in reduced education services, this can prevent parents from returning to work because they have to stay home to take care of their children, which has the potential to slow the overall pace of economic recovery.

Household Funding

The COVID-19 pandemic will result in a massive income and health shock for many households. The household income of many families is likely to decline as rates of unemployment and underemployment rise. Given the global nature of the economic crisis, even households that rely on remittances are likely to see their incomes go down as a result of the pandemic. In many households, particularly poor households, these declines in household income will reduce their investments in education, and this will be exacerbated by the health shocks associated with the pandemic.

The pandemic has already led to unprecedented increases in unemployment and underemployment. Globally, the ILO estimates that four out of every five workers have been unable to work because of lockdowns. It expects working hours to decline by 7 percent in the second quarter of 2020, equivalent to

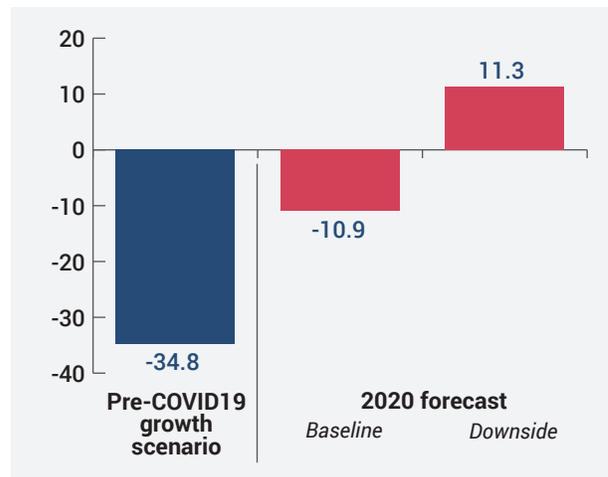


the loss of at least 195 million jobs worldwide (ILO, 2020). For example, in Bangladesh, it has been reported that 1 million garment workers have been laid off or furloughed (temporarily suspended from work) as a result of factory closures and the cancellation of orders (Antara, 2020). As of mid-April 2020, the unemployment rate in the US stood at 12.4 percent, equivalent to 18 million people (US DOL, 2020).

Remittances are expected to drop significantly as a result of the pandemic. In low and lower-middle-income countries, remittances are expected to drop by 20 percent in 2020, the equivalent of approximately US\$142 billion (World Bank, 2020a). Research has shown that remittances can play an important role in enabling recipient households to invest in education. A survey of five African countries showed that education was among the top four uses of remittances received from outside of Africa (Ratha et al, 2011). Households in Kenya and Uganda devoted 15 percent of their domestic and interregional remittances to fund the education of their members. And these investments tend to be associated with better education outcomes in many countries. These findings suggest that the forecast drop in remittances due to COVID-19 will seriously reduce education investments by remittance-receiving households.

Figure 3: COVID-19 will hinder poverty reduction in East Asia

Changes in number of poor people under different scenarios (millions)



Source: World Bank (2020c).

Note: Poverty line—US\$5.50 per day.

COVID-19 will slow progress on poverty reduction and in some cases reverse previous gains. Declines in household income will mean that, in many countries, fewer than expected people will escape poverty in 2020. In East Asia, a World Bank study estimated a baseline scenario of approximately 24 million more people remaining poor because of the effects of the COVID-19 pandemic (Figure 3). In a more pessimistic scenario, the authors projected that poverty will actually increase in the region. Poverty is also projected to increase in many of the low and lower-middle-income countries in ECA (World Bank, 2020d). For example, it is expected that the numbers of individuals in poverty in Tajikistan and Ukraine are likely to increase in 2020 by 25 and 33 percent respectively. In South Asia, available forecasts show that Bangladesh's poverty rate, based on the international poverty line, is expected to increase from 13 to 22 percent in 2020. A rapid assessment of livelihoods in Bangladesh has shown that average incomes in rural areas have already declined by almost two-thirds, leading to food insecurity for many families (Rahman and Matin, 2020). In Sub-Saharan Africa, projections suggest that an additional 23 million people will be pushed into poverty because of the pandemic (Mahler, et al, 2020).

Reductions in income and the need for greater health spending will make it difficult for some families to cover education costs. Previous economic shocks in low-income countries have reduced incomes, lowered household education spending, and led to lower rates of school participation (World Bank, 2020b). Analysis of weather shocks on school enrollment in Cote d'Ivoire and Malawi showed that they had had a large negative impact on education participation (Ferreira and Schady, 2009). In Sierra Leone, the Ebola crisis created a significant economic shock that led to a large drop in girls' enrollment rates in school (Bandiera, et al, 2019). The Asian Financial Crisis in 1997/98 led to a significant decline in household income in many countries. In Indonesia, these reductions in family incomes led to a 17 percent fall in education spending among rural households and a 10 percent fall among urban households as well as a drop in enrollment rates, particularly for the poorest children (World Bank, 1998 and Thomas et al, 2004). The impact of economic crises on school participation in wealthier countries is more mixed. In middle-income countries in Latin America, some economic crises have been associated with increases in school participation, and the last financial crisis did not have any significant impact on school participation in OECD countries.

Declining incomes may also lead to shifts in enrollment from private schools to public schools, adding further pressure on public education budgets. In Indonesia, there is some evidence to suggest that enrollment rates in private secondary schools fell after the Asian financial crisis, while government schools increased enrollment rates slightly (Strauss et al, 2004). If the COVID-19 crisis results in similar shifts in enrollment, this will increase the funding needs of public schools at a time when funds are scarce. The overall effect of shifts of this kind without adequate funding will be to reduce quality, for example, by increasing class sizes. In order to prevent these kinds of outcomes in the current pandemic, Ethiopia has directed private schools to explore ways to either cancel fees or defer payments until parents can afford to pay.

Donor Funding

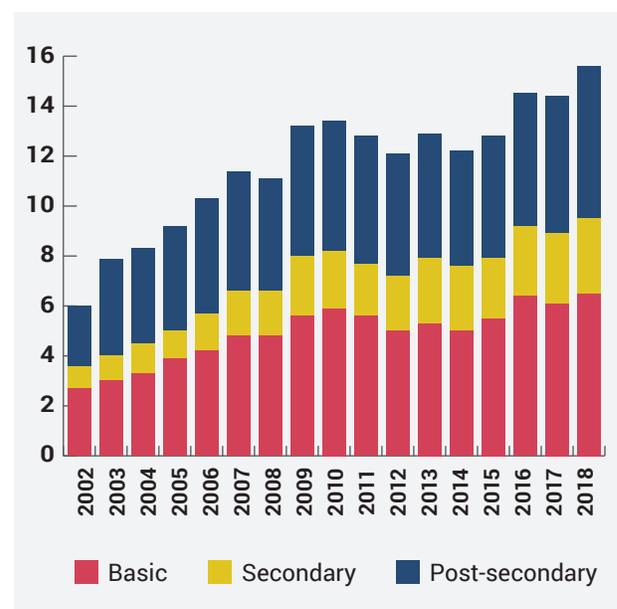
Development assistance for education has only recently recovered from the financial crisis of

2008/09. In the five years prior to the financial crisis, aid to education increased in real terms by approximately 10 percent per year (Figure 4), but in the five years afterwards, it fell by about 2 percent annually. Aid to education only reached the levels seen prior to the crisis in 2016, seven years after the onset of the crisis (UNESCO, 2019). These trends were not only a result of reductions in total development assistance. Between 2007 and 2016, the share of all aid going to education declined from 11 percent to 8 percent.

Aid volume is likely to be negatively affected by the sharp drop in economic growth associated with the pandemic in some of the largest donor countries. For example, the United Kingdom is one of the largest bilateral donors to basic education and has committed itself to meeting the UN target of allocating 0.7 percent of GDP to development assistance. However, the UK economy is forecast to contract by 6.5 percent in 2020, which could reduce the government's aid commitments by approximately US\$1.4 billion.

Figure 4: Aid to education has only recently recovered to levels seen before the last financial crisis

Aid to education (constant 2018 US\$ billions)



Source: World Bank calculations using the OECD Creditor Reporting System.

Note: Unesco (2019) methodology used to calculate aid levels and composition.



3 Policy Responses

Many countries were already facing a learning crisis, which the pandemic will worsen. Almost half of all children in low- and middle-income countries are unable to read proficiently by the time they reach 10 years of age (World Bank, 2019). In many countries, changing this picture will require significant increases in public funding. For example, the IMF estimates that in low-income developing countries it would require additional spending of US\$284 billion or 8 percentage points of GDP to achieve the Sustainable Development Goals in education and health (Gaspar et al., 2019). Developing countries have invested a lot more in their education systems over the last 15 years but COVID-19 is likely to be a set-back to this progress. However, the way countries respond in terms of funding can go a long way in making this only a temporary set-back and avoiding losses in terms of both children's education and long-term economic growth.

Funding Needs for the COVID-19 Response

Developing effective responses to the pandemic will place even greater demands on government education budgets. Public funds will be needed to protect children, to minimize the learning losses associated

with school closures, and to meet the challenges related to the eventual re-opening of schools.

While schools are closed, it is important to ensure that adequate resources are made available for remote learning and to maintain and expand student support programs. During school closures, funds will be required to support remote learning that were not included in recent budgets. Moreover, school feeding programs and other student support programs (such as stipends) are likely to become even more needed. Resources to ensure that these programs continue and, where possible, increase their coverage will be critical for enabling students to continue to learn. For example, in the US, the Coronavirus Aid, Relief, and Economic Security (CARES) Act is providing six-month deferments on student loans and has allocated US\$12.6 billion to higher education institutions, with half of this funding earmarked for providing emergency aid grants for students.

As schools begin to reopen, it will be critical to allocate additional funding to schools, universities, and other institutions. To ease the financial burden on households and ensure that children return to school, it will be important to ensure that schools are adequately funded and that they are prevented from seeking additional fees or contributions from parents. Education institutions will also require additional funding to implement new health and safety requirements, undertake the outreach activities needed to persuade students to return, and facilitate remedial teaching to minimize learning losses. There is substantial evidence to show that providing grants to schools is an effective use of funds for reducing the chances that children will drop out (Snilstveit et al, 2015). Since many countries already have these mechanisms in place, governments can use them to get funds to where they are most needed.

Funding will also be needed to ensure that the pandemic's impact does not fall disproportionately on the poorest and most vulnerable students. The impact of the pandemic is likely to fall most heavily on girls and on children in poor and vulnerable households. This has the potential to widen already stark disparities in learning outcomes among children (World Bank,

2020b). Providing additional support to disadvantaged children will be critical to ensure that they return to school and have opportunities to make up any learning lost during the school closure. Evidence has shown that school stipends, cash transfer programs, and fee waivers can all help to encourage children to enroll and increase their attainment and learning (Birger and Craissati, 2009 and Snilstveit et al, 2015). For example, as part of the response to the Ebola outbreak in Sierra Leone, the government waived school fees, which was an essential factor in encouraging children to return to school.

Financing the COVID-19 Response

How countries finance the pandemic response and minimize disruptions to the development of their education sector will depend on the severity of the pandemic's fiscal impact. The forecasts presented in this finance brief highlight the uncertainty surrounding how COVID-19 will affect government education budgets. While these forecasts do not represent a fixed destiny, they show that many countries will find it extremely challenging to fully protect their education budgets over the next two years.

For countries that have the fiscal space to address the pandemic, it will be critical to include funds to cover the pandemic response in education. In past crises, some countries have used fiscal stimulus packages to protect and mobilize resources for education as a way to revive their economies and enhance their medium-term growth prospects. For example, in the financial crisis of 2008/09, 15 percent of the resources in the US Federal American Recovery and Reinvestment Act (ARRA) went to fund education (UNESCO, 2010). In the current crisis, the US is also allocating a significant element of its COVID relief package to education. According to the IMF policy tracker, countries such as Equatorial Guinea, Ethiopia, Panama, Sweden, and Tonga have included additional education spending in their fiscal stimulus packages, while other countries such as Algeria are making efforts to ensure that social spending, including education, is protected during the current crisis.

However, countries whose governments find it impossible to protect their overall levels of spending will need to explore ways to reallocate resources

for the pandemic response. Countries can first look to reallocate their overall budget to provide funding to priority sectors, including education. Decisions over how to allocate public spending involve difficult trade-offs, but in the immediate COVID-19 pandemic, priority has to be given to funding health and social protection to protect lives and livelihoods. These priorities will also help to minimize learning losses. However, the pandemic also provides governments with an opportunity to reassess their existing budgetary allocations. They should consider reallocating funds to education from other parts of the budget in order to help parents to return to work in the short run and to maximize the sector's contribution to longer-term economic growth. Many countries already fail to invest adequately in their education systems. For example, on average low- and lower-middle-income countries allocate 16 percent of their budgets to education but around a third allocate less than 13 percent. Changing this picture could liberate the resources needed to minimize learning losses.

Where it is not possible to make intersectoral budget adjustments, reallocations within the education budget will be needed to ensure that frontline services are protected. In these cases, it will be critical to prioritize existing funds to cover the additional costs associated with the pandemic response and to minimize disruptions to the quality of education services. This might involve postponing expansion plans, reducing other planned capital investments, reducing training and supervision budgets, or temporarily shifting resources from non-essential services to the frontlines. However, any reallocations of this kind would need to be carefully assessed to ensure that they do not reduce current levels of access or standards of quality.

In all countries, the pandemic places a spotlight on the need to use resources as efficiently and equitably as possible. In many countries, there are significant inefficiencies in education spending, which often drive large inequalities in spending between different regions and children from different socioeconomic backgrounds. The sources of this inefficiency and unequal use of public funding differ across countries but often include the uneven distribution of teachers, fiscal transfer formulas that fail to take account of differences

in student populations, and weaknesses in public procurement systems. While there may be different causes, the pandemic and the strain that it will put on government finances adds further urgency to tackling these weaknesses and increasing the effectiveness of public funding.

Development partners can also play an important role in supporting governments' pandemic responses and targeting resources to the most vulnerable.

In the short term, development partners can provide emergency funding to support countries in their response to the pandemic. For example, the World Bank will deploy as much as US\$160 billion over the next 15 months to help countries to tackle the health, economic, social, and poverty shocks that they are facing. And the Global Partnership for Education has established a US\$250 million funding window for emergency responses to COVID-19. Donors' existing projects and support could also be adjusted and frontloaded to support the pandemic response. In the medium term, development partners should assess the feasibility of increasing their development assistance for education, for example, by increasing its share in total aid allocations. Developing country governments should also look at ways to mobilize additional resources from non-traditional sources (such as philanthropic organizations or corporate social responsibility contributions) to support investments in the education sector.

Improving Monitoring and Financial Planning

Minimizing learning losses due to COVID-19 and tackling the learning crisis will require better monitoring. The impact of the pandemic on public spending plans for education will vary according to the context and the policy choices made in each country. As the crisis unfolds and its impact becomes clearer, it will be important to track its effect on national spending plans. While up-to-date data on budget and budget revisions are available in most countries, this information is not assembled in a way that is meaningful nor is it made publicly available. At the international level, information on education spending is only available with a significant delay. The ongoing crisis further highlights the need to address these information gaps.

Better data can also help countries to adjust and to develop more sustainable medium-term financing strategies for the sector.

The impact of COVID-19 will throw the financing of future development plans for the sector off course. As countries move out of the first phase of crisis response and pressures on fiscal space ease, it will be important for governments to adjust their plans to ensure that national education goals can be sustainably financed. Credible financing strategies will be needed that identify funding needs, that include a medium-term outlook for sector financing, and that highlight actions to strengthen financial management. This will improve sector planning and facilitate more effective public financial management.



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