


# FINANCING EDUCATION RECOVERY: A PIECE OF CAKE?



JUNE 2022



IS FINANCING  
EDUCATION  
RECOVERY  
A PIECE OF CAKE?

IT CAN BE,  
WITH JOINT  
COMMITMENT  
BY ALL OF US.

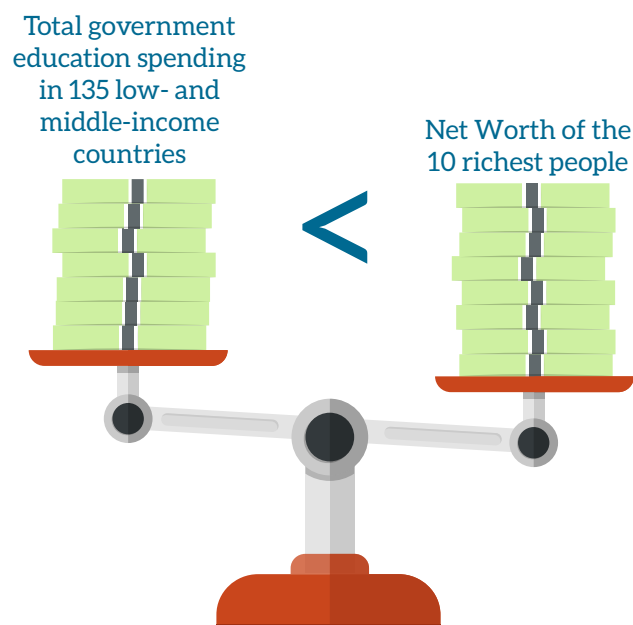
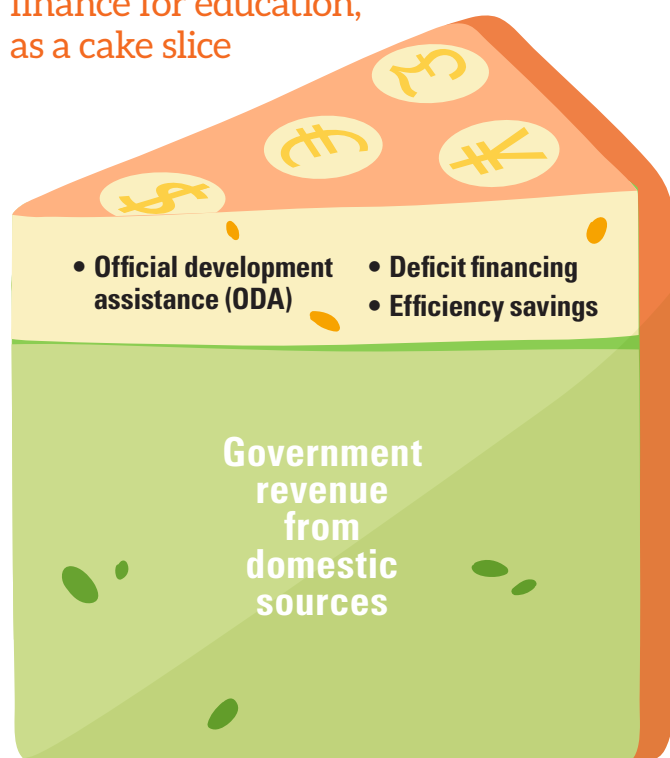
**It is no longer a question, but a fact that education budgets are endangered due to the effects of COVID-19.** On one hand, the current generation of learners could stand to lose as much as \$21 trillion in lifetime earnings due to the education disruption caused by the pandemic.<sup>1</sup> On the other hand, only 3 percent of COVID-19 stimulus packages went to education<sup>2</sup>, only one third of countries increased public resources for education, and education assistance has declined in share during the pandemic<sup>3</sup>, not to mention the persisting issues of efficiency and equity.

This brief applies the ‘cake analogy’ to re-examine the three principles of education financing (**big cake – adequacy, tasty cake – efficiency, and fairly-cut cake – equity**), with a focus on priorities and issues rising during the pandemic response. It also discusses the role of international agencies in financing education recovery.

## A bigger cake – adequacy

If the education budget<sup>4</sup> cake is a cream cake, its main body will be the **government revenue from domestic sources**, with a creamy top-up of official development assistance (ODA), deficit financing and efficiency savings<sup>5</sup> (see image below). Those other

## Public sources of finance for education, as a cake slice

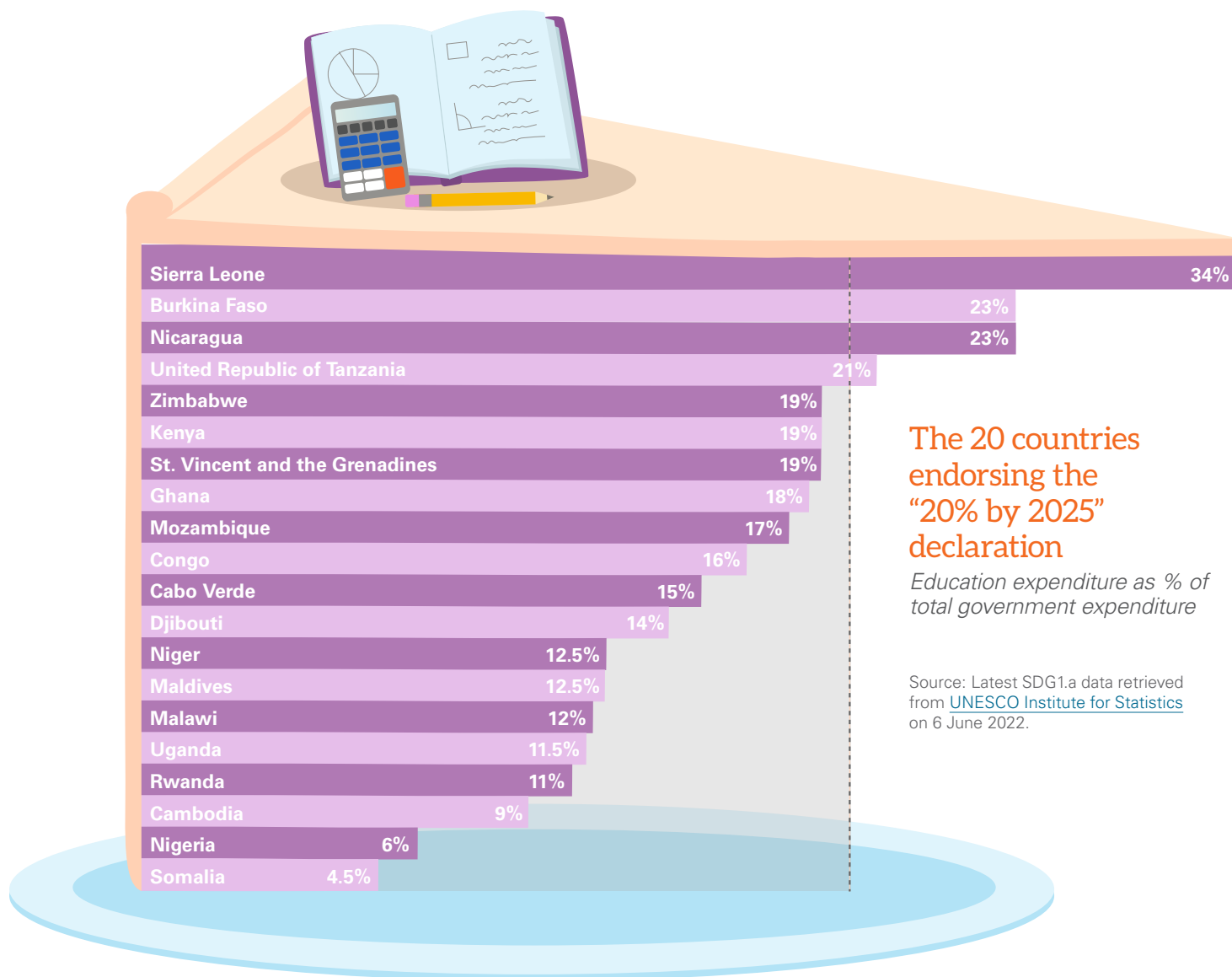


Source: [World Bank Open Data](#) and [Forbes Billionaire 2022](#)

three corners of the fiscal space are important, but much smaller and less sustainable than domestic revenue that is mobilized through improved tax administration or tax policy reforms. For example, ODA to education represents 18 percent of total public education spending in low-income countries (a thick layer of cream), and merely 2 percent in lower-middle-income countries<sup>6</sup> — domestic revenue remains the main solution for adequate financing in achieving national education goals. Reasonable rise in tax base can significantly address the funding gap in education, particularly for low-income countries where exist larger space of improvement in taxation capacity.<sup>7</sup>

In recognition of the critical role of government contribution, a rising concern is to **benchmark** adequacy. Though there is a consensus of spending at least 4-6 percent of GDP or 15-20 percent of public expenditure on education<sup>8</sup>, countries understandably choose different data to report based on their budget structure and data availability<sup>9</sup>. A **transparent** budget accompanied by standardized computer accounting systems will enable more comparable and consistent monitoring of education budgets.

After the [Global Education Summit](#) in July 2021, 20 partner countries of the Global Partnership for Education (GPE) committed to reach or maintain at least 20 percent of public expenditure on education by 2025. The following graph shows that fulfilling this commitment requires aggressive expansion of spending in certain countries, based on the reporting system they endorse. Looking beyond GPE countries,



**for every ten countries and territories globally, only one meets the 20 percent benchmark, and four meet the less ambitious 15 percent.**<sup>10</sup>

Besides domestic revenue, ODA, deficit financing and efficiency savings still have a large potential to be unleashed, particularly for lower-income countries, and it could be done **innovatively**. In the past decade, we have seen increasing attempts of innovative financing for education (IFE), such as catalytic grants, debt swaps, loan buy-downs, public-private partnerships, religion-based financing, result-based financing, etc.<sup>11</sup>. There are also newly developed mechanisms such as the International Finance Facility for Education (IFFEd) that can multiply traditional aid up to seven times.<sup>12</sup>

It is important to note that these **different corners of fiscal space are connected**. For example, if following

the 20 percent education expenditure benchmark and the ‘0.7 percent of GNI’ ODA benchmark, theoretically the global corporate tax deal achieved in 2021<sup>13</sup> could generate not only a \$6 billion annual top-up on public education expenditure in low- and middle-income countries, but also an additional \$100 million ODA earmarked for education assistance from high-income countries.

Finally, we are witnessing the expansion of funding sources accelerated, including the Climate Finance started pre-pandemic<sup>14</sup>, and more recently the Non-fungible token (NFT) fundraiser. In 2021, the Giga Initiative teamed up with Snowcrash and artist Nadiyah Bremer to issue the UN’s largest ever collection of NFT artworks: Patchwork Kingdoms, to raise funds for school connectivity. The data-driven NFTs were derived from connectivity data on 283,000 schools from the [Project Connect platform](#). Once the Patchwork

## Example of NFT fundraiser in education: Patchwork Kingdom for school connectivity



Source: <https://www.patchwork-kingdoms.com/>

Kingdoms went on public sale, they sold out within just three hours and the original mint raised 175 ETH (around \$550,000 at the time) for school connectivity.

### A tasty cake – efficiency

A bigger cake is not necessarily welcomed if it tastes awful. In education financing, this is about value for money. To begin with, education planners should have **cost-efficiency** in mind when addressing challenges that emerged during the pandemic. For example, it becomes necessary for many governments to understand the cost of introducing digital or remote learning for a more resilient and responsive education system.

With the cost in mind, we then invest in **cost-effective** education programmes. A review of literature has confirmed sharing information with parents and children on education benefits, costs and quality; interventions to target teaching instruction

by learning level rather than grade; and structural lesson plans with linked materials and ongoing teacher monitoring & training<sup>15</sup> as highly cost-effective education interventions.

The most effective education programmes are not necessarily the most cost-saving, which is why adequacy comes first. For example, although information provision is very cost-effective, education actors cannot just provide information about what services are available while many education programmes are not functioning well. Governments should not give up ‘costly’ investments that build resilience for the education system with possible lower future cost, such as digital learning and remedial education, which both play a critical role in the COVID-19 response. Neither should governments overlook interventions that are less perceivable but with the potential of trillions-of-dollars return to society, such as promoting the skill of collaborative problem solving.<sup>16</sup> Having said that, it is worth mentioning that multilingual instruction and community-based monitoring stand out as low-cost / high-impact interventions, i.e., **super smart buys**.<sup>17</sup>

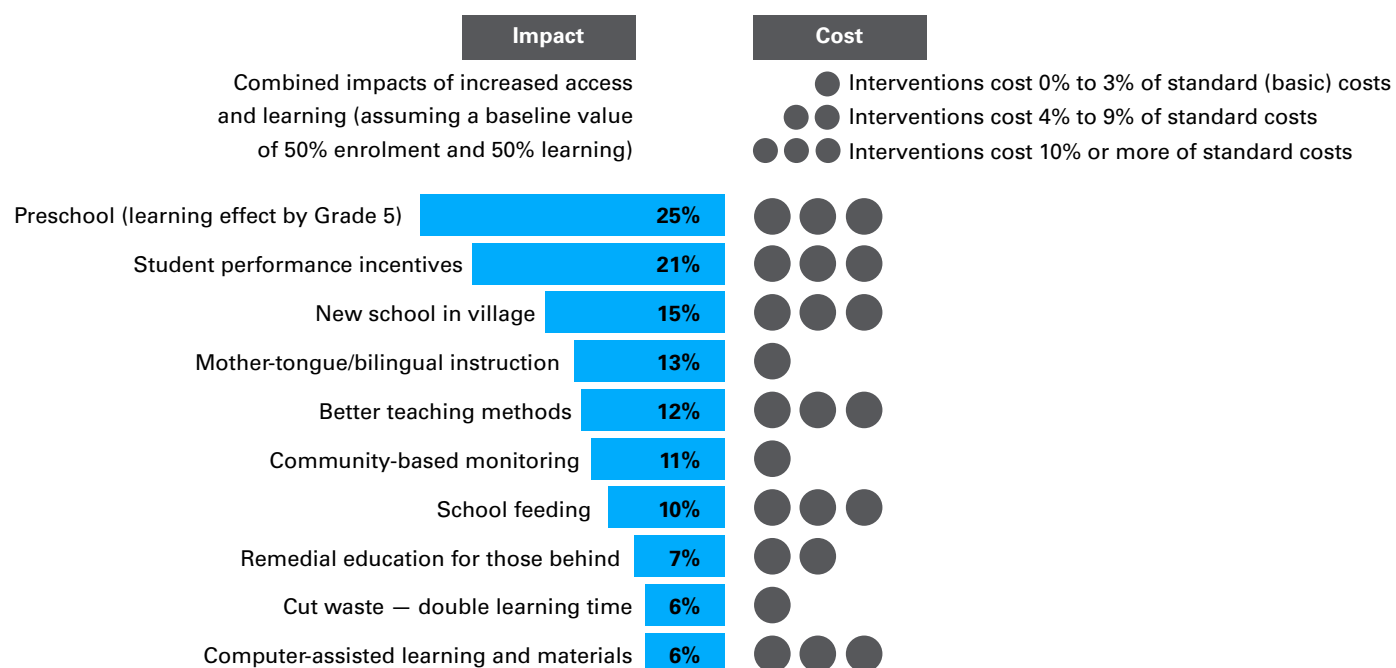
In short, we do have the ingredients for a bigger cake that is also tasty.

Some concerns to be kept in mind, however. First, **publication and status-quo bias** could prevent us from perfectly identifying the most worthwhile programmes to invest in, i.e., evaluations showing zero or even negative impacts could be hidden, and evaluations could only cover existing programmes.

## Efficiency in education financing leads to a “tastier” cake



## Top-10 effective education programmes, regardless of cost



Second, though some programmes are not as (cost-) effective as the top-3 are in literature, it does not mean we should give them up. Instead, it means the quality of delivery needs improvement, particularly for those critical to **preparedness** for education in emergency situations, such as remote learning and school sanitation during the pandemic. Last but not least, to ensure **sustainability**, a balance between capital (development) expenditure and current expenditure (mainly salaries but also maintenance, operation, trainings, etc.) need to be kept tailored to country context.

### A cake fairly cut – equity

The next consideration to make after creating a bigger tasty cake is to share it fairly, the **equity** in education financing. Before the pandemic, low-income countries spent approximately \$48 per school-aged child compared to \$8,501 in high-income countries.<sup>18</sup> For pre-primary-aged children, that is a more striking gap of \$10 vs. \$5,724.<sup>19</sup> And during the pandemic, less than 1 percent of COVID-19 stimulus package went to education in Africa, Asia, and Latin America & the Caribbean, compared to nearly 4 percent in Europe and North America.<sup>20</sup>

**Such disparity exists not only between but also within countries.** Before the COVID-19, only 16 percent of public education spending went to the poorest 20 percent of children in school, compared to 26 percent that went to the wealthiest 20 percent of children in school.<sup>21</sup> In low-income countries and in Africa<sup>22</sup>, the gap was much larger, such that the public education resources received by the poorest child was only one fourth of that received by his richest peer.

These inequities are the result of several factors. First, children living in poverty are less likely to have access to school, and when they do, they generally

\$1 invested in  
pre-primary education gives  
the society \$9.25 in return

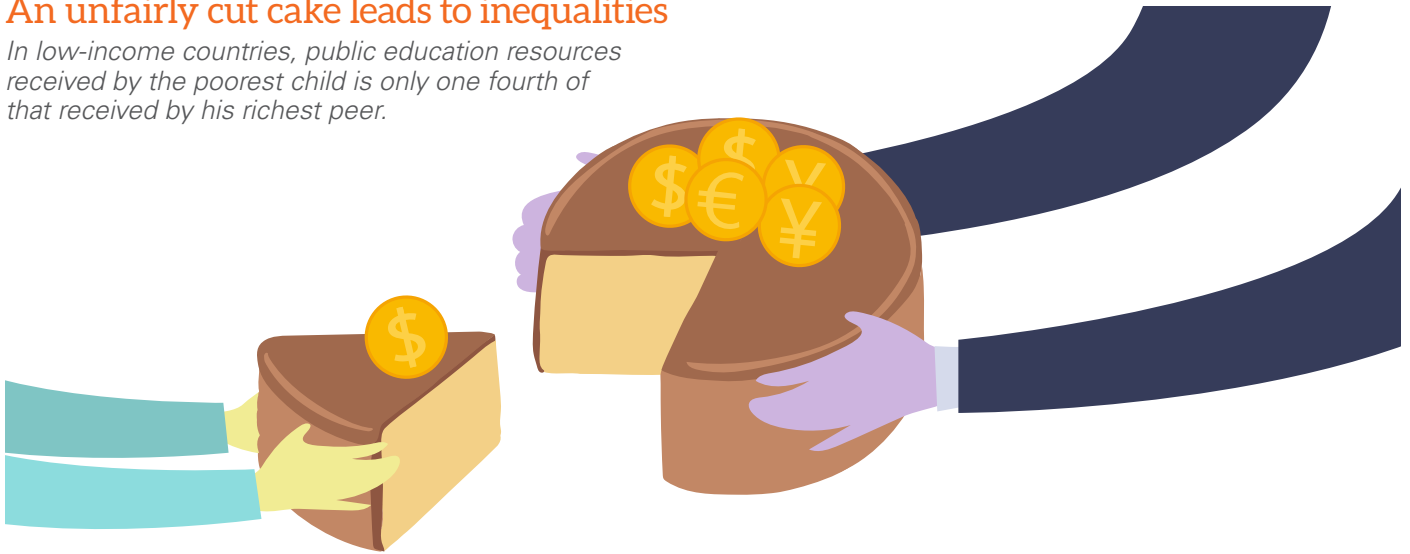


\$1 invested in  
the stock market in 1972 gives  
the investor \$6.88 in 2021

(According to  
UNICEF Office of Research and Moneychimp)

## An unfairly cut cake leads to inequalities

*In low-income countries, public education resources received by the poorest child is only one fourth of that received by his richest peer.*



drop out sooner, and therefore ‘miss out’ on education resources. Second, the poorest children are more represented in lower levels of education where the provision of services costs the least, with lower public spending per capita. Third, children from the poorest households tend to live in remote and rural areas that are generally underserved.

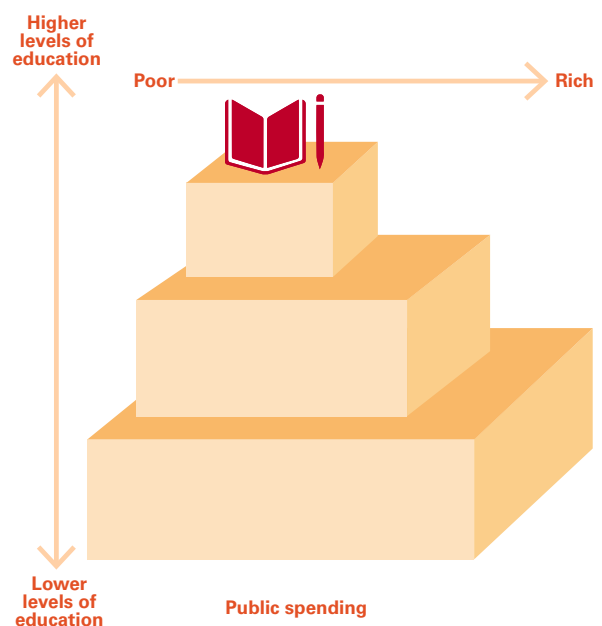
**Progressive universalism** helps address the above. It gives initial priority in the allocation of public funding to lower levels of education where the poorer children are most represented. Then, gradually increasing allocations to higher levels when coverage is close to universal at lower levels, with a continued focus on the poorest and most vulnerable children. This principle is of great relevance during the pandemic since pre-primary and primary schools were not prioritized in reopening efforts in low- and middle-income countries.<sup>23</sup>

Under the principle of progressive universalism, **equity-sensitive policies** play a critical role in equitable financing<sup>24</sup>, such as spending on disability-friendly facilities, water, sanitation and nutrition in rural schools, and multiple pathways for marginalized children and youth, etc. Before these, there should also be efforts in measuring inequity to inform a pro-poor budget allocation, such as Nepal’s equity index developed by the Ministry of Education through the [Data Must Speak](#) initiative<sup>25</sup>. As for pandemic response and recovery, the biggest ‘equaliser’ is arguably on closing the digital divide, which requires a \$1.4

trillion multi-sectoral commitments in education and infrastructure by 2030.<sup>26</sup>

Progressive universalism might not be sufficient to address a complex layer of equitable financing — **equitable aid**. This is particularly evident in humanitarian contexts. As of mid-2022, humanitarian aid available to each person living in emergencies in the Horn of Africa is only one-sixtieth of that for each Ukrainian in need of humanitarian support.<sup>27</sup> Appeals for education in emergencies often receive just 10 to 30 percent of the total funds needed, with disparities

## Progressive universalism



at country and regional levels.<sup>28</sup> An integrated and swift global mechanism is required to monitor and achieve more equitable education aid.<sup>29</sup>

## International agencies as the yeast

So, what is the role of international agencies in financing education recovery? On some occasions for least developed countries or countries in emergency, international agencies can act as the milk, eggs, or even the flour, in other words, they serve as essential ingredients when making a financing cake. But in most cases, **international agencies are the yeast, facilitating** the baking of a bigger tasty cake that can be fairly shared by learners.

The relative size of international education actors decides their role as yeast. GPE, the world's largest funding platform for education, has a fundraising target of \$5 billion for five years; UNICEF, with the widest

field presence in education, has an annual education expenditure of \$1.2 billion; and Education Cannot Wait (ECW), the first global fund dedicated to education in emergencies and protracted crises, disbursed \$138 million in 2020.<sup>30</sup> While these are all huge undertakings that are benefiting the most in-need, they are still far from filling the post-pandemic funding gap estimated at \$75 - \$200 billion per year<sup>31</sup>.

In bakery, yeast is small but mighty in triggering big puffy cakes, and international agencies can play the same role supporting governments in financing education recovery. Funding activities aside, throughout the whole budget cycle, a lot can be done in evidence generation, engagement, advocacy and communication, and capacity building. Let's end with an example table of these activities promoting adequacy, efficiency and equity — many more to be explored and practised of course.

## International agencies as the yeast



**Table 1: Budget cycle and engagement by international agencies, with examples in GPE partner countries<sup>32</sup>**

	GENERATING EVIDENCE	ADVOCACY AND COMMUNICATION	CAPACITY BUILDING
<b>POLICY REVIEW</b>	Situation analysis and diagnostic work / Fiscal space analysis e.g., <a href="#">Rwanda</a>	Advocacy on implications of inequality, cost-benefit analysis e.g., <a href="#">Albania</a>	Budget literacy and engagement of civic service organizations (CSOs) e.g., <a href="#">Cambodia</a>
<b>STRATEGIC PLANNING</b>	Investment case work (cost-effectiveness) e.g., <a href="#">Ghana</a>	Advocacy on implications of diagnosis, innovative financing, etc. e.g., <a href="#">Uganda</a>	Support to Ministry of Education (MoE) to make their case e.g., <a href="#">Bhutan</a>
<b>BUDGET FORMULATION AND APPROVAL</b>	Analytical report for the parliament/ donors on education budget e.g., <a href="#">South Sudan</a>	Highlight the relevant focus (inclusion, digitalization, etc.) of the documents e.g., <a href="#">Malawi</a>	Support to MoE and local actors to use the budget as an 'action' tool e.g., <a href="#">Guyana</a>
<b>BUDGET EXECUTION</b>	Budget tracking at the service delivery level e.g., <a href="#">Madagascar</a>	Publication of budget execution reports, funding reports, where available e.g., <a href="#">Kenya</a>	Support in budget management e.g., <a href="#">Mongolia</a>
<b>ACCOUNTING AND MONITORING</b>	Support to the production of national education accounts e.g., <a href="#">Nepal</a>	Support to initiatives aiming to increase the transparency of the budget e.g., <a href="#">Cameroon</a>	Support to parliament and CSOs in budget scrutiny e.g., <a href="#">Sri Lanka</a>
<b>AUDIT AND EVALUATION</b>	Economic evaluation of programmes (cost-benefit / inequalities) e.g., <a href="#">Mozambique</a>	Communication of monitoring and evaluation (M&E) results e.g., <a href="#">Lesotho</a>	Support to develop M&E capacity in MoE and relevant agencies e.g., <a href="#">Sudan</a>

## ACKNOWLEDGEMENTS

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# ENDNOTES

- 1 World Bank, UNESCO, UNICEF, FCDO, USAID, & Bill & Melinda Gates Foundation. 2022. [The State of Global Learning Poverty: 2022 Update](#).
- 2 UNESCO. 2021. [Uneven global education stimulus risks widening learning disparities](#).
- 3 UNICEF, UNESCO, & World Bank. 2022. [Where are we on education recovery?](#)
- 4 This brief focuses on education budget. For the more general education spending there are also substantive (but less sustainable) components of household spending, private sector investment and philanthropy.
- 5 ODA through aid and debt relief; deficit financing through domestic and external borrowing; and efficiency savings through improving the allocation of resources to maximize effect or optimise implementation lower costs.
- 6 World Bank, UNESCO (Global Education Monitoring Report). 2021. [Education finance watch](#).
- 7 Lewin, K. 2020. [Beyond business as usual: Aid and financing education in Sub Saharan Africa](#). International Journal of Educational Development. 78: 1-14.
- 8 UNESCO Global Education Monitoring Report. 2020. [Inclusion and education: all means all](#).
- 9 UNESCO Institute for Statistics. 2016. [A roadmap to better data on education financing](#).
- 10 Latest SDG1.a data retrieved from UNESCO Institute for Statistics on 6 June 2022. Similar ratios for the 173 countries/territories with data in 2017-2021 data and the 191 with data in 2001-2021.
- 11 For explanation of major IFEs, please refer to Avelar, M., Terway, A., & Dreux Frotte, M. 2020. [Innovative financing for education: A systematic literature review](#). NORRAG Working Paper #11.
- 12 <https://educationcommission.org/international-finance-facility-education/>
- 13 OECD. 2021. [International community strikes a ground-breaking tax deal for the digital age](#).
- 14 For example, primary school constructed or retrofitted to serve as cyclone shelters in Bangladesh, funded by the World Bank. See Weaver, J. 2021. [Education and climate change – are we addressing the linkages?](#)
- 15 World Bank, Foreign, Commonwealth and Development Office, & Building Evidence in Education. 2020. [Cost-effective approaches to improve global learning](#). A future round of review is suggested to cover additional categories such as school leadership and multilingual instruction.
- 16 World Economic Forum. 2022. [Catalysing Education 4.0: Investing in the future of learning for a human-centric recovery](#).
- 17 These are among the 20 interventions reviewed. Extracted from UNICEF. 2019. [A world ready to learn](#). Converted from the findings in Education Commission. 2016. [The Learning Generation: Investing in education for a changing world](#).
- 18 World Bank, UNESCO (Global Education Monitoring Report). 2021. [Education finance watch](#).
- 19 UNICEF. 2019. [A world ready to learn](#).
- 20 UNESCO. 2021. [Uneven global education stimulus risks widening learning disparities](#).
- 21 UNICEF. 2020. [Addressing the learning crisis: An urgent need to better finance education for the poorest children](#).
- 22 UNICEF, & African Union Commission. 2021. [Transforming education in Africa: An evidence-based overview and recommendations for long-term improvements](#).
- 23 Save our Future. 2020. [Averting an education catastrophe for the world's children](#).
- 24 The three SDG 4.5 indicators on equitable financing summarize well the post-pandemic focus: 4.5.3 Existence of funding mechanisms to reallocate education resources to disadvantaged populations; 4.5.4 Education expenditure per student by level of education of funding; and 4.5.5 Percentage of total aid to education allocated to least developed countries.
- 25 Price, W., & Oostrum, J., 2018. [Nepal's equity index: Innovations in financing to reach the children most in need](#). GPE Education for All Blog.
- 26 Yao, H., et al. 2022. [How much does universal digital learning cost?](#) UNICEF Office of Research-Innocenti Policy Brief.
- 27 Calculation based on [Financial Tracking Service, Ukraine Situation Report \(3 June 2022\)](#), and analyses of the US Ukraine aid packages by [Reuters](#) and [The New York Times](#). Here the calculation is beyond education to account for multisectoral and unspecified aids that may also be related to education.
- 28 According to the reporting on education response from the [Financial Tracking Service](#).
- 29 Global Hub for Education in Emergencies. 2022. [Education in emergencies financing in the wake of COVID-19: Time to reinvest to meet growing needs](#).
- 30 Information available on GPE, UNICEF, and ECW official websites.
- 31 Global Education Forum (GEF) Secretariat. 2022. The urgent case to invest in education & children.
- 32 Referencing the UNESCO [Background document for the 2021 Global Education Meeting – High-Level Segment](#) and the UNICEF [Public Finance for Children](#) Framework.



## What could you do with \$2 million?

- ☐ Launch one cruise missile
- ☐ Buy four tickets for a 90-minute space tour
- ☐ Provide 200,000 kids with remedial education in low-income countries, increasing their potential for peacebuilding and space exploration

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