# Policy Paper

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# How committed? Unlocking financing for equity in education

It is difficult to agree how much countries should spend on education. The Education 2030 Framework for Action appealed to countries to spend at least 4% of their gross domestic product on education. Some people question even such a modest target because country contexts vary significantly. Different countries appear to achieve the same education results with very different levels of public expenditure. However, there is consensus that, if countries are to achieve the goal of 'inclusive and equitable' education by 2030, they need to spend their budgets, whatever their level, in ways that actively pursue these inclusion and equity objectives. This paper discusses four categories of financing policies that can support such equity objectives depending on how comprehensive they are, how targeted their coverage is and how much money they allocate. Mapping policies and programmes from 78 countries around the world shows that around 1 in 5 demonstrate a strong level of commitment to equity in education through these different mechanisms.

The international community's commitment in 2015 to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' as the fourth Sustainable Development Goal (SDG 4) is one of the clearest examples of the overall pledge to leave no one behind, contained in the United Nations (UN) 2030 Agenda for Sustainable Development. The unforeseen challenge of the COVID-19 pandemic risks exacerbating the unequal distribution of resources and opportunities and emphasizes the need for financing mechanisms to strengthen their focus on equity in education if countries are not to move further away from their 2030 targets.

The role of public institutions in equity-oriented processes in education has received less attention than the actual results in monitoring SDG 4. This is not surprising. It is easier to observe inequality, especially with the supply of household surveys and learning assessments in recent years. By contrast, monitoring equity-oriented processes, notably policies and programmes, in a comparative way is plagued by vast differences in context and has therefore rarely been done systematically until now. Indeed, multiple policies can be deployed to affect equity in education (OECD, 2007). A recent review of European countries' approaches identifies five sets of policies. First, countries may pursue policies that facilitate stratification: They may encourage special schools, school choice, restrictions in admission, and placement into separate school tracks or repetition on the basis of low academic results. Second, they may instead promote following the same standards throughout the system. Third, countries may seek to actively support schools and students at risk of falling behind to compensate for their disadvantage. Fourth, they may promote the provision of early childhood services, which are known to be particularly effective for vulnerable groups that otherwise are not prepared for school. Finally, countries can use financing mechanisms to promote equity (European Commission/EACEA/ Eurydice, 2020) (Figure 1).

However, this complexity should not prevent efforts to better understand how countries promote equity in education. The purpose of this policy paper is to encourage such a discussion, unpacking just the last of these five sets of policies countries have at their disposal to promote equity in education: financing. The paper uses country examples from a new layer of country-specific information made



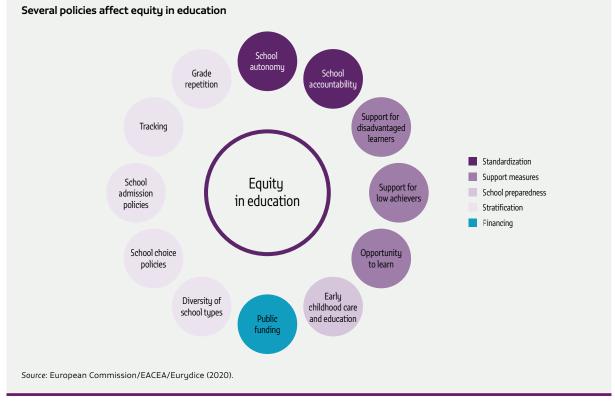


available through the Profiles Enhancing Education Reviews (PEER) website, originally developed for the 2020 *Global Education Monitoring Report*. This tool brings together national experiences to facilitate peer dialogue within and between countries. This paper provides a framework for the analysis, the principal results and examples from different countries.

## MONITORING A COMMITMENT TO EQUITY THROUGH FINANCING REQUIRES QUALITATIVE ASSESSMENTS

SDG 4 includes neither a target nor a global indicator on the level of education financing. To make up for that gap, one thematic indicator under SDG target 4.5 on equity aims to capture the efforts countries make to reallocate public resources to reach disadvantaged groups. Indicator 4.5.3 was originally set to measure the 'extent to which explicit formula-based policies reallocate education resources to disadvantaged populations'. There have been a couple of attempts to develop a methodology for monitoring this indicator. The first attempt took a narrow but deep view of the indicator, focusing on 'formula-based policies' for schools or local governments. In practice, it is hard to guantify the 'extent' to which formulas help 'reallocate'; hence, it may be sufficient just to compile background information on the formulas countries use and share them to serve a peer learning but not a monitoring objective (UIS, 2018). The second attempt took a broad perspective. It noted that 'formula-based' resource reallocation is only one of several levers for governments to help equalize education opportunities (UIS 2016). The indicator should capture how comprehensively financing mechanisms try to reallocate resources towards the poor and other disadvantaged populations (e.g. policy levers 5a and 5b in World Bank [2013]). Alternatively, the indicator can focus on results: how the actual distribution of resources differs between more and less disadvantaged schools, regardless of whether a policy exists (UIS 2016), although this latter approach would diverge from the original purpose of the indicator.

#### FIGURE 1:





Indicator 4.5.3 has been renamed to capture the 'existence of funding mechanisms to reallocate education resources to disadvantaged populations'. Monitoring it inevitably requires a mixture of quantitative data (e.g. how many students receive what amount) and qualitative judgement (e.g. what is the mechanism trying to achieve and how). It does not in any way suggest that governments should be held to account for their policies and institutional arrangements; there are multiple routes to achieve equity in education and no single route should be prioritized over others. The purpose of such monitoring in the context of SDG 4 is formative: to facilitate the exchange of information so that countries can learn from each other.

### COUNTRIES CAN COMMIT TO EQUITY IN EDUCATION THROUGH FINANCING IN DIFFERENT WAYS

Countries pursue different routes of varying form and intensity to mitigate the education impact of factors such as poverty, gender, ethnicity, disability or remoteness. For the purpose of the analysis in this paper, four categories of financing policies were examined.

First, overall education financing mechanisms refer to resource allocation mechanisms from the central to lower tiers of government, mainly to cover salaries and operational needs. Typically, the budget is allocated from the centre to local governments based on the school-age population and a unit cost per student. To promote equity, allocations may be adjusted, taking factors such as poverty and location into account. In more centralized systems, the budget may be organized along line items, some of which may specifically address the education needs of disadvantaged groups.

Second, while schools may be reached directly through the first mechanism, some countries provide further resources to schools for development purposes. Some of these programmes also try to compensate schools that are in a disadvantaged area and/or have disadvantaged students. They tend to be block grants, in addition to the capitation grants, and may provide cash or cover specific expenditure types (e.g. equipment purchases, teacher training).

Third, the education ministry may lead policies and programmes that provide resources to disadvantaged

students and their families. These may be exemptions from fee payments or come in the form of cash (e.g. scholarships, although many such schemes are merit-based and not equity-oriented), or kind (e.g. targeted school meal programmes).

Fourth, social protection ministries lead policies and programmes that provide cash to disadvantaged students and families to help improve their education opportunities. Their targeting mechanisms tend to be well articulated and regularly evaluated.

Three dimensions were examined to assess the extent to which these four mechanisms reallocate resources:

- Comprehensiveness: Does a policy exist and how extensive are its criteria to target disadvantaged groups?
- Coverage: What is the share of schools, students and/or households reached by the main policy or programme?
- Volume: What is the share of total public education expenditure allocated for the main policy or programme or what is the size of the average transfer under this policy or programme expressed in some relative measure (e.g. percentage of GDP or per capita household income)?

These dimensions have been used to summarize the complex set of information on the respective policies and programmes. Where there was more than one programme, the larger one was analysed. Assuming that any of the four policy and programme types exists, the equity focus in the coverage and volume dimensions has been rated on a three-point scale - low, medium and high - using thresholds (Table 1). The thresholds have been selected arbitrarily and empirically to help distinguish countries' different levels of effort and do not imply a desirable level of coverage or volume of expenditure, let alone of evidence that such coverage and volume levels lead to effective policies and programmes. Likewise, they are by no means final thresholds. On the contrary, they have been put forward as a basis for discussion.

In the case of the second and third mechanism types, in other words education resources to schools and students, respectively, a low rating in coverage has been associated with both very low levels and very high levels of coverage. The rationale is that policies and programmes under both mechanisms are more effective if they target specific populations. In that sense, targeted coverage has been rated more highly than very wide coverage.

In total, there are eight ratings, two each for every one of the four mechanisms, referring respectively to coverage and volume. An education system has been classified as 'equity-oriented' if it had at least five medium or high scores assigned in the eight categories. The GEM Report team collected information on the four mechanisms from 78 low- and middle-income countries covering all SDG regions except Europe and North America. A few high-income countries were also reviewed to better understand the variation of education financing policies in different contexts. National sources of information, such as budget proposals, national budget or education statistics reports, and education sector plans, were complemented with international organization reports. The analysis focuses on policies in formal primary and secondary education funded domestically or through external sources as long as implementation is led by the government.

Overall, the analysis for this paper found that 17 out of these 78 countries, or about 1 in 5, had a clear equity focus in education through their financing policies that permeated their overall education financing mechanisms as well as through targeted efforts to reach disadvantaged schools or students through education or social protection spending. Nearly half of Latin American countries in the sample displayed such a variety of efforts to redistribute resources to promote equity in education. This regional concentration informs the conclusion that upper-middle-income countries are slightly more likely to have a strong equity orientation (**Figure 2**). The remaining sections present policy and programme examples representing the four financing mechanisms.

### CENTRAL GOVERNMENTS STRUGGLE TO REDISTRIBUTE RESOURCES TO DISADVANTAGED REGIONS AND SCHOOLS

About 46% of countries devolve funds to the local level with a fiscal redistribution element to reduce disparity.

#### TABLE 1.

	Dimension	Low	Medium	High
1. Overall education financing mechanism	Coverage			
	Share of school-age population	<30%	30-70%	≥70%
	Volume			
	Share of total public education spending	<25%	25-50%	≥50%
2. Resources to schools / 3. Resources to students (education)	Coverage			
	Share of school-age population	<2% or >50%	2-10% or 25-50%	10-25%
	Volume			
	Share of total public education spending	<2%	2-10%	≥10%
	Share of total public spending	<0.3%	0.3-1.5%	≥1.5%
	Share of GDP	<0.1%	0.1-0.4%	≥0.4%
	If information is not available	Non-compulsory education	Only part of compulsory education	All levels of compulsory education
4. Resources to students (social)	Coverage			
	Share of school-age population	<5%	5-15%	≥15%
	Share of total population	<2%	2-8%	≥8%
	Volume			
	Share of total public spending	<0.5%	0.5-1%	≥1%
	Share of GDP	<0.01%	0.01-0.1%	≥0.1%
	If information is not available	Any other programme	Child grant or social assistance programme for families with school- aged children	Conditional cash transfer programme

Source: GEM Report team.



Such policies consider the characteristics of regions or schools (or their student population) so that authorities receive a level of resources per student that corresponds to the higher costs their disadvantage warrants. Of the 36 countries that have adopted equity-oriented general financing policies, 11 use such policies to allocate more than 50% of their education spending. In terms of population coverage, 15 countries covered more than 70% of the school-age population.

Equity is only one of several objectives that can be pursued through grants to regions or schools. Access, quality, autonomy, efficiency and transparency are among the other objectives that can be pursued instead or jointly by governments (IIEP, 2018). Efficiency and transparency are usually at the root of such initiatives. Formulas are used to replace allocation rules, which may have been based on an incremental approach and historical patterns: As formulas involve fixed rules, decision makers at national, local and school levels can anticipate future income. To pursue an equity objective, funding formulas need to go beyond simply ensuring equal treatment for all: They need to recognize the higher costs involved in serving disadvantaged populations.

However, sophisticated mechanisms require well-developed information systems and reliable, detailed data to distinguish between the poor and the very poor areas or schools, which may not be available. Such distinctions may not even make sense when poverty levels are very high. Schools also have limited capacity to spend discretionary resources on activities that compensate for disadvantage, while governments have limited capacity to monitor and train districts or schools. As a result, poorer countries are generally less likely to redistribute funds through their overall financing mechanisms: Only 37% of low- and lower-middle-income countries do so, compared to

#### FIGURE 2:

Upper-middle-income countries are more likely than low- and lower-middle-income countries to have a strong equity orientation in their policies and programmes

Percentage of countries with evidence on financing policies and programmes that focus on equity in education, by policy and programme type, coverage and volume, and country income group



Note: 'Yes, missing' suggests that a mechanism exists but there is not enough information on its coverage or volume. Source: GEM Report team.

60% of upper-middle-income countries. Poorer countries may show a preference for horizontal policies that do not seek to identify and compensate for disadvantage, such as financing the provision of free compulsory education or developing school feeding programmes (**Box 1**).

As a first step, countries tend to allocate funds to districts or schools through capitation grants tied to the number of students enrolled. Since 2009, Myanmar has used a simple formula to transfer resources to states and regions based on the number of enrolled students, the number of teachers, and the budget execution rate in the previous three years (UNICEF, 2018). The government gradually developed operational guidelines that are distributed to local education officers and head teachers. Grants, which reach all schools, ranged from US\$400 to US\$15,000 in 2017/18, depending on the size of the school. However, the formula is not sensitive to the higher needs of remote schools that face high transport costs, and schools have had limited autonomy in the use of the grant (World Bank, 2018).

The Philippines introduced a capitation grant in 2013 to cover schools' maintenance and other operating costs. At the time, the average primary school received US\$3,700 and the average secondary school US\$16,000, which was equivalent to 82% of their discretionary funding. While these grants are in principle calculated to help schools achieve minimum standards, they are insufficient for that purpose. There has also been lack of clarity over how the allocation components (fixed, per enrolled student, per graduated student, per teacher, per classroom) determine the allocation. In principle, the formula is not sensitive to the level of need. In practice, schools serving poorer students receive a higher allocation of funding per capita because poorer students are more likely to attend schools in rural areas where pupil/classroom and pupil/teacher ratios are lower. But, as schools serving poorer students are less likely to spend their allocation, there is no difference in expenditure (World Bank, 2016).

Since 2003, Rwanda has provided schools with a simple capitation grant allocated to teaching and learning materials (50%), school maintenance (35%) and teacher training (15%), combined with a teacher salary top-up. The grant has provided basic funds to all schools and helped improve textbook availability, but its effect on teacher training is unknown, especially after that part of the grant was recentralized in 2012 (Milligan et al.,

2017; Williams, 2017). No adjustment is made for schools needing more funding (Rwanda Ministry of Finance and Economic Planning, 2017), however, and parental contributions to schools in richer areas exacerbate inequality (Paxton and Mutesi, 2012).

The United Republic of Tanzania has decentralized most education spending, making three broad types of financial transfers to local government authorities for primary and secondary education (Tidemand et al., 2014). Under the first type, known as recurrent block grants, there are two sector-specific grants: The main one covers salaries, while the other, which covers 'other charges', is a capitation grant. Its effectiveness was questioned as its nominal level was low and was being eroded by inflation, while it was reaching schools neither in its entirety nor equally (U. R. Tanzania Ministry of Education and Vocational Training, 2009). The other two types, known as basket funds and capital development grants, have some equity orientation. For instance, the development grant takes into account district population (70%), the poverty headcount (20%) and the district land area (10%). Overall, though, they have not been able to address equity concerns (Allers and Ishemoi, 2012; UNICEF, 2018).

With support from their international partners, some countries have experimented with variations in their district or school funding formulas. Cambodia introduced school operating budget grants in selected pilot districts in the late 1990s with enrolment as the only criterion. It introduced a fixed component in 2001, while a series of changes in the formula introduced variation in both the fixed and the variable component depending on the location of the school (favouring disadvantaged areas) and the size of the school (favouring smaller schools) (Save the Children, 2015; UNESCO Bangkok, 2017). As part of reforms under the current education sector plan, a new equity-focused school funding formula is envisaged (GPE, 2020).

Tajikistan strengthened its education management information system and introduced a per capita financing system in 2010. Schools receive a grant consisting of a fixed component related to their type ('minimum standard', which takes into account their recurrent expenditures) and a variable component related to the number of students, adjusted by the type of school. The formula is further adjusted on the basis of location (taking into account the district budget) and available school facilities. The grant covers teacher



salaries as well as maintenance and other operational costs. Although schools have autonomy in budget execution, no component promoting equity other than school location is yet incorporated in the formula. But making funding proportional to need has resulted in more equitable allocations from the point of view of pupil/teacher ratios. Still, the mechanism has not fully addressed the inequalities arising from some districts' inability to raise enough resources even if they benefit from central government transfers (GPE, 2019; IsDB/ GPE, 2020).

Many countries that attempt to redistribute funds struggle to make an impact on inequality. Education financing in Argentina, a federal country, is in three parts. First, there are automatic transfers from the federal government to provincial governments. Rules for some of them are set in the 2006 education financing law, which takes rural and out-of-school populations into account (Argentina Government, 2006). However, these transfers do not sufficiently account for provincial differences (Rivas and Dborkin, 2018). Second, the ministries of education and public administration make non-automatic transfers to provinces and municipalities in implementing their nationwide programmes. Their effect on inequality is hard to estimate. Third, provinces co-finance education from their revenue, which constitutes the bulk of total education spending (Bertoni et al., 2018). As this revenue varies considerably, it is a major source of inequality. There are calls for a more centralized model to address interprovincial inequality, as well as for a review of non-automatic transfers to increase their effect on inequality (Claus and Sanchez, 2019).

Georgia introduced a capitation grant approach to school funding in 2006 to address challenges such as delayed teacher salary payments, inequality in school revenues, corruption at local and school level, and school buildings in disrepair. The approach involved transferring money directly from the central government to schools based on school enrolment, differentiating by school location (urban, rural and mountain). The reform led to the elimination of the role of local government in education but also to school consolidation, as 30% of schools closed down (Alonso and Sanchez, 2011). However, there were also problems in implementation and, as a result, the formula was adapted in 2011-13 to introduce a fixed on top of the variable component and to take into account the needs of schools by size, grade composition, and presence of

students from ethnic minorities or with special needs (CCIIR, 2014; Janashia, 2016).

In Indonesia, different mechanisms are used for the two main types of education expenditure. First, teacher salaries and allowances are paid through the General Allocation Grant (Dana Alokasi Umum). This unconditional grant transfers resources to local governments to cover salary costs. It also attempts to compensate for the difference between local needs and revenue, incorporating regional variables such as population, area, GDP per capita, and the value of a human development index that includes education. However, inequality has been increasing (Akita et al., 2019; UNDP, 2019). Second, a capitation grant covers schools' operational and, since 2009, quality-related costs (Bantuan Operasional Sekolah). Some districts complement this with a school grant. However, districts vary significantly in their revenue-raising capacity, and the poorest struggle (OECD and ADB, 2015). Some studies focusing on inputs found that decentralization resulted in lower budgets and teachers with fewer qualifications in poorer schools. Teachers also spent less time in classrooms in rural areas (Leer, 2016). Another study, focusing on outcomes, found that decentralization increased inter-municipal inequality in attainment (Muttagin et al., 2016).

Provinces in Sri Lanka also receive funds through two main channels. First, they receive block grants for salaries and recurrent non-salary expenditure. Almost all schools receive education quality input funds according to a formula that accounts for student population, school size and grade coverage. Second, provinces receive grants for capital expenditure, notably the Province Specific Development Grant, whose allocation is determined by four factors to equalize intra-provincial disparity: per capita income (40%), infrastructure (30%), health (15%) and education (15%), the latter in the form of an index based on enrolment and pass rates for five examinations (Sri Lanka Finance Commission, 2014). However, considerable disparity exists among districts in both resource allocation and examination results; in the latter case, within-district disparity was even higher than inter-district disparity. In addition to late, partial or non-receipt of funds, smaller schools with fewer resources have limited ability to raise funds, exacerbating disparity (Ranasinghe et al., 2016).

A notable example of decentralization reform that has had a strong equity orientation is Ethiopia. Building

on a large-scale devolution in the early 1990s, regional governments were granted considerable powers and responsibilities for service delivery, although the latter were increasingly shifted to districts. Block grants from the central to the regional governments and from the regional to district governments have been the main source of funding, with education taking the largest share. The original formula was based on population (65%), poverty (25%) and revenue collection effort (10%) (Garcia and Rajkumar, 2008). In 2008, the formula was revised to ensure equality in range and level of service delivery and independence of the grant from regional tax effort levels, while at the same time providing incentives for local governments to perform better (Dom and Lister, 2010; Assefa, 2015). A recent evaluation argues that the positive effects on education and health have been the result not simply of more resources but also of local control over decisions (Faguet, 2020).

In Brazil, the Fund for the Maintenance and Development of Basic Education and Valorization of Education Professionals (Fundo de Manutenção e Desenvolvimento da Educação Básica e de Valorização dos Profissionais da Educação, FUNDEB) was established in 2007 to redistribute federal, state and municipal resources to reduce inequality between rich and poor municipalities. It has been estimated that such inequality decreased by 12% in five years as a result of the fund, but the mechanism did not totally eliminate the gaps (Bertoni et al, 2018).

# ADDITIONAL GRANTS TO SCHOOLS ARE OFTEN NOT SUSTAINED OR FRAGMENTED

Overall financing mechanisms may be mediated by regions and districts or channelled directly to schools, depending on a country's governance and decentralization structures. But in addition to those general mechanisms, several governments also pursue specific policies to support schools. While these may serve different objectives, equity is often one of those, with targeted efforts to mitigate the impact of vulnerabilities caused by poverty, ethnicity, disability and location.

A recurrent challenge has been that different types of school grants, variedly described as focusing, for instance, on school improvement or school-based management, have been introduced in low- and middle-income countries by donors but have not become part of the public budget and have not been sustained after the end of the programme. For example, donor-funded programmes in Cambodia have at times supported additional grants, for instance in 2009–2012 (Marshall and Bunly, 2017) and in 2013–2016 (UNESCO Bangkok, 2017), but these have not been sustained. In the Philippines, supplementary school-based management grants have been piloted for a number of years in selected districts taking the school location's into account, but they also have not been sustained (Philippines Department of Education, 2015; World Bank, 2020).

Some countries are trying to move these programmes to the budget. Ethiopia introduced a school grant in 2009 on top of its block grant, giving schools more flexibility in the use of resources, but there was no equity consideration attached as the grant was proportional to enrolment (Kedir Kelil et al., 2014). The school grant has been funded by donors through three successive programmes, but a condition attached and fulfilled under the ongoing General Education Quality Improvement Program for Equity was for the government to begin co-financing the grant through the budget. An additional 5% is meant to be awarded to disadvantaged regions although some have struggled to deliver grants to schools affected by conflict or other emergencies in these regions. Supplementary grants were also provided to support the transformation of cluster centre schools to inclusive education resource centres to facilitate the inclusion of children with disabilities in mainstream schools (World Bank, 2017a).

Several governments in middle-income countries run programmes to support disadvantaged schools. One common problem that hampers an understanding of the breadth and depth of such interventions from a comparative perspective is the large number of such programmes, each catering for a different characteristic or different level of education and funded through different mechanisms. At least half of the countries with such policies and programmes allocated less than 2% of their total education expenditure to them. Such programmes also tend to focus on specific populations and target groups. In 32 countries, they cover only part of compulsory education, while in 33 countries they cover non-compulsory education (such as early childhood education).



#### BOX 1:

# School feeding programmes are key to promote equity

The potential of school feeding programmes to support education and promote equity is considerable. A randomized control trial evaluated a large-scale, government-led school feeding programme in Ghana, introduced after poverty and food insecurity rankings were developed to target priority districts. It found that the programme increased test scores, especially among girls, poor children and those from northern regions. The effect was the result of increased school participation and reduced time doing household chores (Aurino et al., 2018).

However, developing such programmes, incorporating them into the budget and making them equitable remains a struggle for many governments. Often, they are underfunded or dependent on donor support, and information systems are weak. In Yemen, where the civil war has left two million children under age 5 requiring treatment for acute malnutrition (Humanitarian Information Unit, 2018), the school feeding programme was relaunched in 2018, distributing high-energy biscuits and date bars to all primary schools across 13 governorates, reaching almost 400,000 students, with the support of the World Food Programme (WFP). A review as part of the World Bank's Systems Approach for Better Education Results identified an urgent need for a national school feeding policy that would lead to budget commitments (WFP, 2019b).

A number of countries are beginning to adopt school feeding programmes in their national budgets as part of efforts to promote equity. For instance, in 2018/19, Algeria subsidized its school canteens with US\$200 million, on top of which local governments also contributed (APS, 2018). About 46% of primary school students from the poorest 20% benefitted, compared to 18% of those from the richest 20% (UNICEF, 2020). Guatemala allocates 4% of its education spending to its school feeding programme, which covers 2.4 million students or 32% of the school-age population (Guatemala Ministry of Education, 2017). In Kenya', where WFP had run school feeding programmes for 40 years, especially in semi-arid and slum areas, the government's 2018/19 budget set aside US\$24 million for school meals (UNESCO, 2019a). In Myanmar, where school feeding has been taking place in selected vulnerable areas, the government recently endorsed strategic guidelines and a three-year work plan for a national school feeding policy (WFP, 2016; 2020).

### SOME EDUCATION PROGRAMMES THAT TARGET STUDENTS ARE BEGINNING TO FOCUS ON NEED OVER MERIT

A few education programmes are targeted at students and their families through exemptions (e.g. fees), cash transfers (e.g. scholarships) or in-kind transfers (e.g. textbooks and uniforms, or transport costs and assistive devices for families of students with special needs). Overall, 88% of countries surveyed had at least one programme that provided financial support to students. While the rate was somewhat lower in low-income countries, over 70% of them also offer scholarships. It is difficult to provide an aggregate picture from such interventions, which tend to be fragmented.

Fee exemptions tend to be granted on the basis of poverty. In South Africa, the 2005 Education Laws Amendment Act categorized schools according to the poverty of the area in which they are located. In 2016, 65% of learners did not have to pay school fees and 87% of schools were classified as no-fee schools under this funding policy (UNICEF, 2017). However, there are also other criteria. In Benin, girls are exempt from secondary tuition fees (Benin Ministry of Pre-Primary and Primary Education, 2018), while Viet Nam granted preschool tuition fee exemptions to households living in remote areas in 2018 (Viet Nam Ministry of Planning and Investment, 2018).

Some fee exemption programmes' equity orientation is less than straightforward and their effects are hard to establish. School capitation grants in Chile, known as vouchers, allow students to choose public or private schools. Since they were introduced in 1980, they accelerated stratification in the education system. In 2008, the government introduced the Preferential School Subsidy (known by its Spanish acronum, SEP) to reverse this legacy. The subsidy levels were adjusted to encourage private subsidized schools to enrol so-called 'priority students' from an underprivileged background who would be exempt from paying fees (OECD, 2017). Although the programme has been associated with improved learning outcomes, the disparity in these outcomes remained unchanged in public schools and may have increased in private subsidized schools (Flores, 2020).

Some programmes may even be regressive. The Philippines expanded compulsory education to 12 years in 2016/17 and introduced a Senior High School Voucher Programme, providing financial support for grade 10 students to enrol in private schools in grades 11 and 12. All grade 10 public school students are eligible to receive the full amount, which varies by location, while private school students receive 80% of the full amount. In 2017, more than 1.2 million voucher recipients were enrolled in grades 11 and 12, which was equivalent to 47% of total and 94% of private school enrolment. As the voucher value and eligibility do not vary by background, the programme most likely benefits richer students, thus exacerbating inequality (World Bank, 2020).

Scholarships tend to be awarded on the basis of academic performance, which usually exacerbates inequality. However, some countries have attempted to take socio-economic status into account, including those where households still account for a very large share of total education spending despite compulsory education being nominally free. In Myanmar, it is estimated that households contribute two-thirds of overall education expenditure (World Bank, 2018). In 2017/18, a donor-funded programme operated in 55 townships and provided monthly transfers to 192,000 poor and at-risk students in grades 5 to 11 (World Bank, 2017b). In Nepal, where households are estimated to contribute 49% of total education expenditure, equity is one of five foundations of the School Sector Development Programme. Various scholarship schemes exist for vulnerable groups, notably for all Dalit students and for girls. However, the very large number of recipients, which reached 2.8 million students, or 37% of total primary and secondary school enrolment, in 2016, means that the scholarship amounts are very low, for instance ranging between US\$3.6 and US\$4.9 per student per year (Nepal Department of Education, 2016; Vertex Consult, 2016). A large-scale female secondary school stipend programme introduced in Bangladesh in 1994 increased attainment, delayed marriage, reduced number of offspring and improved decision-making autonomy (Hahn et al., 2018).

In Algeria, a large-scale programme offers an annual education allowance worth US\$23 to three million primary and secondary school students from disadvantaged families earning less than US\$60 per month. The allowance is paid at the beginning of each school year with the intention to support them with their school supply purchases. The total envelope of US\$68 million corresponds to 6% of public education expenditure. In Indonesia, Bantuan Siswa Miskin, a cash transfer for poor students, expanded its coverage and improved its targeting in 2013 (World Bank, 2017c). Although households were not obliged to change spending patterns, poor families' education expenditure increased (Anindita and Sahadewo, 2020).

Finally, an example of a large-scale in-kind transfer is the One Million Schoolbags programme in Morocco, which offers a school kit that includes a bag, books and school supplies. More than 4.3 million students benefited in 2018/19, of which 63% live in rural areas.

Thailand had followed an unusual approach to transfer resources to students in cash and in kind. In 2009, the Free Education Programme introduced five transfers ultimately to be made to households. However, schools administered three (textbooks, learning and teaching, and student development) and made in-cash or in-kind transfers to households for the other two (uniforms and learning materials). In addition, schools received a transfer for poor students (US\$33 per eligible primary and US\$100 per secondary school student), assessing which students were poor (up to 40% of primary and 30% of secondary school students) and deciding whether to pay households in cash or in kind. However, a public expenditure tracking survey found that 75% of schools did not target the poor student grant, making in-kind transfers to all students (mostly uniforms, meals and transport). This reduced the programme's potential to promote equity, which was already compromised by the fact that per capita transfers were the same in all schools regardless of poverty rates (UNICEF, 2017; Gauthier and Punyasavatsut, 2019). Partly in response to these challenges, the Equitable Education Fund was established in 2018 to target 4.3 million children and youth with a poverty-screening programme that uses proxy means tests (UNESCO, 2019b).

Such background information on policy characteristics provides the context to interpret the rich insights of the new module of the UNICEF Multiple Indicators Cluster Survey (MICS) on social transfers. Added to the sixth wave of surveys that began in 2017, the module enables an analysis of the actual reach of some of these education programmes but also the relative effectiveness with which they reach disadvantaged



households. For instance, the evidence confirms that Algeria's programmes have lower coverage but are better targeted (38% of the poorest but 10% of the richest receive school tuition support) than those of Thailand, where a large part of support ends up with the richer households (59% of the poorest but 44% of the richest receive school tuition support). The same is true for Georgia, whose limited tuition support programme is even regressive, favouring the richest. Bangladesh and Costa Rica appear relatively successful in targeting the poorest, although there is scope for improvement. Finally, there is a marked absence of programmes to support education in sub-Saharan African countries, such as the Democratic Republic of the Congo and Zimbabwe (**Figure 3**).

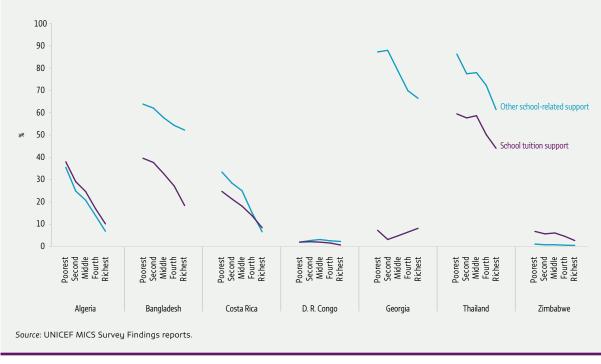
These messages are still interesting even after accounting for the fact that responding households may be unsure which programmes they benefitted from or that response categories may confound different programmes. No information is available on the size of the transfers, which often are in kind, as explained above. But the MICS module creates new opportunities for addressing the questions raised in this paper and also offers extensive information on coverage of social programmes, which are discussed in the next section.

## SOCIAL PROTECTION PROGRAMMES' POTENTIAL IMPACT ON EQUITY IN EDUCATION IS OFTEN OVERLOOKED

The education ministry's component is not the only one in the budget that can impact on equity in education. Four of five countries covered in this review have a social protection programme, such as unconditional transfers or conditional transfers with an education angle. About 20% of countries with such a programme cover at least 15% of the school-age population. A systematic review found that the odds of enrolment increase by 18% in the case of unconditional transfers and by 60% in the case of programmes with strict conditions and strong monitoring mechanisms (Baird et al., 2014).

#### FIGURE 3:

**Countries' efforts to support education and their capacity to reach the poorest households vary considerably** Coverage and targeting effectiveness of programmes offering support for school tuition and other school-related support, by household wealth quintile, selected countries, 2017–2019



An example of a large unconditional cash transfer without a school attendance requirement is Ethiopia's Productive Safety Net Programme, which offers cash to poor households in exchange for participation in labour-intensive public works. The impact of such programmes on children depends on whether the increased demand for schooling due to higher income exceeds the potential increased demand for child labour as adults take part in public works. Evidence has been inconclusive, with one evaluation finding a positive impact on school attendance for boys (Hoddinott et al., 2010) and another finding an increase in demand for child labour (Tafere and Woldehanna, 2012).

Mongolia has a rare universal child benefit programme, the Child Money Program, which transfers about US\$11 per month for each child aged under 18, funded out of the Human Development Fund, where revenues from mineral exports are saved. However, there have been strong calls for the programme to be targeted (Klugman et al., 2017; Mongolia Ministry of Population Development and Social Protection and World Bank, 2015; Yeung and Howes, 2015). By contrast, in South Africa, the Child Support Grant, worth US\$29 per month, is targeted at poorer households and paid to parents of 12.5 million children or 64% of the population. It costs the government 1.3% of GDP (UNICEF, 2019). An earlier evaluation found a positive impact on education (DSD, SASSA and UNICEF, 2012).

Conditional cash transfers were pioneered in Latin America, where evidence of long-term effects shows that conditional cash transfers have increased education attainment by between 0.5 and 1.5 grades (Molina Millán et al., 2019). Public expenditure programmes vary by country, from 0.01% of GDP in Belize to 0.61% in Argentina. Population coverage also varies, from 1.2% in El Salvador to 51% in the Plurinational State of Bolivia.

In Colombia, Más Familias en Acción (More Families in Action) is a cash transfer programme conditional on school attendance and health service use. It serves 2.7 million poor families targeted through two complementary mechanisms. First, three registries are used to certify vulnerability: beneficiaries of the extreme poverty programme Red Unidos (United Network), victims of displacement and those enumerated in the Indigenous Census. Second, the National Planning Department's multidimensional Beneficiary Identification System for Social Programmes index uses proxy characteristics to estimate living standards. The programme's management information system uses information technology to improve operational efficiency and reduce families' participation costs (Sánchez Prada and Medellín, 2015). In Ecuador, the Bono de Desarrollo Humano (Human Development Grant) targeted households that had children under age 16 and were classified as vulnerable according to the Social Registry's socio-economic index. Ultimately, the programme's conditionality on school attendance was not enforced; however, an evaluation of effects over 10 years found a significant increase in secondary school completion: up to two percentage points (Araujo et al., 2017).

Conditional and unconditional programmes that target the poor and have an effect on inclusion exist in many other parts of the world. Some have a long history, while others were inspired by lessons and developments in Latin America. In Indonesia, Program Keluarga Harapan (Family Hope Programme) began providing guarterly cash transfers to very poor households in 2008. While they were initially equivalent to 15% to 20% of income, their real value fell to 7% within six years. Eligible households have certain demographic characteristics, such as children under age 15 or children aged 16 to 18 who have not completed nine years of education. Conditions for payments include an 85% school attendance rate. A six-year follow-up evaluation showed enrolment rates among 13- to 15-year-olds rose by up to nine percentage points, equivalent to halving the share of those out of school. Increases of between four and seven percentage points were observed in the secondary school completion rate among 18- to 21-year-olds, with the effect concentrated among young men (Cahyadi et al., 2018). The government scaled up the programme from 3.5 million to 10 million households between 2016 and 2018 (Indonesia Ministry of Social Affairs, 2020), equivalent to 14% of the population.

In Morocco, Tayssir is an education-focused conditional cash transfer programme first piloted in 2008. For up to three children per household, it offers a monthly payment of US\$6.7 in grades 1 and 2, U\$9 in grades 3 and 4, US\$11.3 in grades 5 and 6, and US\$15.8 in secondary school; it has been estimated that these transfers amount to 5% of household consumption. The programme was originally targeted at rural areas, focusing on municipalities with poverty rates of at



least 30% and dropout rates of at least 8% (Gyori et al., 2017). In 2018/19, the programme was expanded to all rural municipalities in the case of primary education and throughout the country in the case of secondary education. As a result, there was a threefold expansion of both its coverage (from 700,000 to 2.1 million) and its cost (from US\$71 to US\$245 million). As part of the expansion, beneficiaries will need to be listed in the Unified Social Register to enable the application of new poverty-focused targeting criteria.

In the Philippines, after 12 years of implementation, the Pantawid Pamilyang Pilipino Program conditional cash transfer programme became enshrined in law in 2019. It covers 3.9 million households, or 21% of the population, that include children under 18 and earn less than US\$2.15 per day. Since 2014 it has been complemented by a programme that supports 200,000 households originally not listed because they were homeless, indigenous or in need of special protection. Altogether it was disbursing US\$1.7 billion in 2018, 78% of which was covered by the government, corresponding to 0.5% of GDP or 2.6% of total public expenditure. It corresponds to just 7% of beneficiaries' income, a low amount compared to comparable programmes (Acosta et al., 2019). Its impact on education has been modest but consistent, representing an increase of five percentage points in school attendance rates among 12- to 15-year-old beneficiaries relative to the baseline (PIDS, 2020).

Turkey has run a conditional cash transfer programme since 2003. An initial evaluation found large positive effects on the secondary school enrolment rate among 14- to 17-year-olds, especially in rural areas, where the probability of being enrolled increased by 17% and, for boys, as much as 23% (Ahmed et al., 2007). The government later scaled up the programme and extended it in May 2017 to reach Syrian and other refugee children. By June 2019, more than 500,000 students regularly attending school were receiving a transfer of between US\$6 and US\$10 per month; 83% of the families also benefited from Emergency Social Safety Net grants of US\$20 per family member per month (Turkey Government and European Commission, 2019). The programme worked in complementarity with education interventions, such as Turkish language classes, Syrian volunteer education personnel and transport support, and other services, such as child protection (Ring et al., 2020).

While conditional cash transfer programmes are designed to overcome the perceived weak demand for education, their success requires the supply of education services of good quality in proximity to the target populations' residence. Yet, these programmes do not address factors such as class size, teacher qualifications or transportation costs.

# HIGH-INCOME COUNTRIES ALSO STRUGGLE TO FUND SCHOOLS EQUITABLY

Although the review suggests that richer countries are more likely to have a robust equity focus in their financing policies, high-income countries face big obstacles in ensuring that school funding serves their multiple policy objectives. These obstacles have only become bigger in the context of COVID-19, a challenge that affects poor and rich countries alike (**Box 2**). A long-term project of the Organization for Economic Co-operation and Development looks at each element of the public financial management cycle – planning, budgeting, implementation, monitoring, accounting, reporting and evaluating – and how it can serve equity, among other objectives (OECD, 2017). There is a lot to learn from the dilemmas and tradeoffs these countries have faced (Di Gregorio and Savage, 2020).

In Australia, the school funding mechanism has favoured private at the expense of public schools. Following a major review in 2011, a new education law in 2013 set a country-wide minimum capitation grant per student for the first time, with a formula to determine additional support to disadvantaged students (affected by poverty, disability, indigeneity and low English proficiency) and schools (rural and small). Private schools' minimum capitation would be adjusted downwards to take their ability to charge fees into account. However, the reform was diluted: A government commitment that no school would lose resources entrenched historically unequal allocations; the Catholic schools sector was given discretion in applying the formula; states were not forced to comply with federal targets; federal funding that would have helped underfunded schools catch up was postponed by five years; and overfunded schools would lose their advantage at a very slow rate (Goss et al., 2016). Ultimately private schools received a larger increase in funding than public schools between 2007/08 and 2016/17 (Baker, 2019).

#### BOX 2:

#### COVID-19 has prompted countries to adjust and rethink financing for equity in education

Targeted financing is particularly critical to respond to the increased marginalization as a result of COVID-19, which many countries have been quick to realize. When closed, schools require adequate resources to reach children through remote learning and to maintain and expand student support programmes. As schools reopen, allocations to schools can help prevent financial costs from being passed on to families or students (World Bank, 2020). Allocating grants directly to schools is an effective use of funds for reducing the chances that children will drop out. The government in Sierra Leone waived school fees as part of its response to the Ebola outbreak to encourage children to return to school (Sierra Leone Government, 2015).

Some countries have relied upon their overall funding mechanisms to support children during the pandemic. In the United States, the CARES Act behind the first stimulus package prioritized sending additional funds per child to states with higher poverty rates. States are then responsible for equitably redistributing funds to school districts in need, although the formulas for determining those most in need were strongly debated (Reber and Gordon, 2020). While initial funding was tied to schools re-opening, that condition was dropped in the second US\$900 billion stimulus package, passed at the end of 2020. But states have US\$4 billion at their discretion for education, less than before, and US\$2.5 billion of that amount must go to private schools, albeit those serving low-income students (Fensterwald, 2020).

Many countries have targeted schools with funding responses specific to COVID-19. In the UK, exceptional costs can be claimed by schools, including for pupils who have not returned to school (Education and Skills Funding Agency, 2020). A digital education grant was made available for local authorities running public schools, boards of state-aided private schools, and individual schools to acquire materials and internet access for disadvantaged children (Department for Education, 2020a). A GBP1 billion package is being allocated to schools in 2020/21, two-thirds of which are a 'catch-up premium'. However, no equity component was attached to this flat payment, which corresponds to GBP80 per student. Equity orientation was reserved for the remaining one-third of the package, the national tutoring programme, which is targeted to the most marginalised (Department for Education, 2020b). However, delays were observed in its delivery (Yaghi, 2020) and in the delivery of a free school meal for poor families (Education Policy Institute, 2020).

A more common approach, including in middle-income countries, has been the adjustment of social programmes. In the Islamic Republic of Iran, a conditional cash transfer targets at-risk households with children under the age of 18 in three deprived provinces. The cash transfer complements existing schemes, including in-kind support aimed at increasing access to and continuation of learning (United Nations Country Team, 2020). South Africa has topped up its Child Support Grant (Webb and Vally, 2020). Spain protected support received by families during the school year, ensuring that it continued during school closures (OECD, 2020).

Low- and lower-middle-income countries have received aid for their emergency responses. By the end of October 2020, the Global Partnership for Education had approved US\$467 million worth of grants, of which 38% supported equity initiatives defined as 'activities on hygiene and psychosocial support programs, with priority support for the most vulnerable children, including children with disabilities'. About 76% of the grants supported no- or low-tech solutions for distance learning (GPE, 2021). For instance, Sudan purchased 287,000 radios with solar-powered chargers, printed homework assignments in newspapers, and bought mobile phone data for teachers to communicate with students. Papua New Guinea targeted learning kits to individual student needs, including providing Braille and large print materials to visually impaired students (GPE, 2020).

In New Zealand, just 2.9% of school funding has been targeted for equity purposes (New Zealand Government, 2019). At the same time, a system that ranked schools into deciles was perceived to have stigmatized schools in the bottom decile and prompted students to move out of them. A spending review completed in 2019 concluded that a student-centred equity index would replace the current school-centred system by 2021, while the scope of its application could extend to teacher salaries and professional development or student wellbeing supports. Exploiting confidential individual-level data, the index would identify the percentage of disadvantaged children in a school (New Zealand Ministry of Education, 2019).

In the United States, the federal government provided 8%, states 47% and districts 45% of total funding for public education in 2016. In total, 39 states use a foundation formula, in which districts receive a base amount per student with weights added to reflect the



higher needs of some populations. By contrast, eight states follow a resource allocation model, in which resources are distributed based on criteria such as the number of teaching posts per student (Education Commission of the United States, 2020). Federal funding tends to compensate for disadvantage, but state allocations to districts sometimes increase disadvantage. Using data up to 2015, a review found that while districts with the highest concentration of non-white students received at least 5% more funding than districts with the lowest concentration of non-white students in 14 states, the opposite was the case in another 14 states (Morgan and Amerikaner, 2018). Illinois, ranked second from the bottom in that classification, has since passed a reform to focus more resources on districts with higher poverty rates (Rhodes and Mackay, 2017).

Countries often struggle to choose between targeting groups instead of targeting factors more broadly associated with underlying disadvantage. For instance, while students with immigrant backgrounds are a common policy concern in many high-income countries, migrant status is rarely explicitly included as a factor in financing schools. Belgium, England (United Kingdom), Israel and the Netherlands have either reduced or removed the focus on migrant status in favour of related factors, such as socio-economic status and parental education level (UNESCO, 2019a).

## CONCLUSION AND RECOMMENDATIONS

The international community committed to 'inclusive and equitable' education by 2030, a goal whose achievement is under additional threat as a result of the COVID-19 pandemic. Since 2015, there has been a welcome focus on monitoring the state of the world's education disparities - and, to a large extent, on data to match. However, there has been less attention on how to summarize, report and compare country efforts to close these gaps. There are several ways in which countries can reduce gaps in education opportunities. One of them is through financing mechanisms. The importance of financing as a tool to improve equity has been recognized in an SDG 4 thematic indicator on the 'existence of funding mechanisms to reallocate education resources to disadvantaged populations'. This is an example of a new generation of indicators that emphasize the formative aspect of monitoring and the

need for countries to learn from each other. However, the indicator has lacked a methodology.

The aim of this paper is to help initiate a debate on the value of monitoring policies and programmes in education - and in particular, those financing mechanisms that promote equity in education. It focused on three issues. First, it provided a framework of four types of financing policies and programmes that can improve equity in education: overall financing mechanisms that allocate funds to cover operational costs to local governments or schools; grants made to schools to cover development costs; education policies, such as fee exemptions, scholarships and in-kind transfers, targeted at disadvantaged students and their families; and social policies, such as unconditional and conditional cash transfers with an education component, also targeted at disadvantaged students and their families. Second, it suggested some indicative thresholds to differentiate the efforts countries make in those four policy and programme types by three dimensions: comprehensiveness, population coverage and volume of support. Third, it reviewed material on policies and programmes in 78 countries, classified them against these four different types, and assessed the information - now uploaded on the Global Education Monitoring Report's new website, PEER - against the three dimensions.

The analysis suggests that one in five countries demonstrated a strong focus on equity in education through financing. Inevitably, there are errors in how countries are grouped. Information on policy and programme comprehensiveness, coverage and volume may be unavailable, out of date or misleading. More importantly, quantitative indicators may hide as much as they show. Identifying hard and fast rules to determine whether certain policies are oriented in the right direction cannot be done without reference to how decentralized systems are, how budgets are structured or whether education programmes are co-financed with other ministries. Many programmes in poorer countries are driven by donors; countries may have no means to incorporate them in their budget when projects end. Administration weaknesses or design faults mean that programme intent is often not realized. The evidence emerging from the MICS sixth round on coverage offers invaluable insights in that respect. Last but not least, even with the right foundation, some programmes may not reduce disparity in education; the paper has mentioned several evaluation examples.

A few key recommendations emerge.

- Monitoring of processes has lagged behind monitoring of results in SDG 4. Despite the challenges mentioned above, a systematic effort is needed to support countries with more information to help them debate alternatives and design better policies in the future.
- Monitoring financing for equity in education must involve both quantitative data and qualitative judgement. Rating comprehensiveness, coverage and volume of policy intent is necessary but not sufficient unless accompanied by contextual information on programme history and prospects.
- The contribution that the GEM Report and other international entities can make through a comparable framework and critical information evaluating effectiveness is necessary but not sufficient. First, it requires the engagement of governments that can provide up-to-date and accurate information. Second, it requires the engagement of regional organizations as forums in which such issues are discussed between peers.

Monitoring an elaborate concept such as the focus of national financing policies and programmes on equity in education loses its purpose without a complementary forum in which findings can be exchanged, debated, contested and reflected upon. This analysis has drawn attention to how differently countries approach each one of the four main financing mechanisms and how much scope there is for countries to learn from each other. More than half of low- and middle-income countries' overall financing mechanisms do not take local governments' and schools' relative disadvantage into account. Transfers to schools for development purposes, especially in poorer countries, are often initiated by donors but lack a clear trajectory towards sustainability. When transfers to students are managed by education ministries, design problems frequently emerge as capacity is lacking to target those most in need. This capacity tends to be much stronger among social protection ministries, but their cash transfer programmes are rarely integrated in education ministries' plans and their potential from joint design not fully exploited. Some countries, notably in sub-Saharan Africa, have no financing policies to promote equity. While lack of funding is a major constraint, awareness needs to be built.

Over the past 20 years in international development, the education sector and the health sector, with which it is frequently compared, have moved in opposite directions in terms of their emphasis. Education has moved from universal basic education and a focus on outputs such as enrolment to a focus on outcomes such as learning. Health, after achieving major progress on monitoring outcomes, has shifted its attention to achieving universal health coverage, accompanied with the building of mechanisms that help countries to learn from each other, such as the Joint Learning Network for Universal Health Coverage. The time has come for a Joint Learning Network for Equity in Education to support countries to place the issue at the heart of their agenda.

References for this paper can be found online at the following link: Bit.ly/financingforequity\_ref

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