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Financing 'leave no one behind'

Policy options in the social sectors

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Key messages

- In allocating funds across regions and programmes, donors and governments need to provide a greater-than-proportional allocation to poor and marginalised groups, not an equal per capita share.
- The provision of physical facilities and trained staff positively influences access and outcomes, while financial incentives can help to recruit and motivate staff in remote areas.
- Finance also influences the demand side. Abolishing user fees, reducing indirect costs and providing additional financial incentives, such as cash transfers, can all help support access.
- Governments need to both mobilise and spend resources in ways that benefit marginalised groups. This includes increasing the share of spending on the social sectors and primary services.
- Sectoral and sub-sectoral allocations need to improve. Limited progress has been made in increasing the share of government spending on education and health, and the share allocated to primary education has fallen in many countries.

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1. Introduction

'Leaving no one behind' is a fundamental tenet of the new Sustainable Development Goals (SDG) agenda agreed in September 2015. Not only is 'ending poverty, in all its forms, everywhere' a specific goal, but tackling marginalisation and meeting the needs of all groups is also placed centre stage across the whole agenda, and there is a commitment to 'reach the furthest behind first'.

This is also known as progressive universalism – or prioritising the implementation of policy among the worst-off groups first. If this approach is not taken – in other words, if policy is implemented first among better-off groups and only later in the poorest ones, which is the current norm – the likelihood is that the existing gap between the worst and best-off will increase. Should a drive for universal coverage then fall short of fully realising its goal, this gap becomes permanent (Gwatkin and Ergo, 2011; Stuart and Samman, 2017).

There are various illustrative groups highlighted in the SDG Declaration to be at risk of being 'left behind': children, young people, persons with disabilities, those living with HIV/AIDS and older people, along with indigenous peoples, refugees and internally displaced persons and migrants. Women and girls, and those living in extreme poverty are also given prominence.

Meeting the commitment to 'leave no one behind' (LNOB) and support progressive universalism will require finance. Money is not the only thing needed: changes in governance, data, and policy are also critical. However, meeting this commitment will require changes to the way finance – and public finance in particular – is allocated and delivered. The main actors involved in mobilising, allocating and delivering finance to meet the LNOB agenda will be governments, although development partners, the private sector and non-governmental organisations (NGOs) also have a role to play.[1]

A broad range of financing actions will be needed to leave no one behind, and these must be appropriately tailored to individual contexts across the developing world. In this paper, we focus particularly on the sectors in which public finance is likely to have an important role: social protection, education and universal health coverage. We do this to keep the analysis manageable, while noting that private financing can also play a role in these sectors and that reforms across the whole economy, including labour markets, will also be needed. Our aim here is simply to identify some overarching principles and priorities to help inform efforts, in these sectors and others, to move towards the goal to leave no one behind.

We ask the following questions:

- What are the supply and demand side responses needed to ensure no one is left behind in these sectors?
- What are the potential sources of finance?
- How can money be spent most effectively to leave no one behind?
- How can different actors – particularly governments, donors and NGOs – best work together?

The paper draws on secondary sources, including both academic and grey sources. Particular attention is paid to identifying positive examples, including the Overseas Development Institute's (ODI) Development Progress[2] case studies (see Rabinowitz and Prizzon, 2015). We also note that these were selected on the basis of the general level of progress, not necessarily the extent to which the poor and vulnerable have been targeted.

1 Leaving no one behind is a universal problem to be addressed in high, middle and low-income countries. However, the financing needs are more acute in low and middle-income countries, and so this paper limits itself to those countries.

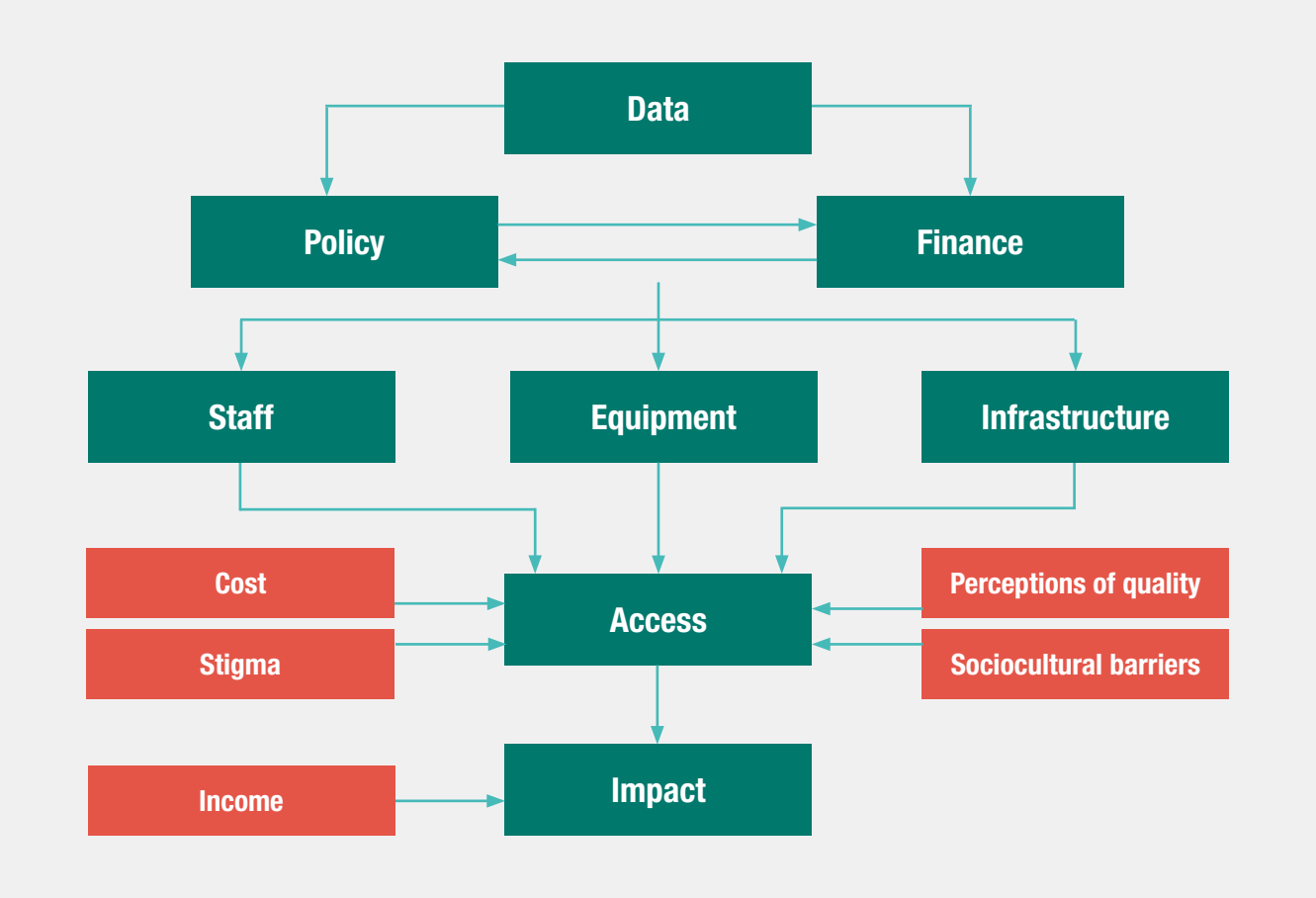
2 ODI's Development Progress project was a five-year research project supported by the Bill and Melinda Gates Foundation. It aimed to understand, measure and communicate where and how developed progress has happened. Key messages on financing of development progress have been summarised by Rabinowitz and Prizzon (2015).

2. Supply and demand side responses

The conceptual framework guiding this study (see Figure 1) suggests that access to quality basic services will depend on both demand and supply side responses, both of which are likely to require financing. On the supply side, access requires appropriately trained and incentivised staff (e.g. teachers and doctors) to provide quality services in ways that include poor and marginalised people, such as teaching in languages they can understand. High-quality equipment, including drugs, medical supplies and textbooks, should be available. Crucially, the physical infrastructure needs to be located where poor and marginalised people live, and in ways that they can access (e.g. with disabled access and sanitation facilities for girls).

On the demand side, services need to be available at a cost that poor and marginalised people can afford, including indirect costs such as transport. Information about services needs to be made available (Ulrichs, 2016) and sociocultural barriers that may preclude access be overcome. Other issues such as fear of or actual stigma faced by marginalised groups or the quality of services also need to be tackled. Some demand side matters may also be caused by the supply side. For example, costs of transportation will be high where facilities are located far away and sociocultural barriers may be harder to overcome when there are fewer community health workers.

Figure 1. Conceptual framework



Source: Abdulai et al, forthcoming

2.1. Supply side responses

2.1.1. Infrastructure and facilities

Bringing services to marginalised communities requires investment in physical infrastructure. In the education sector, there is a strong relationship between school building, enrolment and attendance. Building schools enables children to go to school nearer home, reducing travel time, an important indirect cost of attending. Greater distances may also lead to direct transportation costs and worries about safety (Glewwe and Muralidharan, 2015): a potential deterrent for girls in particular.

The evidence bears this out. Glewwe and Muralidharan (2015) examined five high-quality studies looking at the impact of building new schools on time spent in school. All six estimates across the five studies found significantly positive impacts from building new schools on students' time there. In Afghanistan, a randomised evaluation found that placing schools in villages led girls' enrolment to increase by 52 percentage points and to significant improvements in test scores, virtually eliminating the gender gap in the latter (Burde and Linden, 2013). In Ethiopia, classroom construction has been a central part of the national strategy to accelerate progress towards universal primary education. School building has been concentrated in rural areas, significantly reducing average distances to school. The out-of-school population has declined by 3 million and gender disparities have narrowed, underlining the importance of distance in demand for girls' education (United Nations Educational, Scientific and Cultural Organization (UNESCO), 2010). Similar findings have been observed by Duflo (2001) and Handa (2002), albeit with fairly small effects seen in the latter study.

In the health sector, a similar relationship has been found between distances to health clinics and health outcomes. A study of 24,555 children in rural Burkina Faso found that walking distance to a health clinic was significantly related to both infant and child mortality, and that under-five mortality was more than 50% higher at a distance of four hours compared with having a health facility in the village (Schoeps et al., 2011). A study of paediatric health utilisation in rural Kenya found that the rate of clinic visits decreased linearly at 0.5 km intervals up to 4 km, and that for every 1 km increase in distance of residence from a clinic, the rate of clinic visits decreased by 34% (Feikin et al., 2009). A study of a rural clinic in Bangladesh found that attendance rates for diarrhoea treatment declined as the distance from the clinic increased. It also found that mortality due to diarrhoea was significantly reduced only within a two-mile radius of the clinic (Rahaman et al., 1982).

Ensuring access by marginalised groups can sometimes mean adapting the standard service delivery model. In the education sector, where marginalised children live in scattered communities in remote areas, 'satellite school' models may sometimes be needed. These are organised into clusters, usually consisting of central, relatively well-resourced schools and several smaller satellites (UNESCO, 2010). Other models may also be required. These include multi-grade schools and mobile schools, which accompany children and teach them when they are not herding. However, it is important to ensure that teachers are properly trained for multi-grade teaching and have a positive attitude towards it (Little, 1995). In Bolivia, 'clusters of schools, known as núcleos', have been created to expand the reach of the education system into underserved highland and jungle areas. Each cluster comprises a central school, offering the full cycles of grades up to secondary level, with several satellite schools offering the first three primary grades in multi-grade classes. Students and teachers can be redirected to different schools within the cluster to make coverage more even. This system has played a vital role in expanding access to education among indigenous children in highland areas, including via instructions in Bolivia's three main indigenous languages and the promotion of bilingual and cultural education (Giordano, 2008). The reform has helped increase the public education system's coverage. For instance, in 1992, 82% of urban but only 41% of rural students completed grade 6; by 2001, this had risen to 85% in urban areas and 74% in rural areas (Countreras and Talvera Simoni, 2003, cited in UNESCO, 2010). Other possible approaches include non-formal teaching, sometimes using the same infrastructure as formal schools, but at different times of day.

Other models have been developed for children living in conflict-affected states where it is difficult for staff to work or children to travel to school. For example, in Afghanistan, community schools managed remotely by NGOs, but working through local staff and partners, have helped to ensure continuity of education. Day-to-day running is effectively transferred to local staff and school management committees, where village elders and parents are represented (UNESCO, 2011).

2.1.2. Human resource inputs

A number of studies have analysed the relationship between the number of public health workers, health services, and outcomes across countries. Anand and Bärnighausen (2007) carried out regression analysis on the significance of the density of human resources for coverage of three vaccinations: measles-containing vaccine (MCV), diphtheria, tetanus, pertussis (DTP3) and poliomyelitis (polio3). This found that health worker density was significantly associated with coverage of all three vaccinations. Using data from 192 countries and 19 different statistical models, Speybroeck et al. (2006) found a statistically significant relationship between the aggregate density of health workers and coverage for both measles immunisation and skilled birth attendants. These results are perhaps not surprising: we would expect more health workers to lead to more vaccinations and skilled birth attendance. More strikingly, perhaps, Anand and Bärnighausen (2004) carried out a cross-country multiple

regression analysis exploring the relationship between maternal, infant and under-five mortality rates and the aggregate density of human resources and found that the density of human resources for health to be significant in accounting for each of these mortality rates (with elasticities ranging from -0·474 to -0·212). This implies that human resources impact health outcomes as well as service delivery.

Similar research on the education sector has found some support for concluding that pupil-teacher ratios, as the commonly used measure for assessing the impact of teacher numbers on outcomes, are important for education outcomes. However, this evidence is generally weaker than that for health. A 2015 review of evidence on this issue found three high-quality studies producing five estimates of the impact of the pupil-teacher ratio on student learning. Of these estimates, three (from two different studies) found a significantly negative effect of rising class size on learning, with two (again, from two studies) failing to find a statistically significant relationship (Glewwe and Muralidharan, 2015). This is possibly because this relationship is non-linear – very high class sizes may significantly worsen quality, but reducing them beyond a certain number may not have a similarly positive effect.

Service delivery and quality in marginalised areas is often undermined by a lack of skilled staff, such as teachers and doctors. Additional incentives are often required to encourage staff to work in such areas. In Mozambique, doctors are required to spend their first two years in rural areas, where they are compulsorily posted after graduation. After that time, however, better career opportunities tend to attract them back to Maputo or other urban locations, leaving rural areas without qualified staff (Pereira et al., 2007, cited in Rodriquez-Pose et al., 2014). Some countries have provided additional financial incentives in the education sector, with good results, although the evidence suggests these have to be quite high to attract good teachers (UNESCO, 2010). For example, in The Gambia, a special allowance was introduced in 2006 to attract and retain teachers in schools more than 3km from a main road. The allowance represented 30–40% of an average salary. By 2007, 24% of teachers in several regions had requested a transfer to hardship posts, with negligible numbers requesting transfers in the opposite direction (Mulkeen, 2009, cited in UNESCO 2010). In the education sector in Mozambique, bonuses are paid to attract the most experienced teachers to remote areas. These can effectively double the salary of the most qualified teachers (Mulkeen and Chen, 2008, cited in UNESCO, 2010).

Housing can also be a key barrier: in Mozambique, deployment of newly graduated doctors and nurses to the neediest locations can be delayed for months due to lack of housing near health facilities (Rodriquez-Pose et al., 2014). In 2005, the Government of Uganda responded to a similar problem by allocating a grant for the construction of teachers housing (Mulkeen and Chen, 2008, cited in UNESCO, 2010). Another option would be to focus on recruiting and training teachers from local communities, for whom remoteness and housing are likely to be less of a barrier. Ghana's Untrained Teachers Diploma in Basic Education (UTDBE) has trained up teachers from remote regions and these were found to be more willing to stay in those areas (Abdulai et al., forthcoming). Using teachers from local communities, can, however, raise issues of quality if teachers have not themselves received a good-quality education.

Ensuring access for some marginalised groups may also require additional teacher training and support. For example, in Turkey, a one-term pre-service course on gender equity had a significant impact on female teachers' gender attitudes and awareness (UNESCO, 2014).

2.1.3. Conclusions

Financing is critical to supporting these investments on the supply side: a review of all Development Progress case studies has confirmed that financing can play a role in supporting the investments in physical, human or technical capacity required to bring services to communities, particularly poorer, more marginalised, isolated communities (Rabinowitz and Prizzon, 2015). Finance is needed to build schools and clinics, and also employ teachers and health workers. Moreover, because population density is lower in some areas where marginalised people live, cost-per-child or per patient can often be higher. Mobile schools and satellite schools can be more resource intensive than mainstream schools (Giordano, 2008). Additional financial incentives to encourage workers into remote areas need to be quite high to have an impact, and investment in housing or teacher training involves additional costs. Governments therefore need to allocate additional funding to services in remote or hard-to-reach areas, as we discuss below.

2.2. Demand side responses

Providing services that are close to poor and marginalised communities and in a form they can physically access is a first step, but this is not enough. Poor people also need to have effective demand for services. This means reducing the other barriers that can stop people accessing services, including financial ones. Sometimes, additional financial incentives may be required to encourage people to overcome cultural barriers to accessing services, even if they are free.

2.2.1. Abolishing user fees and reducing other costs

There is now a wide consensus, supported by substantial evidence, that reducing or abolishing user fees improves access to education and health services, particularly for the poorest. Lagarde and Palmer (2008) reviewed 16 studies on user fees and health service utilisation and found that removing or reducing user fees increased the use of curative services and may have also augmented the use of preventive services. Palmer et al. (2004) have agreed that general user fees have deterred utilisation of health services. Langlois et al. (2015) found that reducing

user fees in Burkina Faso led to an immediate 45% increase in the use of skilled birth attendance for women with the lowest socioeconomic status, compared to the counterfactual scenario, with this increase highest for this group of women, compared to their richer counterparts.

There are similar findings in the education sector. Talan et al. (2015) found that the introduction of school fees decreased primary school enrolment, without achieving significant quality improvements. In the secondary sub-sector in South Africa, Borkum (2012), found that eliminating school fees increased enrolment by almost 2% in secondary schools implementing this measure, an increase concentrated in earlier secondary grades. This increase was driven entirely by an increase of around 3.5% in the poorest two quintiles. Overall, the abolition of fees seems to have been reasonably effective in increasing secondary school enrolment in particularly poor communities in this example, even though the eliminated fees were relatively low, at only 1.5% of annual household income (per child).

However, in some cases, abolition of user fees has negatively impacted on service quality. This is because user fees have commonly been retained at the health or education facility level as a contribution to operating budgets and, when removed, this income has not been replaced, depriving facilities of crucial funding especially for drugs, textbooks and other supplies. Lagarde and Palmer (2008) have found deteriorating quality in the health sector, for example. In some cases, perhaps due to service quality issues, this has also helped to worsen inequality. In Kenya, while abolition of user fees has boosted primary completion rates for both boys and girls, it has had a larger effect for boys, thereby increasing the gender gap in graduation (Lucas and Mbiti, 2012). Abolition of school fees can have limited impact on school enrolment of children with disabilities. In Kenya, as of 2004, only one in six Kenyan children with disabilities was attending school even after the fee abolition (Mulama, 2004, cited in UNESCO, 2010).

In both the health and education sectors, abolishing user fees may not be enough, given the additional or informal costs that often accompany service utilisation in these sectors. In the health sector, transport fees and lost income can be even more prohibitive than the charges imposed for the service (World Health Organization (WHO), 2010). In the education sector, indirect costs such as uniforms, textbooks and informal fees can also deter access (UNESCO, 2010). While somewhat out of date, a 2005 survey by the World Bank covering 90 countries found that only 16 education authorities charged no fees at all, even though the vast majority made free education nominally available (World Bank and United Nations Children's Fund (UNICEF), 2009). In western Kenya, a randomised experiment found that students receiving a free uniform who did not previously own one were 13 percentage points more likely to attend school. For those who already owned a uniform, the estimated impacts were small and insignificant (Holla and Kremer, 2009). Governments can help bolster demand for services by providing vouchers and refunds to cover transport costs (WHO, 2010) or lowering informal and additional costs (UNESCO, 2010).

2.2.2. Cash transfers and other incentives

Cash transfers can be an effective tool in combatting poverty and inequality directly. Cash transfers in particular have reduced the depth and severity of poverty (the poverty gap) in carefully evaluated middle-income country (MIC) programmes. Cross-country studies have consistently demonstrated the positive impacts of cash transfers for increasing per capita consumption and reducing the poverty gap (DFID, 2011).

Moreover, cash transfers have also been shown to be effective in increasing demand for health and education services. In the education sector, Baird et al. (2013) conducted a systematic review of the relative effectiveness of conditional and unconditional cash transfers for schooling outcomes in developing countries. They found that these programmes improve the likelihood of being enrolled in, and attending, school. Programmes that are explicitly conditional and monitor compliance, while penalising non-compliance, have substantively larger effects: 60% improvement in the likelihood of enrolment. However, they have found that, unlike enrolment, the impact of cash transfer programmes on test scores is small at best. Glewwe and Maralidharan (2015) reviewed 43 estimates from 20 studies on the impact of conditional cash transfers (CCTs) on enrolment and attendance at school. They found that 40 out of 43 estimates were significantly positive, while the other three were statistically insignificant. They further found that some, though not all, cash transfer programmes also increased student learning. Seven high-quality studies have produced estimates of the impact of CCTs on student learning. Three of these found a positive and statistically significant impact on learning outcomes, while the other four were statistically insignificant.

A number of country-level studies support this conclusion. Baird et al. (2009) found that teenage girls and young women in Malawi in 2007–08 were 2.5 times more likely to re-enrol in school on receipt of a cash transfer (compared to a control group) and less likely to drop out from school (a reduction from 11% to 6%). In Brazil, the Bolsa Familia programme, which includes cash transfers conditional on school attendance, has significantly increased the demand for schooling (Watkins and Alemayehu, 2012).

Conditional cash transfers have also been shown to be effective in promoting secondary school attendance for marginalised groups. In a pilot project from 2002 to 2005 in Cambodia, girls who reached the final grade of primary school were eligible for grants of around $45. Cash was provided to families, conditional on their children attending secondary school. It was estimated this programme increased enrolment among participants by about 30%. An evaluation found that enrolment effects rose with household poverty: for girls from the poorest 20% of households, enrolment increased by 50%, compared with 15% for girls in the wealthiest two quintiles (Filmer and Schady, 2008 and Fizbein et al., 2009, both cited in UNESCO, 2010). In Bangladesh, the Female Secondary School Stipend Project (FSSSP) has also introduced wider conditions for transfers. It covers school fees and additional payments for girls who

stay in school, remain unmarried up to age 18 and pass exams. The stipends are credited not just with increasing secondary school enrolment by about 12 percentage points, but also creating incentives for households to ensure girls complete primary education. Girls' primary school enrolment now exceeds that of boys (Khandker et al., 2003, cited in UNESCO 2010).

There is similar evidence from the health sector. Lagarde et al. (2009) found that several conditional cash transfer programmes had had a positive impact on the use of health services, nutritional status and health outcomes, although they noted that it is hard to specifically attribute these positive effects to the cash incentives because other components may also contribute. CCTs targeted at poor and marginalised groups have been found to increase uptake of antenatal care by 8% in the first trimester of pregnancy in Mexico and by 15–20% in Honduras, especially in poorer households (Borghi et al., 2006). Meanwhile DFID (2011) has observed that evidence of the effects of transfers on the use of preventative health services is generally stronger for children and more limited for adults, though there is increasing evidence that transfers contribute to maternal health.

In addition to cash transfers, other incentives have been in used in countries like Mozambique to encourage greater uptake of services, as outlined in Box 1.

Box 1. Stimulating demand for primary health care services in Mozambique

Mozambique has made particularly rapid progress both in improving health outcomes and reducing health inequality. The urban-rural gap in under-five mortality was 58% in 1997, but only 11% in 2011, while the income gap was 50% in 2003, but only 23% in 2011.

Contributing factors have included policies to stimulate demand for health services and their utilisation, including the following:

- employment of community outreach workers
- establishment of maternity waiting homes (meaning women could await the delivery of their babies close to hospital, rather than having to make long journeys after commencement of labour)
- specific cash incentives, and provision of baby equipment for women who deliver in health centres.

Source: Rodriquez-Pose et al., 2014

2.3. Demand and supply side responses

While we have neatly separated demand and supply side responses here, the evidence suggests that such responses must be combined and properly sequenced if poverty and marginalisation is to be effectively tackled. A review of the Development Progress case studies in health and education found that expanded access to services had put a strain on existing systems of delivery (e.g. staffing, facilities and other physical resources) that had not received investment at the same pace as access had been promoted, leading to significant challenges in improving service quality (Rabinowitz and Prizzon, 2015). Lagarde et al. (2009) furthermore found that if the obstacles to healthcare utilisation by the population were on the supply side (e.g. lack of drugs and low density of facilities), conditional cash transfers were less effective. Quality and availability of health services is probably a prerequisite to the success of conditional cash transfers. In the education sector, evidence from a range of countries that have withdrawn fees shows that sequencing of reforms is vital (World Bank and UNICEF, 2009). Increasing investment in teacher recruitment and textbook provision in anticipation of rising enrolment is likely to prove more effective than action after the event (UNESCO, 2010).

3. Where does the money come from? Financing sources to leave no one behind

3.1. Government revenues

For the social sectors, evidence suggests that public financing is likely to be most effective in meeting the SDGs, although the exact financing mix will be a matter for domestic policy choices. Social assistance is – almost by definition – publicly funded. In both education and health, Rabinowitz and Prizzon (2015) found that progress was associated with a shift in the burden of financing away from households and towards governments. This finding chimes with the conclusions from the sectoral literature.

In health, compulsory public financing mechanisms that pool resources, particularly general taxation revenues and social health-insurance contributions, have been found to outperform voluntary financing mechanisms (fees and voluntary forms of private insurance (WHO, 2010)). This is particularly true if the objective is to reach the poorest members of society.

Wagstaff et al. (2014) found that when a high share of government facility revenues come from user fees, government health expenditure tends to be less pro-poor. The necessity for public finance to replace private finance in reaching UHC has also been confirmed by the 2013 Lancet Commission (Lancet, 2013), a UN Health Thematic Report (SDSN, 2014) and Rottingen et al. (2014) for Chatham House.

The key question is therefore how governments can mobilise additional resources to support those left behind. This will principally take place through raising tax and non-tax revenues. Governments can also choose to spend their existing resources more effectively, which is covered in section 3.4. Finally, governments can borrow, either domestically or externally. Many countries have financing strategies to prevent them from borrowing non-concessional funds to support social sectors (see Prizzon et al., 2015). The main sources of borrowing are therefore likely to be concessional financing, which we include under section 3.3.

3.1.1. Expanding revenues from direct taxation

Tax revenues are one of the primary sources of domestic public finance available to developing countries, especially for those without natural resources (such as oil, gas and minerals). A LNOB approach to identifying the mix of taxes and the design of individual taxes for raising revenues needs to be sensitive to the impacts that these decisions can have on the welfare of the poor and marginalised and how the tax burden is spread across society. Recent research has found that 40% of the poor in Brazil paid more in taxes than the benefits they received from public spending (Higgins and Lustig, 2015). It has also been found that in Bolivia, El Salvador, Ethiopia, Guatemala and Peru, the poor are (on average) net payers to the fiscal system (Lustig, 2015).

Research has identified that income and other direct taxes are often strongly progressive – people with higher incomes pay higher rates of tax on their incomes. However, exemptions and evasion of these taxes can undermine their progressivity (Bastagli et al., 2012). A contributory factor in the progressive nature of these taxes is that the poorest people often earn a living in the informal sector and, as a result, find their incomes lie outside the purview of the tax authorities. It is, however, important to note that this factor also limits the revenues that can be mobilised from income in many developing countries, as the size of their formal sectors are limited.

Expanding tax revenues from income in these countries partly requires extending the reach of income taxes to informal and often poorer economic actors. Policies to pursue this goal therefore need to be carefully designed in order to ensure that efforts to reduce poverty and LNOB are not undermined. In Ethiopia, the agricultural income tax has wide application and is mainly levied according to land-holding size, which is often not an accurate reflection of the income levels generated by households from agriculture. As

a result, this tax is regressive and is a significant driver of the outcome that 9% of Ethiopian households are impoverished when the incidence of taxes and public spending is fully accounted for (World Bank, 2015).

3.1.2. Expanding revenues from indirect taxation

Due to limits to revenue-raising capacity from income and other direct taxes in many developing countries, indirect taxes levied on goods and services are a very important source of revenue. In more than half of low and lower-middle-income countries, at least two-fifths of tax revenue is collected from taxation on goods and services (Zubairi and Rose, 2016). Research has illustrated how these taxes are often regressive insomuch as their burden falls disproportionately on poorer groups. For example, indirect taxes have been found to be slightly un-equalising in Bolivia and Guatemala. High consumption taxes on basic goods are reported to have led to increased poverty in Brazil and Colombia, and indirect taxes have been found to fall disproportionately on marginalised ethnic groups in Bolivia and Uruguay (Lustig 2015). Import taxes often appear to be the most regressive among indirect taxes (Bastagli et al., 2012), and export taxes on goods produced by the poor can also undermine poverty reduction efforts (Younger 1993; Younger et al., 1999).

However, indirect taxes can be designed so as to ensure that they are progressive and don't overly burden lower-income groups. For example, in Uganda, the introduction of a sales tax in the early 1990s did not worsen poverty, as most goods consumed by the poor were exempt from it (Chen et al., 2001). In Lebanon, basic food commodities are exempted from VAT, which should limit the poverty impacts of any future increase in VAT rates (Salti and Chaaban, 2010). Research has also suggested that reducing/removing taxes on kerosene – a fuel consumed mainly by lower-income households – can increase the progressivity of consumption taxes (Younger 1993; Younger et al., 1999). From the perspective of the effects of indirect taxes such as VAT on businesses, there is strong evidence that the exemption of small businesses can improve their progressivity (Jenkins et al., 2006).

There are also some examples of earmarked taxes being introduced to fund specific sectors. In the Philippines, for example, a sin tax was introduced, resulting in a significant rise in tobacco and alcohol excise collection. Incremental revenues have been earmarked for health, the majority of which have gone towards expanding coverage of the national social health insurance fund, PhilHealth. However, the WHO has concluded that overall, earmarked taxes are likely to be relatively small in comparison with higher allocation to health from government revenues, and noted that Ministries of Finance in general do not welcome them (WHO, 2014).

The implications of research on tax incidence suggests that carefully designed direct and indirect taxes can help ensure that tax revenues are raised in ways that support those left behind. This requires governments to understand the incidence of taxes across socioeconomic groups and their impacts on poverty and marginalisation, and to determine their rates across groups, goods and services in ways that don't undermine efforts to reduce poverty and marginalisation.

3.2. Households and the private sector

While reaching the poorest and marginalised groups will generally require the burden of payment to be taken away from households, there are some examples of mechanisms that involve some household contributions. We also include the private sector in this section because, although the private sector can and does effectively deliver these services in a number of countries, services must be paid for. Either the public-sector funds services and delivers them through the private sector, in which case the financing source remains public, or the ultimate funding source is households who then pay for privately contracted services.

There are some good examples of private or community health insurance schemes that have been funded or part-funded by household contributions. In Rwanda, for example, community health insurance schemes (or 'mutuelles') have been key to removing the financial barriers to health services. Aimed at spreading the financial risk of seeking care across their membership base, mutuelles have enabled people to access services at an affordable cost, before their condition worsens, thus also reducing treatment costs. This has led to an increased uptake of health services. Those who cannot pay, according to communities, are supported by the government or development partners (Rodriguez-Pose and Samuels, 2011). Private health funds can also be supported by governments, which offer subsidies on insurance premiums for poorer groups. There can also be cross-subsidisation between richer and poorer households within health funds, although there are sometimes political challenges involved in this.

In education, there has been a growth of low-fee private schools over the past decade, which have been seen to offer a better quality of education than government schools at a lower cost, including for the poor (Day Ashley at al., 2014). However, while there is some evidence that these schools do reach poor households, they do not generally reach the very poorest and most marginalised. In rural Pakistan, for example, around 40% of the richest children enrolled in schools are in private education, compared with 10% of the poorest. Private schools can also reinforce other forms of disadvantage, particularly where poor parents are forced to choose between which children to pay for; after controlling for other factors, the poorest girls in rural Pakistan are 31% less likely to attend private schools than the poorest boys (Alcott and Rose, 2015).

3.3. International public and philanthropic finance

3.3.1. ODA

Donors will also need to be an important source of funding for these sectors, particularly in lower-income countries. An ODI analysis (Greenhill et al., 2015) of resource requirements to fund universal health coverage, education and social assistance in comparison with potential government revenues found that, while many middle-income countries could fund these sectors themselves, low-income countries (LICs), and particularly least developed countries (LDCs), faced a large financing gap. The overall financing gap is $39 billion in very LICs, $34 billion in other LICs and $10 billion in lower middle-income countries (LMICs). Official Development Assistance (ODA) will therefore continue to play an important role.

However, there is a mismatch between current levels of ODA per person living in extreme poverty across country groupings. This analysis illustrates that the average LIC currently receives about a third as much ODA per person living in extreme poverty as the average LMIC. The majority of LICs are also affected by conflict and classified as fragile states, which are particularly neglected by current ODA allocations (Greenhill et al., 2015).

In terms of allocations of ODA from Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) members across sectors, a number of trends are worth highlighting from the perspective of resourcing needs to LNOB.

- ODA to health, education and population and reproductive health: the proportion of (sector allocated) ODA targeted at these sectors increased during 2008–11, from 18.6% to 20.7%, but then fell over the following two years, reaching 19.2% in 2014.
- ODA to health: the proportion of (sector-allocated) ODA assigned to this sector stagnated at just over 8% during 2008–12 and then then fell to 7.3% in 2013.
- ODA to primary education: across the 2008–13 period, an average of just a quarter of ODA for education was allocated towards primary education. This is concerning from an LNOB perspective, given that investing in the pre-and primary sub-sectors is of primary importance for improving equity (Rose and Alcott, 2015).

3.3.2. Philanthropy and innovative financing

At global levels, volumes of philanthropic funding are large. Estimates suggest that in 2011, US-based foundations, corporations and private voluntary organisations disbursed more than $26 billion (Prizzon et al., 2016). However, at country level, estimates are very small (ibid). This suggests that the majority of philanthropic funding is being channelled through existing actors, including global funds such as The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) GAVI (the Vaccine Alliance) or international NGOs, rather than being made directly available to governments.

Analysis of the sectoral allocation of philanthropic development assistance suggests that there is a strong emphasis on sectors critical to efforts to LNOB. Most development assistance from foundations is focused on the health sector, with other social services also a major beneficiary of this funding. Corporate philanthropy is predominantly centred on the health and education sectors, as well as humanitarian programmes. NGOs and civil society organisations (CSOs) are also strongly focused on social sectors, health, water and sanitation and humanitarian activities (Development Initiatives, 2013). Philanthropic funding for education tends to lag behind health, however, with funders apparently deterred by the long-term and complex nature of the challenge (Foundation Center, 2016).

Innovative financing mechanisms also offer significant potential. Innovative financing in development is estimated to have raised nearly $100 billion between 2000 and 2013, with this expected to grow to $24 billion a year by 2020 (Dalberg, 2014, cited in Bellinger et al., 2016). Of this, $7 billion is estimated to have been channelled to the health sector, although volumes to education remain very limited (ibid). A number of potential innovative financing mechanisms have been suggested for the education sector, including a global financing facility for education (GFFE), outcome-based financing, education bonds, loan buy-downs and student financing (Bellinger et al., 2016). The majority of these require coordinated action at national and international levels, and should be further explored.

3.4. Spending money effectively to leave no one behind

3.4.1. Allocating funds to the sectors and sub-sectors with the largest impact on marginalised groups

Sectoral allocations

The first way that financing can better support those left behind is through allocation to the sectors that matter most for these groups. This is not simply about distributing more to social sectors. Given the interdependencies between sectors, governments will need to think holistically about how to allocate funding across them to improve outcomes. In Uganda, for example, World Bank modelling has suggested that the most important drivers of Millennium Development Goals (MDG) progress in the health sector has been household income growth and provision of public infrastructure such as roads, rather than public social service delivery (Kharas et al., 2015).

Nevertheless, developing country governments have made international commitments to increase their levels of public spending on education, health and social protection. In turn, implementing these pledges will help to promote LNOB, especially if this is done via progressive universalism, meaning the poorest will benefit as least as much as the richest at every stage.

Through the follow-up process to the 2000 Dakar Framework for Action, overseen by UNESCO's Education for All (EFA) initiative, developing countries governments committed to allocate between 15% and 20% of their budgets (and 4% to 6% of gross domestic product (GDP)) towards education. Through the 2001 Abuja Declaration, they agreed to allocate 15% of their annual budgets towards health, with a commitment to increase spending on social protection equivalent to 4.5% of GDP via the African Union's 2008 Windhoek Declaration.

Regarding education, a number of LICs and LMICs have increased their public spending on education as a share of gross national product (GNP), although progress has been more limited in other countries, as Table 1 shows. Overall, analysis of spending in 20 low-income countries between 1999 and 2012 has found that only seven increased spending by more than 1% of GDP over the same period. Progress was faster within the group of 32 LMICs analysed, with almost half (15) increasing spending by more than 1% of GDP (UNESCO, 2015).

In the health sector, health spending in LICs remained at an average of only 10% between 2009 and 2013, a rise of only one percentage point from 2000 to 2004. However, of the 27 LICs for which data is available, 18 increased their share of government expenditure devoted to health between 2000 and 2004 and 2009 to 2013, compared to only seven that decreased spending. Among the 49 LMICs for which data is available, 26 increased the share of government spending on health and 18 decreased spending over the same time period (WHO, 2016). However, the overall average share of government spending allocated to health between 2009 and 2013 was also 10% in LMICs, a figure that has stagnated, in aggregate, since the 2000 to 2004 period (WHO, 2016).

With regard to social protection, an analysis of data from 45 developing countries suggests that none have yet met the Windhoek Declaration commitment. In terms of planned spending for social protection in 2014, one country (Timor Leste) planned to spend just over 3% of GDP, while another two (Armenia and Jordan) planned to spend 2% to 3% of GDP. A further five planned to spend 1% to 2% of GDP on social protection, only one of which was an LIC (Haiti). Therefore, few LICs have made significant progress in expanding social protection schemes, although some have recently announced programmes that may help to promote progress in the coming years (Development Finance International (DFI) and Oxfam, 2015).

In some countries, one of the factors constraining levels of public spending in sectors critical to LNOB efforts is that the share of budgets allocated to defence and (especially) debt servicing remains significant, and is growing in some cases. Of the countries for which data on debt servicing is available, 21 currently spend more than 15% of their budget on debt, with those spending the most from LMIC grouping. Across the countries for which there is data, debt service has risen by 1.2% of GDP since 2008. This analysis highlights the issue of whether developing countries are increasingly relying on borrowing to fund their development, given ongoing challenges in increasing their revenues and accessing increased level of ODA.

Spending on defence places less demand on public financing, although it is still a notable expenditure for a number of countries. Of the 44 for which data are available, eight spend more than 10% of their budget on defence (DFI and Oxfam, 2015). It does not necessarily make sense to increase spending on health and education at the expense of other areas that may be equally important to the LNOB agenda (e.g. water, roads or agriculture). However, redirecting spending from defence into the social sectors appears to be a fairly unambiguously positive move that, unlike debt servicing, is more directly under government control.

Overall, there remains considerable scope for governments to increase the share of budgets allocated to health, education and social protection. This would help to support the LNOB agenda if combined with spending on other complementary sectors. Domestic efforts to curtail defence spending and international work to reduce debt service payments would help provide more fiscal space to do so.

Eliminating regressive subsidies

Research on the incidence of universal subsidies applied to the consumption of goods and services suggests that these can be highly regressive, due to the fact that higher income groups have higher levels of consumption and therefore capture a greater share of these subsidies (Bastagli, 2015). Petroleum subsidies are developing countries' most widely-used form of consumption support. In sub-Saharan Africa in 2012, fuel subsidies were equivalent to 1.4% of GDP when direct subsidies plus foregone taxes were taken into account (International Monetary Fund (IMF), 2013). Other estimates suggest that, in Africa, the wealthiest income quintile consumes 44.2% of the benefits, compared to just 7.8% by the poorest income quintile, with similar results in other continents (Coady et al., 2010). In India, the richest 10% of

Table 1. Changes in education spending across country groups, 1999–2012

	Number of countries increasing spending on education by more than 1% of GDP, 1999–2012	Number of countries changing spending on education by less than 1% of GDP, 1999–2012	Number of countries reducing spending on education by more than 1% of GDP, 1999–2012
Low-income countries	7	12	1
Lower middle-income countries	15	8	4

Source: UNESCO 2015

households receive seven times more in benefits from fuel subsidies than the poorest 10% (Anand et al., 2013).

This analysis therefore suggests that significant poverty and equity impacts can be achieved by reducing/removing universal consumption subsidies and allocating the resources to programmes that are better targeted at the poor and marginalised. A number of developing countries have reformed their petroleum subsidies in this way in recent years. For example, in 2005, the Ghanaian Government reduced fuel subsidies, with the subsequent savings utilised for the elimination of fees for state primary and secondary schools, a ceiling on public transport fares, additional funding for healthcare in poor areas, and a rise in the minimum wage. The reforms and use of savings were informed by analysis from a Poverty and Social Impact Assessment (Van der Burg and Whitley, 2015). Indonesia reduced fuel subsidies over a number of phases in 2005, 2008 and 2013, and has reallocated much of the funding towards cash transfers, an expansion of financial support to poor students, expanding free healthcare and increasing subsidies for rice (Van der Burg and Whitley, 2015).

Sub-sectoral allocations to leave no one behind

Increasing investments in primary services relative to higher-level services helps to improve equity, as these services are more accessible to, and intensively utilised by, lower-income households than secondary or tertiary services (Alcott and Rose, 2015; Bastagli et al., 2012; Davoodi et al., 2010).

However, Ilie and Rose (2017) found an overall pattern of pro-rich education spending, increasing with education level, across 31 countries. This is because per capita spending is very high in tertiary education, a level primarily accessed by richer groups. Regarding the health sector, Davoodi et al.'s (2010) analysis of data from 1960 to 2000 found hospital (secondary or tertiary) care to be pro-rich, as it is often focused on specialised services that require more expertise and resources and are not aimed at the common ailments of the poor. A recent study of the incidence of healthcare in Ghana found that 'benefits are more evenly distributed at the lower levels of care and are pro-poor at the district hospital level for in-patient care' (Akazili et al., 2012).

It is therefore concerning that there is a decline in the share of the education budget allocated to the primary level. Of the 75 countries with data on primary education spending between 2000 and 2013, just 23 increased the share allocated to this area (Mustapha and Krause, 2016) Of the nine LICs with data over the same period, only three increased the share allocated to primary, while six reduced it (ibid). This included countries, such as Malawi, with among the worst primary completion rates and learning outcomes in sub-Saharan Africa (UNESCO, 2015).

3.4.2. Allocating funds to sub-national entities and programmes

Allocation to sub-national entities

Many countries decentralise spending for social services to sub-national levels, including districts. Some also decentralise certain revenue-raising powers. Commonly, there are also intergovernmental transfers between sub-national entities. These seek to equalise spending between richer and poorer areas of the country, as expenditures by districts can vary significantly. In Mozambique, a nine-fold variation in per capita spending on health, driven by staffing and infrastructure allocation patterns, was observed between districts. In Chad, non-wage per capita public health spending varied by a ratio of 16:1. In Zambia, the best-funded district received eight times more average per-student public resources than the least-funded districts (Glassman et al., 2008).

As we have seen above, targeting poor and marginalised groups can be more expensive. However, such investments may also deliver the best value for money. For example, a recent UNICEF report indicates investments that increase poor groups' access to high-impact health and nutrition interventions cost 1.5 times more than those accessed by non-poor groups, but save almost twice as many lives (UNICEF, 2017).

Nevertheless, due to the additional cost of reaching those furthest behind, a pro-poor allocation of expenditure would not only ensure that poorer districts – or those where marginalised people live – have an equal per capita allocation for social services, but that their per capita allocation is higher.

In some countries, elements of both expenditure and revenue-raising powers are decentralised. In these places, it is particularly important that inter-governmental transfers exist to equalise spending between richer and poorer areas. This is the case in India, for example: the central government raises about 10% of GDP in revenue, while states raise a further 8%. Just under half of the central government revenue is transferred to states. Transfers are based on a formula incorporating four indicators: fiscal capacity (47.5%), population (25%), fiscal discipline (17.5%) and area (10%). The fiscal capacity provision equalises revenues between richer and poorer states, with an inverse correlation between average state-level income and per capita transfers from the national tax revenue pool to state governments (Watkins and Alemayehu, 2012).

In South Africa, revenue generation is more centralised, with 80% of provincial government income coming from the centre via the Provincial Equitable Sharing (PES) budget. PES transfers are made according to a formula comprising weights for:

- education (incorporating the size of the school age population)
- health (including a weighting for the share of the population without access to medical aid)
- population
- poverty
- GDP.

While this formula has some strengths, particularly in its recognition of the need to channel more spending for health to provinces with a greater share of the population without access to medical aid, there are also some weaknesses.

Financing provisions are not linked to estimates of the costs of delivering basic services and the poverty share is only 3% (as of 2008). This may disadvantage poorer provinces (Watkins and Alemayahu, 2012).

In other cases, there is even more limited decentralisation of revenue, but decentralisation of service delivery. This is the case in Ethiopia, for example. Basic services are primarily managed at the woreda (district) level and financed through intergovernmental fiscal transfers (IGFTs). These are also partly supported by donors through the Promoting Basic Services (PBS) programme. There does appear to be priority given to disadvantaged regions: more than 50% of the woredas in the two most disadvantaged regions of the country spend more than 110% of the national average on the basic services sectors. Disadvantaged ethnic groups are also favoured, with the five majority-Anyiwak woredas receiving the most public resources of all woredas in the nation. This spending has helped Ethiopia make very rapid progress towards the MDGs (World Bank, 2014).

There are also other examples of LICs and LMICs adopting local government financing formulae with an explicitly redistributive bias in favour of disadvantaged regions. Many of these formulae also include a proxy weighting for the cost of service provision.

- Rwanda has an allocation formula for block grants to local government. This includes a proxy for poverty (20%, using revenue collection) and an estimated financing gap between revenue collection and costs of administration.
- Nepal operates a system of government-financed development grants, allocated on a formula that includes a weighted cost-of-services index (25%) (Watkins and Alemayehu, 2012).

In other countries, the picture is less positive. In Tanzania, for example, sector block transfers are the primary drivers of interlocal government fiscal inequity. These are determined by patterns of staff allocation and their salary payments. Because Tanzania has no incentives for staff to go to areas where service need is greatest (as above), staffing levels, and hence transfers, are lower in these areas (Tidemand et al., 2014). A similar trend is in place in Ghana (Abdulai et al, forthcoming).

Allocating funding within programmes

Funding within sectors and programmes also needs to recognise the particular situation of disadvantaged/marginalised groups. For example, in Indonesia and Mongolia, schools have been provided with a standard level of funding per student enrolled, which has helped to expand enrolment rates by giving schools an incentive to take more children. However, this has failed to recognise that in some areas, particularly more rural or remote ones, enrolment requires a higher level of financing. Also, schools are more expensive to run, because the population is more dispersed and infrastructure less developed, making the same absolute incentives less effective (Rabinowitz and Prizzon, 2015). Similarly, in Kenya, the Capitation Grant is distributed on the basis of the number of children enrolled, a disadvantage for the 12 counties in the arid and semi-arid areas that are home to 46% of the out-of-school population. Children in these areas who do enter school tend to be first-generation learners from non-literate home environments, and therefore need additional support in the form of higher spending per pupil. Areas such as Turkana receive less than half of the public financing for education that they would receive if resources were allocated on a per child basis (Watkins and Alemayehu, 2012).

In India, the Sarva Shkisha Adhiyan (Education for All) programme, while implemented at district level, was financed by the central government. Districts were identified to receive additional funding on the basis of their out-of-school population, gender disparity, infrastructure conditions and minority populations (UNESCO, 2010).

3.4.3. Improving the efficiency and effectiveness of spending

Even when funds are raised effectively and allocated to the poorest areas and people, effectiveness can still be undermined if budget execution is poor. This can occur when there are leakages and/or re-allocations between central or local governments releasing funds, and the schools or hospitals receiving them. A review of African Public Expenditure Tracking Surveys (PETS) noted that leakage levels can be extremely high, with the initial Uganda PETS in 1996 finding that 87% of capitation (per student) grants were not reaching their destination. Different forms of expenditure can have different leakage levels: rule-based allocations, wages and cash transfers tend to have lower levels of leakage, with discretionary spending, non-wage and in-kind expenditures having higher rates. The reason non-wage expenditures tend to suffer more from extensive leakage and reallocations than salary expenditures is that local officials and politicians can take advantage of their informational rewards to reduce disbursements of non-wage expenditure for schools, knowing it would attract little attention. In contrast, salaries are often paid directly by the central government to individual workers at the provider level, making it much more obvious if they go missing (Gauthier, 2010). Lower leakage has also been associated with greater monitoring and transparency.

Weak budget execution can also occur for reasons other than budget leakage. In Mozambique, late disbursements from the Ministry of Finance presented a challenge to the delivery of health services. Many provinces and, in turn, districts had only received their first budgetary transfer late in the year (Rodriquez-Pose et al., 2014). Reforms helped to overcome this problem. Common funds were key in providing the liquidity needed to keep activities running within the first quarter or more, with the common basket fund providing funding when Ministry of Finance disbursements were late (Rodriquez-Pose et al., 2014).

4. Partnerships to leave no one behind

Partnerships can be critical in helping ensure no one is left behind. There are several examples of governments working in partnership with NGOs to promote access to services on both the demand and the supply sides. On the demand side, NGOs and development partners in Mozambique, working with the government, have helped to provide demand side incentives for appropriate health-seeking behaviour. An organisation called SolidarMed has established incentive mechanisms to promote institutional deliveries in the areas in which it works, in the remote north of Mozambique, one of the poorest regions in the country. These incentives include a 'baby package', in which every woman who delivers her baby at a health facility receives a gift (a fabric baby carrier, baby outfit, nappies and a baby bathtub). Little evaluation evidence currently exists around this scheme, but according to the SolidarMed website, the number of supervised deliveries in both districts in which the organisation operates has more than doubled (Rodriquez-Pose et al., 2014).

There are also good examples on the supply side. In Bangladesh, NGOs have been able to work in remote areas that government organisations are less able to reach and, as a result, are more able to deliver services to vulnerable populations (Rodríguez Pose and Samuels, 2010). One organisation has developed a system of 'floating schools' to reach the Bede (River Gypsy) community, whose livelihood depends on their moving about on boats. NGOs can often also be involved in second chance schooling for out-of-school children, providing education that is complementary to formal education, and can put children and youth back on-route into the formal system. They are also often active in supporting education for children with disabilities (UNESCO, 2010).

Key lessons from successful government and NGO partnerships have included the need for good coordination between them, and integration of NGO activities into national plans (UNESCO, 2010). In Bangladesh, for example, the government enables NGOs to access government facilities and purchasing power, making the system both more efficient and effective. Many successful programmes started as NGO pilots and were later mainstreamed and scaled up (Rodriguez and Samuels, 2010). There is also need for clear definition of roles and responsibilities of the different actors.

Donor partnerships are also important. Analysis of the Development Progress case studies suggests that coordinated donor support, aligned behind government programmes, has been effective in contributing to progress. In Mozambique, the adoption of a sector-wide approach has allowed for better aid harmonisation, and has also been key to filling funding gaps and keeping health facilities running, while waiting for budget disbursements. Budget support has enabled harmonisation of aid, resulting in a more rigorous policy-making process and annual planning, budgeting and monitoring systems. This has allowed for improved coordination by the Ministry of Health (Rodriquez-Pose et al., 2014). In Bangladesh, the health sector-wide approach has ensured alignment and streamlining of strong donor support, while helping the government shape its health policy, strengthen implementation and make health financing more predictable and flexible (Rodriguez and Samuels, 2010). In Nepal, the development of the sector-wide approach (SWAP) in 2004 was a milestone in allowing donors and government to better align and harmonise their budgets and programmes (Engel et al., 2013). As these examples imply, the Busan development effectiveness principles[3] remain very relevant for the LNOB agenda, but may need to be interpreted in different ways (Greenhill, 2016).

3 The Busan Development Effectiveness principles are a set of common principles for all development actors designed to make development cooperation more effective. See www.oecd.org/development/effectiveness/busanpartnership.htm for further information.

5. Recommendations

Policies to ensure that sufficient resources are mobilised for those left behind and subsequently allocated to them will be very context specific. Countries come from very different starting points, and the nature and location of their own 'left-behind' groups will vary substantially, as will the nature of their constitution and service delivery model. In this section, our main aim is to highlight some of the recommendations that governments and donors may wish to consider implementing, depending on their own national circumstances.

Ensure that physical facilities are equitably distributed across the country, avoiding large gaps between facilities, especially in areas where 'left-behind' groups live.

This may require the service delivery model to be adapted, for example in areas with mobile populations or conflict zones. This requires adequate and equitably distributed capital spending, and may also necessitate a more than proportional per capita allocation to remote areas where population density is low. Sufficient recurrent spending must also be provided to maintain facilities.

Provide incentives to ensure there are adequate human resources available to support service delivery in poor and marginalised regions.

In cases where lack of staff is undermining service delivery, governments should design and pilot measures to incentivise service delivery staff to work in poor and marginalised regions (including use of salary top ups, housing provision and appropriate regulations). Measures proven to be effective should be scaled up across sectors such as education and health. Training staff from local areas can also help plug skill shortages, provided careful attention is paid to the quality of provision.

Abolish user fees for primary education and primary healthcare and, potentially, secondary education, depending on national context.

Additional support to cover indirect costs of accessing health and education (e.g. vouchers to refund transport costs, or subsidised/free school meals and uniforms) should also be provided.

Expand cash transfers to support service delivery and poverty reduction.

Cash transfers have been proven to be one of the most important tools not only for addressing the demand side challenges related to expanding service delivery, but also for improving household incomes and welfare. Cash transfer programmes need to be designed and piloted to target those groups not previously reached by these programmes. These could then be expanded where they have been proven to be effective in supporting efforts to LNOB.

Coordinate and sequence supply and demand side responses.

Governments should address demand side barriers such as user fees and, where needed, the provision of cash transfers. This must be combined with measures to ensure that facilities are appropriately compensated for loss of revenue and that there are sufficient numbers of facilities to meet demand stimulated by cash transfers.

Identify and pursue equitable revenue raising opportunities, particularly by increasing direct taxation.

Governments should deepen their efforts to identify policies and priorities for expanding revenues without hitting the poor. These policies should ensure that the incidence of tax and other revenues is progressive and sensitive to the poverty impacts. They could include closing loopholes and exemptions for income taxes, increasing the share of revenue raised by direct taxes and ensuring indirect taxes are less burdensome on goods and services consumed by the poor. They could also check that the formal corporate sector (including international corporations) is adequately taxed.

Expand spending in primary healthcare and pre- and primary education.

Some governments need to increase spending in sectors such as education, health and social protection to meet their spending commitments and address the substantial financing gaps countries face in these areas. This could partly come from redistributing spending from sectors such as defence and others that do not contribute to efforts to LNOB. Within sectors, governments need to improve the balance between spending on primary versus higher-level services, as primary ones are more easily accessed and appropriate for the needs of the poor and marginalised.

Reform universal subsidies and re-allocate funding in ways that target the poor and marginalised.

Strategies for reforming universal subsidies (e.g. for fuel and energy) need to be developed and pursued. These include examining the impacts of such reforms on poor households and identifying more effective and pro-poor

uses of these resources and priorities for ensuring the poor and marginalised aren't negatively affected by reforms.

Ensure sub-national transfers reflect differential needs.

Governments should make sure systems either administer funding to regions, districts and/or counties are in line with 'leave no one behind' commitments. A pro-LNOB allocation will go beyond equal per capita shares, but also consider the particular needs of poor and marginalised groups, and/or those in remote areas. Allocation formulae including poverty and/or land area provide one such mechanism.

Donors need to focus spending on LDCs and prioritise sectors and sub-sectors with the greatest impact on those left behind.

This includes spending on health, education and social protection, and within those sectors, a greater share to pre- and primary education and primary healthcare.

References

Abdulai, A., Aziz, I., Blampied, C., Chattopadhyay, S., Ellison Smith, C., Greenhill, R., Thompson, R. and Salifu, A. (forthcoming) Leaving no one behind the health and education sectors: an SDG stocktake in Ghana. London: Overseas Development Institute

Alcott, B. and Rose, P. (2015) 'Schools and learning in rural India and Pakistan: who goes where, and how much are they learning?' *Prospects* 45(3): 345–363

Anand, S. and Bärnighausen T. (2004) 'Human resources and health outcomes: cross-country econometric study' *The Lancet* 364(9445): 1603–1609

Anand, S. and Bärnighausen T. (2007) 'Health workers and vaccination coverage in developing countries: an econometric analysis' *The Lancet* 369(9569): 1277–1285

Anand, R., Coady, D., Mohommad, A., Thakoor, V. and Walsh, J.P. (2013) *The fiscal and welfare impacts of reforming fuel subsidies in India*. International Monetary Fund (IMF) Working Paper WP/13/128. Washington DC: IMF

Akazili, J., Garshong, B., Aikins, M., Gyapong, J. and McIntyre, D. (2012) 'Progressivity of healthcare financing and incidence of service benefits in Ghana' *Health Policy and Planning* 27(1:1): 13–22

Baird, S., McIntosh, C. and Özler, B. (2009) *Designing cost-effective cash transfer programs to boost schooling among young women in sub-Saharan Africa*. World Bank Policy Research Working Paper No. 5090, October. New York NY: World Bank

Baird, S., Ferreira, F., Ozler, B. and Woolcock, M. (2013) 'Relative effectiveness of conditional and unconditional cash transfers for schooling outcomes in developing countries'. Oslo: Campbell Collaboration

Bastagli, F., Coady, D. and Gupta, S. (2012) *Income inequality and fiscal policy*. IMF Staff Discussion Note, 28 June. Washington DC: International Monetary Fund

Bellinger, A., Terway, A. and Burnett, N. (2016) *Innovative Financing Recommendations*. Background Paper. New York NY: The Learning Generation, The Education Commission, The International Commission on Financing Global Education Opportunity

Borghi, J., Ensor, T., Somanathan, A., Lissner, C. and Mills, A. (2006) 'Maternal survival 4 – mobilising financial resources for maternal health' *The Lancet* 368: 1457–1465

Borkum, E. (2012) 'Can eliminating school fees in poor districts boost enrolment? Evidence from South Africa' *Economic Development and Cultural Change* 60(2): 359–398

Burde, D. and Linden, L. (2013) 'Bringing education to Afghan girls: a randomised controlled trial of village-based schools' *American Economic Journal*, *Applied Economics* 5(3): 27–40

Chen, D., Matovu, J. and Reinikka-Soininen, R. (2001) *A quest for revenue and tax incidence in Uganda*. IMF Working Paper WP/01/24. Washington DC: International Monetary Fund

Coady, D., Gillingham, R., Ossowski, R., Piotrowski, J., Tareq, S. and Tyson, J. (2010) *Petroleum product subsidies: costly, inequitable and rising*. IMF Staff Position Note, 25 January. Washington DC: International Monetary Fund

Contreras, M.E. and Talavera Simoni, M.L. (2003) 'The Bolivian Education Reform 1992–2002: case studies in large-scale education reform'. Washington DC: The World Bank

Davoodi, H. R., Tiongson, E.R. and Asawanuchit, S.S. (2010) 'Benefit incidence of public education and health spending worldwide: evidence from a new database' *Poverty & Public Policy* 2(2): 5–52.

Day-Ashley, A., Mcloughlin, C., Aslam, M., Engel, J., Wales, J., Rawal, S., Batley, R., Kingdon, G., Nicolai, S. and Rose, P. (2014) *The role and impact of private schools in development countries: a rigorous review of the evidence*. London: Department for International Development

DFID – Department for International Development (2011) *Cash transfers evidence paper*. London: DFID Policy Division

Development Initiatives (2013) *Investments to end poverty: real money, real choices, real lives*. Bristol: Development Initiatives

Duflo, E. (2001) 'Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment' *American Economic Review* 91(4): 795–813

Engel, J., Glennie, J., Adhikari, S.R., Bhattarai, S.W, Prasai, D.P. and Samuels, F. (2013) *Nepal's story: understanding improvements in maternal health*. London: Overseas Development Institute

Feikin, D.R., Nguyen, L.M., Adazu, K., Ombok, M., Audi, A., Slutsker, L. and Lindblade, K.A. (2009) 'The impact of distance of residence from a peripheral health facility on pediatric health utilisation in rural western Kenya' *Tropical Medicine and International Health* 14(1): 54–61

Filmer, D. and Schady, N. (2008) 'Getting girls into school: evidence from a scholarship programme in Cambodia' *Economic Development and Cultural Change* 56(3): 581–617

Fiszbein, A. and Schady N., with Ferreria, F.H.G., Grosh, M., Kelleher, N., Olinto, P. and Skoufias, E. (2009) *Conditional cash transfers: reducing present and future poverty*. Washington DC: World Bank

Foundation Center (2016) *Priorities and strategies of US-based funders supporting global education*. Background Paper. New York NY: The Learning Generation, the Education Commission
Gauthier, B. (2010) *PETS-QSDS in sub-Saharan Africa: a stocktaking study*. Washington DC: The World Bank
Giordano, E.A. (2008) 'School clusters and teacher resource centres'. Fundamentals of Educational Planning, 86. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO) International Institute for Educational Planning
Glassman, A., Becker, L. and Bun, C. (2008) *Monitoring the quality of public spending in the social sectors in developing countries: lessons from Public Expenditure Tracking Surveys and other sources*. London: Results for Development
Glewwe, P. and Muralidharan, K. (2015) *Improving school education outcomes in developing countries: evidence, knowledge gaps, and policy implications*. Research on Improving Systems of Education (RISE) Working Paper, RISE-WP-15/001, 25 October 2015. Oxford: RISE
Greenhill, R., Carter, P., Hoy, C. and Manuel, M. (2015) *Financing the future: how international public finance should fund a global social compact to eradicate poverty*. London: Overseas Development Institute
Greenhill, R. (2016) 'Where next for development effectiveness? Leaving no one behind'. Conference Policy Note No. 4, October. London: Overseas Development Institute
Guarnaschelli, S., Lampert, S. Marsh, E. and Johnson, L. (2014) *Innovative financing for development: scalable business models that produce economic, social, and environmental outcomes*. Various locations: Dalberg, Global Development Incubator, The Citi Foundation and AFD
Gwatkin, D. and Ergo, A. (2011) 'Universal health coverage: friend or foe of health equity?' *The Lancet*, 377(9784): 2160–2161
Handa, S. (2002) 'Raising primary school enrolment in developing countries. The relative importance of supply and demand' *Journal of Development Economics* 69(1): 103–128
Higgins, S. and Lustig, N. (2015) 'Can a poverty-reducing and progressive tax and transfer system hurt the poor?'. CGD Working Paper 405. Washington DC: Center for Global Development
Ilie, S. and Rose, P. (2017) 'Who benefits from public spending on higher education in South Asia and Sub-Saharan Africa?' *Compare: A Journal of Comparative and International Education* 23 August: 1–18.
IMF – International Monetary Fund (2013) *Energy subsidy reform in sub-Saharan Africa: experiences and lessons*. Departmental paper/policy paper. Washington DC: IMF
İşcan, T.B., Rosenblum, D. and Tinker, K. (2015) 'School fees and access to primary education: assessing four decades of policy in sub-Saharan Africa' *Journal of African Economies* 24(4): 559–592
Jenkins, G.P., Jenkins, H.P. and Kuo, C.Y. (2016) 'Is the value added tax naturally progressive?' (18 April). New York NY: Social Science Research Network (http://dx.doi.org/10.2139/ssrn.897677)
Khandker, S. R., Pitt, M.M. and Fuwa, N. (2003) 'Subsidy to promote girls' secondary education: the female stipend program in Bangladesh'. Washington DC: World Bank
Kharas, H., Prizzon, A. and Rogerson, A. (2014) 'Financing the Sustainable Development Goals: a rough roadmap'. London: Overseas Development Institute
Lagarde, M. and Palmer, N. (2008) 'The impact of user fees on health service utilization in low- and middle-income countries: How strong is the evidence?' Bulletin of the World Health Organization 86(11): 839–848
Lagarde, M., Haines, A. and Palmer, N. (2009) 'The impact of conditional cash transfers on health outcomes and the use of health services in low and middle-income countries'. Cochrane Database Systematic Review, October 2009 (4)
Jamison, D.T., Summers, L.H., Alleyne, G., Arrow, K.J., Berkley, S., Binagwaho, A., … and Yamey, G. (2013) 'Global health 2035: a world converging within a generation' *The Lancet Commission on Investing in Health* 382(9908): 1589–1864
Langlois, E., Karp, I., Serme J de D. and Bicaba, A. (2015) 'Effect of a policy to reduce user fees on the rate of skilled birth attendance across socioeconomic strata in Burkina Faso' *Health Policy Plan* 31(4): 462–471
Linden, L. (2008) *Complement or substitute? The effect of technology on student achievement in India*. The Abdul Latif Jameel Poverty Action Lab Working Paper. Cambridge MA: J-PAL
Little, A. (1995) 'Multigrade teaching: a review of practice and research'. Serial No. 12. London: Overseas Development Institute
Lucas, A.M. and Mbiti, I.M. (2012) 'Does free primary education narrow gender differences in schooling? Evidence from Kenya' *Journal of African Economies* 21(5): 691–722
Lustig, N. (2015) 'Fiscal policy, income redistribution and poverty reduction in Latin America: Bolivia, Brazil, Chile, Costa Rica, El Salvador, Guatemala, Mexico, Peru and Uruguay' *Contemporary Issues in Development Economics*: 11–18
Martin, M. and Walker, J. (2015) *Financing the Sustainable Development Goals: lessons from government spending on the MDGs* (Government Spending Watch, 2015 Report). London: Development Finance International and Oxfam
Mulama, J. (2004) 'Education – Kenya: 'Schooling for All': an empty slogan for disabled children'. Rome: Inter Press Service News Agency (www.ipsnews.net/2004/06/education-kenya-schooling-for-all-an-empty-slogan-for-disabled-children)
Mulkeen, A. (2009) *Teachers in anglophone Africa: issues in teacher supply, training and management*. (Based on case studies in Eritrea, the Gambia, Lesotho, Liberia, Malawi, Uganda, Zambia and Zanzibar). Washington DC: Africa Region, Human Development, World Bank

Mulkeen, A. and Chen, D. (eds.) (2008) *Teachers for rural schools: experiences in Lesotho, Malawi, Mozambique, Tanzania, and Uganda*. Washington DC: World Bank
Mustapha, S. and Krause, P. (2016) *Financing education: domestic resource mobilisation and allocation*. Background Paper. New York NY: The Learning Generation, the Education Commission
Palmer, N., Mueller, D.H., Gilson, L., Mills, A. and Haines, A. (2004) 'Health financing to promote access in low income settings – how much do we know?' *The Lancet* 364(9442): 1365–1370
Pereira, C., Cumbi, A., Malalane, R., Vaz, F., McCord, C., Bacci, A. and Begstrom, S. (2007) 'Meeting the need for emergency obstetric care in Mozambique: work performance and histories of medical doctors and assistant medical officers trained for surgery', *BJOG: An International Journal of Obstetrics and Gynaecology* 114(12): 1530–1533
Prizzon, A., Greenhill, R. and Mustapha, A. (2016) *An age of choice for development finance: evidence from country case studies*. London: Overseas Development Institute
Rabinowitz, G. and Prizzon, A. (2015) *Financing for development: lessons from Development Progress case studies*. London: Overseas Development Institute
Rahaman, M.M., Aziz, K.M., Munshi, M.H., Patwari, Y. and Rahman, M. (1982) 'A diarrhoea clinic in rural Bangladesh: influence of distance, age and sex on attendance and diarrhoeal mortality' *American Journal of Public Health* 72(10): 1124–1128
Rodriquez Pose, R. and Samuels, F. (2010) *Bangladesh's progress in health: healthy partnerships and effective pro-poor targeting*. London: Overseas Development Institute
Rodriquez Pose, R. and Samuels, F. (2011) *Rwanda's story: progress on health in Rwanda: leadership, performance and health insurance*. London: Overseas Development Institute
Rodriquez Pose, R., Engel, J., Poncin, A. and Manuel, S. (2014) *Against the odds: Mozambique's gains in primary health care*. London: Overseas Development Institute
Rose, P. and Alcott, B. (2015) *How can education systems become equitable by 2015?* DFID Think Pieces – Learning and Equity. London: Health and Education Advice and Resource Team (HEART) (http://uis.unesco.org/sites/default/files/documents/how-can-education-systems-become-equitable-by-2030-learning-and-equity_pauline-rose_benjamin-alcott_heart_2015-en.pdf)
Rottingen, J.A., Ottersen, T., Albo, A., Arhin-Tenkorgan, D., Benn, C. and Elovainio, R. (2014) *Shared responsibilities for health: a coherent global framework for health financing*. Final report of the Centre on Global Health Security Working Group on Health Financing. London: Chatham House
Salti, N. and Chaaban, J. (2010) 'The poverty and equity implications of a rise in the value added tax: a microeconomic simulation for Lebanon'. New York NY: United Nations Development Programme (www.databank.com.lb/docs/VAT_micro_paper_Lebanon_revised_version_28012010.pdf)
Schoeps, A., Gabrysch, S., NIamba, L., Sie, A. and Becher, H. (2011) 'The effect of distance to health-care facilities on childhood mortality in rural Burkina Faso' *America Journal of Epidemiology* 173(5): 492–498
SDSN – Sustainable Development Solutions Network (2014) *Health in the framework of sustainable development*. Technical Report for the Post-2015 Development Agenda. New York: SDSN Thematic Group on Health for All
Speybroeck, N., Kinfu, Y., Dal Poz, M. and Evans, B. (2006) 'Reassessing the relationship between human resources for health, intervention coverage and health outcomes.' Background paper. *Evidence and Information for Health*. Geneva: World Health Organisation
Stuart, E. and Samman, E. (forthcoming) 'Defining 'leave no one behind'. London: Overseas Development Institute
Tidemand, P., Sola, N., Maziku, A., Williamson, T., Tobias, J., Long, C. and Tilley, H. (2014) *Local Government Authority (LGA) fiscal inequities and the challenges of 'disadvantaged' LGAs in Tanzania*. London: Overseas Development Institute
Ulrichs, M. (2016) *Informality, women and social protection: identifying barriers to provide effective coverage*. London: Overseas Development Institute (www.odi.org/sites/odi.org.uk/files/resource-documents/10481.pdf)
UNESCO – United Nations Educational, Scientific and Cultural Organisation (2010) *Reaching the marginalised – EFA Global Monitoring Report 2010*. Paris: UNESCO
UNESCO (2011) *The hidden crisis: armed conflict and education – EFA Global Monitoring Report 2011*. Paris: UNESCO
UNESCO (2014) *Teaching and learning: achieving quality for all – EFA Global Monitoring Report 2013/14*. Paris: UNESCO
UNESCO (2015) *Education for all 2000–2015: achievements and challenges – EFA Global Monitoring Report 2015*. Paris: UNESCO
UNICEF – United Nations Children's Fund (2017) *Narrowing the gaps: the power of investing in the poorest children*. New York NY: UNICEF
Wagstaff, A., Bilger, M. Buisman, L.R. and Bredenkamp, C. (2014) *Who benefits from government health spending and why? A global assessment*. Policy Research Working Paper (7044). Washington DC: World Bank
Watkins, K. and Alemayehu, W. (2012) *Financing for a fairer, more prosperous Kenya: a review of the public spending challenges and options for selected arid and semi-arid counties*. Centre for Universal Education Working Papers. Washington DC: The Brookings Institution
World Bank and UNICEF (2009) 'Abolishing school fees in Africa: lessons learned in Ethiopia, Ghana, Kenya and Mozambique'. Washington DC/New York NY: World Bank/UNICEF

World Bank (2014) *Improving basic services for the bottom forty percent: lessons from Ethiopia*. Washington DC: World Bank
World Bank (2015) 'Ethiopia poverty assessment. poverty global practice – Africa region'. Washington DC: World Bank
WHO – World Health Organization (2010) *Health systems financing: the path to universal coverage. The World Health Report 2010*. Geneva: WHO
WHO (2014) *Fiscal space, public finance management and health financing: a collaborative agenda*. Geneva: WHO
van der Burg, L. and Whitley, S. (2016) *Unexpected allies: Fossil fuel subsidy reform and education finance*. Background Paper. New York NY: The Learning Generation, the Education Commission
Younger, S. (1993) *Estimating tax incidence in Ghana: an exercise using household data*. Working Paper 48. New York NY: Cornell Food and Nutrition Policy Program, Cornell University
Younger, S., Sahn, D., Haggblade, S. and Dorosh, P. (1999) 'Tax incidence in Madagascar: an analysis using household data' *The World Bank Economic Review* 13(2): 303–331
Zubairi, A. and Rose, P. (2016) *Raising domestic resources for equitable education*. Background Paper. New York NY: The Learning Generation, the Education Commission

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