Working paper 557

How donors can deliver on the 'leave no one behind' commitment

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Key messages

- In order to realise the commitment to 'leave no one behind', donors must consider practical challenges related to data disaggregation and collection, assessing value for money, and rationalising larger expenditures and risk-taking.
- The first step is to identify and define the individuals and groups who are at risk of falling behind. These groups include disadvantaged sections of society, such as women, people with disabilities and children, as well as poor and fragile countries and areas within countries.
- Donors must then collect disaggregated data about these left-behind groups, working with national statistics systems as well as through their own monitoring and evaluation systems to ensure this data is collected in an ethical and sensitive way.
- Broad proxy groups for left-behind individuals can be used as a first approach to assess whether donors are allocating aid according to the leave no one behind principle. Sectoral allocations can also be targeted specifically at left-behind populations.
- To assess the relative costs of delivering targeted interventions that the leave no one behind approach requires, detailed analyses of the costs and benefits should be undertaken. Targeting marginalised groups tends to be more expensive on a unit cost basis, but donors need to make sure that the long-term and wide-ranging benefits of these interventions are also being measured. Assigning extra value to worse-off recipients – for example through equity weights – can shift the balance.

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Acronyms

CBA	cost-benefit analysis
CEA	cost-effectiveness analysis
CRS	Creditor Reporting System
DAC	development Assistance Committee
DCEA	distributional cost-effectiveness analysis
DFI	development finance institution
DFID	UK Department for International Development
DHS	demographic and health survey
ECEA	extended cost-effectiveness analysis
EU	European Union
GDP	gross domestic product
IDA	International Development Association
LDC	least developed country
LGBT	lesbian, gay, bisexual and transsexual
LIC	low-income country
LNOB	leave no one behind
LSHTM	London School of Hygiene and Tropical Medicine
M&E	monitoring and evaluation
MDB	multilateral development bank
MIC	middle-income country
MICS	multiple indicators cluster survey
MSMEs	micro, small and medium-sized enterprises
ODI	Overseas Development Institute
OECD	Organisation for Economic Cooperation and Development
SDGs	Sustainable Development Goals
Sida	Swedish International Development Cooperation Agency
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VfM	value for money

Executive summary

All donors have committed to 'leave no one behind' in their policies and programming in accordance with the text of the Sustainable Development Goals (SDGs) signed in 2015. That is, to ensure that the poorest in all senses of the term make progress faster than anyone else in order to close the gaps with the rest of the population. While there are examples of steps taken by certain donors in recognition of this agenda, many have yet to change the way they implement programmes or allocate resources. A full response to this commitment would be the prioritisation of left-behind groups' needs and interests, and a focus on and optimisation of outcomes for those groups.

One reason for this inaction from donors may be that the concept of leaving no one behind is not clearly defined in the SDGs. In addition, organisations may be concerned that this commitment may be expensive to deliver, as well as being politically and technically challenging.

Because of this uncertainty, several donors have expressed an interest in better understanding what it would entail to implement the leave no one behind (LNOB) agenda, and how they can respond in practical terms. This working paper sets out some proposals aimed at bilateral donors,[1] with a focus on health and education policies.

We first consider how donors can identify and measure results for left-behind groups, before discussing the issue of targeting. There is now significant literature to indicate that coverage of education and health services should be *universal*, but with additional attention paid to implementing universal coverage in an equitable way. That is, *universal with additional targeting* – or 'progressive universalism' (Stuart et al., 2018) – so that the geographical areas, disease burden and access issues faced by the poorest and most marginalised are prioritised. This equitable version of universalism may well require additional inputs from donors to assist the poorest and most marginalised to access services.

Next, the paper examines the thorny question of value for money. For some donors who take a human rights-based or 'prioritarian' approach, needing to justify value for money of interventions is less of an issue (other than in basic procurement terms). However, decisions will vary depending on whether donors assess value for money based on leave no one behind *as a principle* or *as a goal*. For many other donors, a utilitarian and cost-effectiveness argument needs to be made for the importance of leaving no one behind, with consideration also given to the 'distributional justice' of any benefits. As we show, there is room for optimism here, with evidence of donors experimenting with approaches that put equity on a par with efficiency.

Finally, the paper considers what might be the optimal institutional set-up to deliver on the LNOB agenda. Here there are no clear answers, but we present some proposals informed by our findings in the rest of the paper.

1 A companion paper considers the extent to which multilateral donors are already responding to the LNOB agenda, using the World Bank's International Development Association (IDA) as a case study.

‘As we embark on this great collective journey, we pledge that no one will be left behind. Recognizing that the dignity of the human person is fundamental, we wish to see the Goals and targets met for all nations and peoples and for all segments of society. And we will endeavour to reach the furthest behind first.’

United Nations General Assembly Resolution 70/1 (UNGA, 2015)

1 Introduction

The 'leave no one behind' (LNOB) commitment, a core element of Agenda 2030 (UNGA, 2015), states that those who are worst off should be reached first. Great strides were made on previous targets of *reducing* extreme poverty and other indicators, but the Sustainable Development Goals (SDGs) agenda targets *eliminating* poverty and improving outcomes for *everyone* rather than the average.

While the idea is conceptually simple, in practical terms this commitment raises a host of difficulties for donors. If the LNOB agenda is to be more than a lofty ambition, it must be translated into action – which requires a careful assessment of what donors specifically need to do to contribute to the objective.

The concept of LNOB is defined in many ways by different organisations. This working paper assumes a very general definition of a commitment to support groups who are in some way(s) left behind or hard to reach and efforts to fast-track action for them – as per the wording of the SDG outcome document (ibid.). Two core sections of society factor into this: first, groups and individuals who have been left behind because they have not enjoyed improvement in standards along with the average population, and secondly, groups and individuals who face discrimination and worse outcomes as a result (Stuart and Samman, 2017). While income (for better or worse) is a commonly used proxy for an array of development indicators, it is important to note that the LNOB agenda also encompasses many sectors that are important in and of themselves, and that do not necessarily correlate with income. This means that we need to look at unequal outcomes in areas such as health and education in addition to, and separate from, income.

The purpose of this working paper is to discuss and highlight some of the important considerations a donor must make in order to improve its capability to meet the LNOB commitments. This includes:

- how to identify individuals and groups who are left behind and how to measure their progress
- how to target these populations
- how to evaluate cost-effectiveness and value for money when attempting to meet the SDG LNOB commitment
- what elements of the institutional set-up of a donor influences its ability to meet this commitment.

The paper is not intended as a checklist of elements an LNOB donor has to get right, nor is it an exhaustive account of every influence on LNOB. Instead, it is meant as a starting point for discussions around important questions – and in some cases difficult trade-offs – that warrant consideration from the donor community.

2 Identifying and measuring results for LNOB groups

Key takeaways:

1. Donors should work with national statistics systems to ensure sufficiently disaggregated data exists to identify who is at risk of being left behind.
2. Donors should improve their own monitoring and evaluation (M&E) frameworks to ensure sufficiently disaggregated data is collected to identify the impact of aid programmes between groups and individuals.
3. Donors should be wary of political challenges in identifying marginalised groups.

In order to target LNOB groups and measure results for them, donors[2] must first know who they are. Determining and identifying who is better- or worse-off can be relatively easy in some contexts due to certain identifying characteristics (e.g., self-reported ethnicity or place of residence). However, it can be much more challenging to make this distinction in worst-off contexts, where there are large numbers of poor or malnourished people and broader forms of support are likely to be warranted.

A large part of the challenge is the need for disaggregated data, to analyse and evaluate who is at risk of being left behind, to measure whether projects and programmes reach them, and then to track whether or not outcomes have improved. A study of educational outcomes in Nigeria by the United Nations Educational, Scientific and Cultural Organization (UNESCO) shows that while the richest children had an average of 9.7 years of schooling, the equivalent was just 3.5 years for the poorest (quoted in German and Randel, 2017). Furthermore, *intersecting marginalisation* exacerbates the issue further – the same study found that the average was only 0.3 years of schooling among Hausa girls. Samman and Lenhardt (2015) find that in Ethiopia, only 15% of rural women with Somali ethnicity had completed primary school, compared to 77% for urban women of other ethnicities.

Disaggregating data is important whether the intention is to disproportionately benefit the marginalised groups, or just to make sure all groups benefit at least equally (see section 4). Indeed, the fact that national administrative data systems focus on averages and do not disaggregate or measure results for specific groups can be a reason itself why certain groups are left behind (Stuart et al., 2015).

Other issues with identification relate to covering small groups, people living in inaccessible areas, and infrequent data collection. From a partner government's side there might be politically motivated reasons why groups are not counted, while marginalised groups themselves may not want to be identified for related reasons. The following sets of issues are important to keep in mind, whether the donor is working with national statistics offices or undertaking its own bespoke monitoring.

2 And governments, the private sector, civil society and other stakeholders – but these are not the focus of this paper.

2.1 Technical challenges

A significant challenge with gathering disaggregated data is that it can be costlier and more time-consuming than obtaining data on population averages. Take household surveys: while these are conventionally conducted at the household rather than individual level for cost and convenience, this level of aggregation can obscure differences within a household. There may be individuals who are being left behind within a household (e.g. people with disabilities, older people and sometimes female members) who may not become visible unless surveys explicitly focus on identifying intra-household resource transfers and individual consumption patterns.

Studies that have used individual-level indicators have shown significant intra-household inequalities, for example that girls spend more time doing household chores, while boys spend less time on schooling (although such findings are highly variable between countries) (Rodriguez, 2016).[3] The additional cost and administrative burden of obtaining this information on a large scale could make it unfeasible for donors, however. Disaggregating data can also add additional costs in terms of ensuring confidentiality and privacy.

This challenge with household surveys points to a larger issue – capturing small and marginal populations requires larger sample sizes. Assuming left-behind populations are small compared to the overall population, small samples might miss these groups, resulting in their data not being captured. Intersecting inequalities (e.g. women with disabilities of a certain ethnicity) makes this challenge even greater.

Technology and innovative methodologies can play a role in overcoming these issues. In Guatemala, the World Bank was able to reduce the cost of surveys by using mobile phone survey technology to monitor its cash transfer programme (replacing its old paper surveys). Because of this they were able to increase the sample size from 200 to 700 individuals without increasing the cost of the project, and could thereby assess in greater detail the disaggregated impact (Schuster and Brito, 2011).

Another promising emerging field, which provides geographically disaggregated data, is remote sensing and satellite technology. This can be used in combination with household surveys to form a more informed picture of geographical differences.[4] While in its early stages, the technology has provided detailed spatial data on everything from the effects of climate change, changes in land use, monitoring of water bodies, land erosion and night-time luminosity as a proxy for income (for an overview see ESA, 2018). As costs drop rapidly, there is great potential to increase spatially disaggregated data anywhere in the world, updated much more rapidly than on-the-ground surveys (see Box 1 below).

However, disaggregation is not the only technical difficulty. Certain people are sometimes completely excluded from household surveys, for example those who live in insecure areas, are homeless or live in institutions, or highly mobile populations like pastoralists (Villegas and Samman, 2015). Indeed, it has been estimated that as many as 350 million people are missed by household surveys (Carr-Hill, 2013). A particular concern relates to the treatment of undocumented migrants who are not counted in official statistics (UNECE, 2012).

A final difficulty is that people don't always self-identify as vulnerable or marginalised in surveys. Sightsavers' experience from India has shown that while the share of the population answering yes to the question 'are you disabled?' was 0.6%, when using a more detailed set of questions to identify disability, the rate increased to 16.7% (Smith, 2016; Washington Group, 2016). This is likely to relate to the stigma of self-identifying as disabled.

3 This study uses data from the United Nations Children's Fund (UNICEF) Multiple Indicators Cluster Surveys (MICS), a household survey that has certain indicators on the individual level, namely: stunting, birth registration, school attendance, working hours.

4 See, for example, the work of the Demographic and Health Surveys (DHS) programme funded by the United States Agency for International Development (USAID): https://dhsprogram.com/What-We-Do/Gis.cfm

2.2 Political challenges

Identifying LNOB groups is not only a technical challenge. Some groups can become vulnerable for further discrimination if their characteristics are openly identified – for example, those who are HIV positive; lesbian, gay, bisexual and transsexual (LGBT) populations; members of persecuted groups; or displaced people – and can mean that individuals prefer to remain outside official statistics. There are historical examples of identification and disaggregated data being used for extreme overt discrimination, including advanced census data in Nazi Germany (Luebke and Milton, 1994) and the role that identification cards with ethnicity markers played in facilitating the Rwandan genocide (Fussell, 2001).

For donors, a statistical guide from the Joint United Nations Programme on HIV/AIDS (UNAIDS) on measuring HIV/AIDS prevalence warns that, depending on the political context, '[t]here is a very real possibility that reliable estimates of the numbers of drug injectors, street-based sex workers or [men who have sex with men] could lead not to a public health response, but rather to a law-enforcement response' (Weir et al., 2012: 47).

From a government side, not counting or publicising information on marginalised groups might be deliberate, so as not to draw attention to specific populations that are being left behind. Indeed, groups and individuals might be intentionally or unintentionally marginalised through government-sanctioned discrimination, in which case the government might not want to highlight differences in their development outcomes. For example, in countries where homosexuality is banned, governments will be less worried about disaggregating HIV/AIDS prevalence for this group.

This brings us to the dilemma of country ownership. This is an important element of the aid effectiveness agenda, and is built on the experience that aid programmes are less effective (or even counter-productive) if there is no buy-in from the recipient government (Busan Partnership, 2012). If people are intentionally left behind because of government policies, it would be difficult for a donor to challenge such a policy in the name of leaving no one behind.

This problem is sometimes solved by considering *government ownership* versus *societal ownership* (or democratic ownership) – i.e. is the donor's counterpart the recipient-country government, or society at large? (Carothers, 2015). While the government might want to exclude a certain population, the citizens of the country might feel differently. This framework could be used to justify influencing public opinion, for example through cultivating champions and supporting civil society organisations (CSOs) or similar, in order to slowly foster country ownership. In a similar vein, Booth (2012) has argued that country ownership should be considered as the outcome rather than the starting point, as one cannot assume that the recipient government's existing policies are something donors want to support. However, while the societal-ownership angle provides justification for forging ahead with the donor's original intent, in practice it can be hard to assess what the overall population would actually want and how this impacts aid effectiveness. Furthermore, as many as 39 low- and middle-income countries place restrictions on foreign funding of civil society, in many cases precisely to prevent foreign interference (Dupuy et al., 2016).

2.3 Privacy and confidentiality concerns

There is a risk that putting greater effort into collecting disaggregated data can negatively impact marginalised people, unless care is taken to ensure the confidentiality of data. The right to privacy is also a fundamental human right, and should not be negatively impacted by efforts to leave no one behind. This requires safeguards on data collection in terms of anonymisation, confidentiality and consent, as well as ensuring the security of the data that is collected. While these measures should, in theory, already exist in partner governments, there could be a role for donors to support the implementation of existing practices, as well as strengthening systems further. The issue of privacy is also becoming more salient with the introduction of new technologies that could have positive impacts on LNOB data questions, such as biometric identification systems, and DNA and electronic health databases (Hosein, 2011).

2.4 The role of donors

For donors, there is significant scope to support national administrative and statistics capacity to ensure that they measure results for LNOB groups appropriately and ethically. Working through national statistics systems is also more likely to have the added benefit of aligning with recipient-country agendas and promoting government ownership than using parallel systems for donor data collection (Munro, 2018). In light of the political challenges discussed above, there is a potential risk that national statistics offices will have priorities that don't align completely with the donors' interests (German and Randel, 2017). However, encouragingly, data from PARIS21 show that as many as 97% of aid projects aimed at improving statistical capacity aligned with national plans for statistics development (PARIS21, 2017).

Furthermore, there is evidence that donors already support capacity-building programmes that can enhance the ability of national governments to measure their populations appropriately. According to PARIS21 (ibid.), US$541 million in aid was given to improving statistical capacity in recipient countries in 2015, amounting to 0.3% of total official development assistance (ODA). However, this type of aid is highly concentrated among a few key donors: 75% of the aid was given by the top five donors (the World Bank, Canada, the United Nations Population Fund (UNFPA), the European Commission/Eurostat and the African Development Bank (AfDB)), which suggests that there is room for other LNOB donors to increase their efforts in this area.

Beyond national statistics systems, there is also a need to adjust donor M&E and results frameworks to ensure they regularly collect disaggregated project and programme data (Munro, 2018). As part of routine project and programme monitoring, donors should collect data on costs and outcomes and impacts for LNOB groups. This is a relatively simple step, as most donors already have extensive reporting requirements from project implementers. Indeed, some donors do routinely request disaggregation by sex, and further disaggregation by ethnicity, income or other dimensions of marginalisation could be added, as relevant. See Box 1 on commitments made by donors and other stakeholders under the Inclusive Data Charter.

Box 1 The Inclusive Data Charter

The Inclusive Data Charter was launched in 2018 and contains commitments by donors, governments and other stakeholders to improve the quality and quantity of disaggregated data for sustainable development and to address the LNOB agenda. Its main principles hold that:

- all populations must be included in the data
- all data should, wherever possible, be disaggregated in order to accurately describe all populations
- data should be drawn from all available sources
- those responsible for the collection of data and production of statistics must be accountable
- human and technical capacity to collect, analyse, and use disaggregated data must be improved, including through adequate and sustainable financing.

So far, only a handful of donors (including the World Bank, the United Kingdom's Department for International Development (DFID), UNICEF and UNFPA) have signed up to the Charter, and DFID has recently released a draft Inclusive Data Charter Action Plan for consultation.[5] It is hoped that the initiative might be helpful in improving the quality and quantity of available data for sustainable development.

Source: See GPSDD (n.d. and 2018).

5 See DFID (2018). The final version of the Action Plan is due early 2019. As part of this, DFID has developed a guide to disaggregating programme data by disability and has updated the DFID Smart Guide on logical frameworks to include disaggregation. It is also assessing the use of Washington Group questions on disability status in humanitarian response contexts.

Without such donor requirements, this kind of data is unlikely to be collected routinely as it is more costly and needs to be factored into initial planning. At the design phase for project monitoring and data-collection tools and frameworks, there is a need to ensure that consideration is given to sampling (often over-sampling to account for the fact that marginalised groups may be smaller or have a shifting population) and questionnaire design (including questions that take into account the specific characteristics of marginalised populations) (Samman and Roche, 2014). Finally, the data need not only to be collected, but also analysed, in order to improve delivery to LNOB groups.

Box 2 DFID's Data Disaggregation Action Plan

DFID formulated a Data Disaggregation Action Plan in 2017 which sets out its ambitions to promote data disaggregation in both its own projects and in partner countries by 2030. Recognising the difficulties in implementing a disaggregation regime, the Plan deliberately focuses on only four variables: sex, age, disability and geography. After the first phase ends in 2020, a stocktake will be made to assess whether the list can be expanded, as DFID recognises that there are more variables along which people can be vulnerable and marginalised.

In terms of action, the Plan highlights a drive to promote disaggregation through DFID's partners, as well as by influencing other actors. More concretely, the organisation will support capacity-building in partner countries, report on disaggregated results of their own operations throughout all of its activities, and use this data for analysis.

Source: DFID (2017).

3 Targeting LNOB groups

Key takeaways:

1. Donors should consider which broad groups of marginalised people they are reaching; for example by thinking through which groups, countries, regions and sectors they target. Monitoring systems should be adapted in order to measure the extent to which these subsets are targeted.
2. These generalisations should not be a substitute for more granular analysis, however. Donors should strive to identify left-behind groups and individuals specific to the context they are working in.

While LNOB should ideally be about targeting or including *individuals* who are at risk of being left behind,[6] in light of the difficulties and costs outlined in section 2, an often necessary shortcut is to target broader groups that statistically are more likely to be at risk, and the sectors that these groups tend to benefit from. In practice, this means targeting:

1. vulnerable groups
2. vulnerable countries
3. vulnerable regions within countries
4. sectors disproportionately benefiting LNOB groups.

While this approach should not be considered a substitute for identifying left-behind individuals, such categorisations can be used as a first proximation of where to focus attention. In the words of German and Randel (2017), we don't want the best to become the enemy of the good; action cannot wait simply because of imperfect data. Furthermore, there might be benefits to identifying broader groups, such as a higher likelihood of building political support and a lower risk of stigmatising or mis-identifying individuals.

In lieu of detailed disaggregated data, analysing allocations within the above categories can give a rough indicator of the extent to which donors are focusing on those who are left behind.

3.1 Vulnerable groups

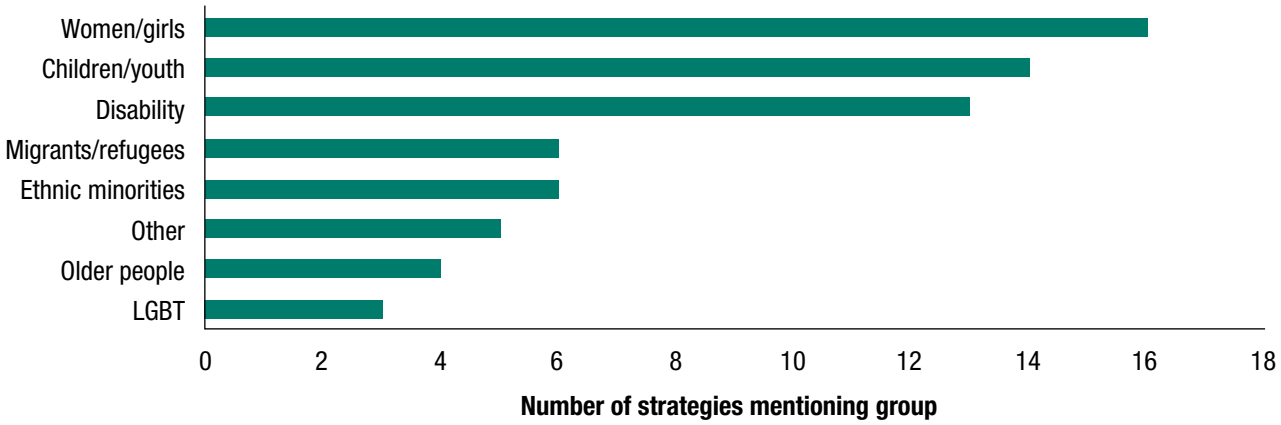
Although local contexts matter, broad groups such as women, children and refugees are typically likely to score worse on a range of indicators than the average population (see, for example, Manuel et al., 2018; Samman et al., 2018; Wodon and de la Brière, 2018). Even within these groups there will inevitably be inequalities, which are further exacerbated by overlapping disadvantages (often referred to as 'intersectionality'), and there might be individuals outside of these groups who are worse off. However, as a first estimate, targeting these broader groups is a rough indicator of whether donor activities are in line with the LNOB agenda.

The 2018 Organisation for Economic Cooperation and Development (OECD) *Development Cooperation Report* outlines briefly donors' strategies on LNOB (OECD, 2018). A breakdown of the 29 Development Assistance Committee (DAC) donors' (plus European Union (EU)) priorities shows that the three most common explicitly mentioned groups within the LNOB context are women/girls, children/youth, and people with disabilities (see Figure 1).

6 A distinction should be made between exclusively *targeting* left-behind individuals on the one hand, and making sure that programmes *include* such individuals, on the other. This is discussed in further detail in section 4.

While these specific groups are mentioned in donors' strategies, it is difficult to assess the extent to which organisations follow up on these commitments. This is due, in large part, to a lack of disaggregated measurements on both the input- and the impact-side of donor programmes. If a donor commits to target a certain vulnerable group, it is obviously crucial that measurements are sufficiently disaggregated to capture variations between that group and the larger population. But this is not widespread in practice. For example, on inclusiveness of disability, analyses have found no comprehensive dataset that measures this for individual donors, let alone a global methodology capable of comparing donors.[7] In this regard, sex and gender is one indicator that stands out, as great improvements have been made in measuring disaggregated results (see Box 3).

Figure 1 Mentions of left-behind groups in donor strategies



Note: Out of 30 donors, only 21 explicitly mention specific groups.
Source: Authors' deliberations from OECD (2018).

Box 3 An LNOB success story – gender

As a marginalised group, women and girls have historically received considerable attention in terms of unequal outcomes. Indeed, gender equality even has its own SDG (Goal 5) – to 'achieve gender equality and empower all women and girls' (UNGA, 2015). This is underpinned by a large literature showing how women and girls underperform on a range of indicators, from educational attainment (World Bank, 2018) and poverty (UN DESA, 2010), to health-related issues such as obesity (ibid.).

Compared to other disadvantaged groups, donors have done relatively well both at collecting data disaggregated by sex, and in targeting women and girls specifically. In terms of donor effort, examples range from Canada's Feminist International Assistance policy (Government of Canada, 2017), and targeted projects and programmes such as DFID's Girl's Education Challenge (see Box 4 in section 4), to Norfund collecting sex-disaggregated data on female employment in their portfolio companies along with the share of clients of supported financial institutions who are female (Norfund, 2016).

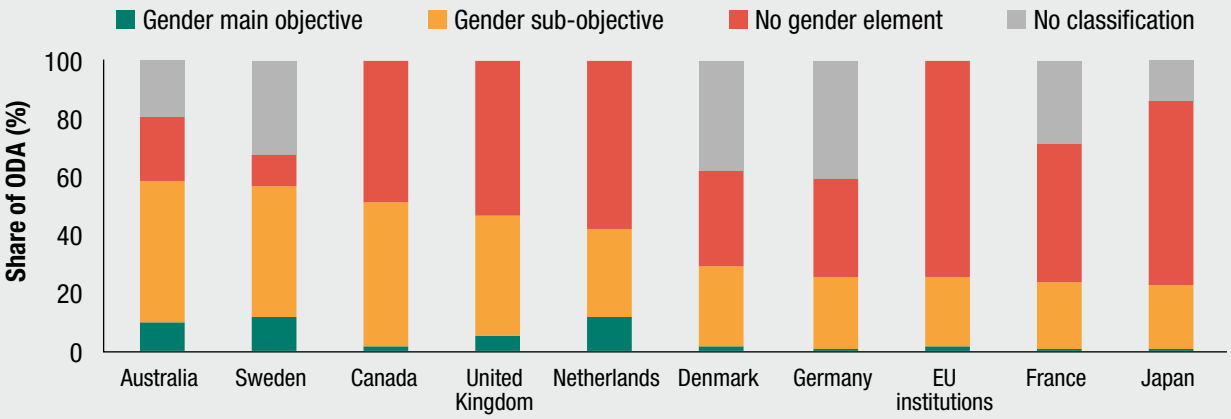
7 However, external analyses of individual donors, based on a manual examination of lists of projects, have found sobering results. For the World Bank, Sims et al. (2016) find that only 2% of their projects could be considered disability inclusive, while a study on Norwegian aid finds that only 0.36% of the total aid budget was targeting disabilities, down from 1% in 2000 (Nilsson and Larsen, 2018).

Box 3 An LNOB success story – gender (cont'd)

On the outcome side, the World Bank Gender Data Portal[1] contains a myriad of indicators that are disaggregated by sex, including in health, education, and economic opportunities, but also in specific areas such as female genital mutilation and women's attitudes to social questions. On the government side, gender has even found its way into 'gender-responsive budgeting' (Welham et al., 2018).

A salient illustration of the attention that gender has received is the inclusion of cross-cutting gender equality markers in the OECD Creditor Reporting System (CRS) database, used to identify whether individual aid projects have a gender equality component.[2] The inclusion of this marker enables broad analysis of which donors engage relatively more in gender-related projects. The breakdown for 2016 shows that Australia, Sweden and Canada engage most, with more than 50% of their project value being marked as having gender equality as either the main or secondary objective (Figure 2). While this broad overview tells us little of the details of each project or whether the final impact did indeed favour women disproportionately, it is nonetheless an important step to enable analysis and benchmarking.

Figure 2 Top 10 donors for gender markers (as share of total ODA, 2016)



Note: Top 10 largest donors in gender equality (as share of total ODA), among largest 25 donors in total aid.
Source: Authors' deliberations from OECD CRS.

The explicit focus on women and girls is not only positive in terms of reducing inequalities, but it also illustrates how it is possible for donors to target and collect disaggregated data on vulnerable groups. The challenge is to transfer these lessons to other vulnerable groups which have not yet received the same amount of attention. While gender is the only LNOB-related marker in the CRS dataset so far, work is ongoing to implement a marker for disability, as originally suggested by the UK in 2017 (see OECD DAC, 2018b). Following this point, in their review of Norwegian aid and LNOB policies, Greenhill and Engen (2018) suggest that in order to further enhance Norway's position, their very successful positive targeting of women and girls should be transferred to other LNOB groups.

1 Available at http://datatopics.worldbank.org/gender/

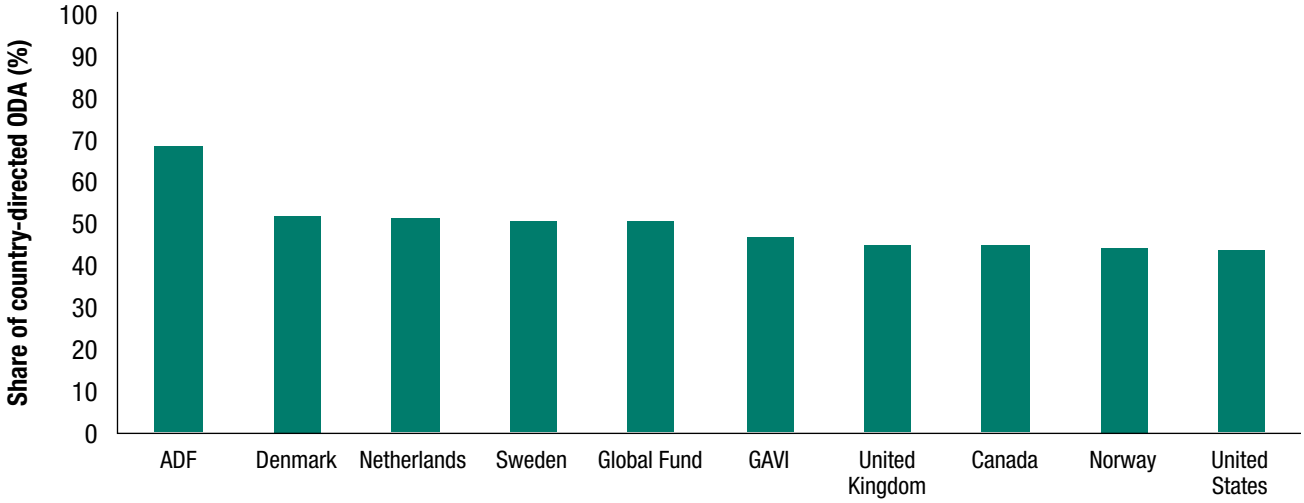
2 SDG 17.2 sets a target for '[d]eveloped countries to implement fully their official development assistance (ODA) commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/Gross National Income (GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries' (UNGA, 2015).

3.2 Vulnerable countries

A less nuanced way of estimating groups who are left behind is using country allocations. While detailed, disaggregated data is certainly preferable, there are large aggregate differences between countries on indicators such as poverty, education and health status, etc., which can be used to guide donor efforts. This is captured by the notion of 'leave no country behind'. There are several ways to measure these aggregate differences, including rankings and categorisations of countries such as low-income countries (LICs), least developed countries (LDCs) and fragile states, as well as studies such as Chandy (2017), Greenhill et al. (2015), Gertz and Kharas (2018) and Manuel et al. (2018) which focus not only on the current status of countries, but also on their projected potential to improve and their ability to finance their own development. While over half of the world's extreme poor population live in middle-income countries (MICs) (Sumner, 2016; Alonso, 2018), the typical MIC has 10 times the revenue potential per person than a typical LIC (Manuel et al., 2018). While there is a clear case for donors supporting MICs to address both relative and absolute deprivation (e.g. through technical assistance and support for civil society advocacy), the case for prioritising financial transfers to LDCs is also well recognised and is explicitly acknowledged in the SDGs.[8, 9]

LDCs are also recognised as facing the greatest development challenges, therefore we can expect that aid flowing to these countries is more LNOB-oriented than otherwise. Within this group, LICs have the greatest need for financial support (see, for example, Greenhill et al., 2015 and Manuel et al., 2018). One simple measure of how well donors are prioritising this group is to look at the share of their ODA flowing to LICs – Figure 3 shows this for the largest donors.

Figure 3 Share of country-directed ODA flowing to LICs by donor (2014–2016)



Note: Only includes ODA directed at specific countries, excludes unspecified aid. Top 10 donors from list of 25 largest (ODA) donors overall; ADF = African Development Fund.
Source: Authors' calculations, based on OECD CRS.

8 SDG 17.2 sets a target for '[d]eveloped countries to implement fully their official development assistance (ODA) commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/Gross National Income (GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries' (UNGA, 2015).

9 For an example of the recent discussion of whether aid should go to the poorest countries or if it should target poor populations even if they live in better-off countries, see Alonso (2018).

A more detailed analysis of one donor's allocations is found in Greenhill and Engen (2018), which compares Norway's top aid recipients with the lists of worst-off countries given in Chandy (2017) and Greenhill et al. (2015). They find that most of Norway's largest recipients indeed feature in these lists, with the exceptions being countries that host large populations of refugees, such as Lebanon and Jordan. However, at the same time, the authors find that the country allocation of Norfund – Norway's development finance institution (DFI) – is less aligned with the LNOB agenda, as its partner countries are mainly MICs.

More recently, Manuel et al. (2018) updated and extended Greenhill et al.'s (2015) approach to analyse all major aid donors, and also developed a new approach to measure donor efficiency at targeting extreme poverty. This framework assesses not only which countries aid is given to, but also the extent to which aid matches the size of that country's financing needs: some LICs need much more support than others. Manuel et al. show that the median level of aid per person living in extreme poverty in MICs is 10 times higher than in LICs, despite the greater availability of domestic resources in MICs. Further, the authors highlight the difference between donors, with Ireland, Belgium and Norway scoring highest on targeting extreme poverty.

3.3 Vulnerable regions within countries

Refining further identification by country allocations, studies have also analysed within-country allocations of donors. However, this is often constrained by a lack of spatially disaggregated data, which is a big problem across the donor universe.

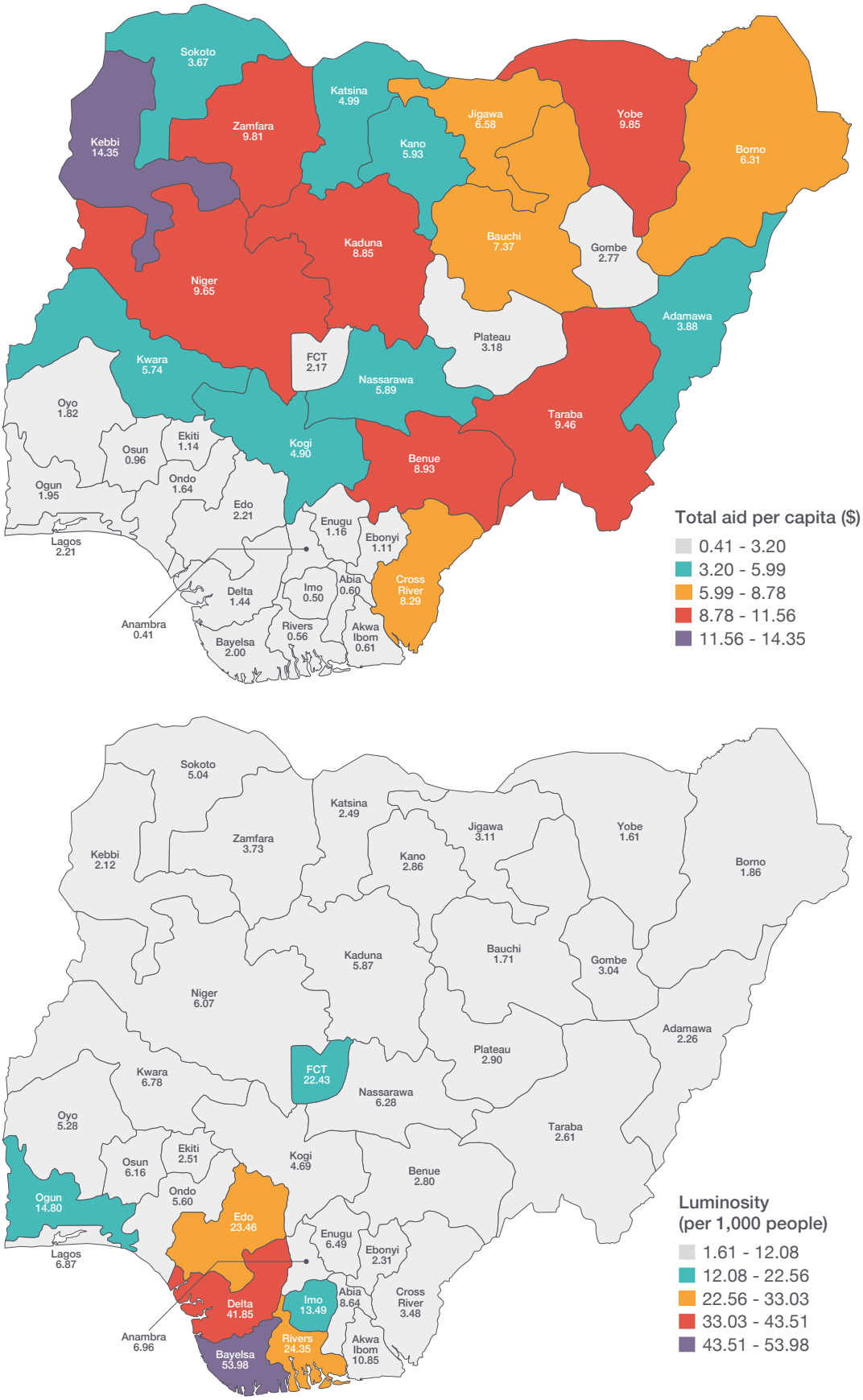
In Publish What You Fund's 2018 Aid Transparency Index (PWYF, 2018), fewer than half of the 43 assessed donors had published sub-national data.[10] While the official aid standard from the OECD DAC does not include sub-national data, other initiatives such as the International Aid Transparency Initiative (IATI) allow its reporting (although not every donor takes advantage of this). In addition, research bodies such as AidData have been collecting sub-national data for aid programmes intermittently. While these efforts provide a potentially rich resource for analysis, further work is needed. In a recent paper, Desai and Greenhill (2017) find that only 5 out of 21 aid recipients had sufficiently granular data to map aid against sub-national needs. The lack of transparency does not necessarily imply that the donors have no internal data on sub-national allocation, or that they do not try to match allocations to relatively worse-off areas, however. But the opaqueness of these aid flows is a negative for accountability, which might then have negative consequences on the flows to LNOB groups.[11]

Despite the paucity of sub-national data from donors, an emerging field of research is taking advantage of the limited existing data (see, for example, Civelli et al., 2017, 2018; Marty et al., 2017). From an LNOB perspective, a handful of studies have analysed the extent to which aid is flowing to the sub-national regions that need them most – a crude, but insightful exercise, considering the lack of other types of disaggregated data. Desai and Greenhill (2017) compare sub-national aid flows with two indicators on vulnerability, namely: night-time lights observed from satellite data as a proxy for poverty, and the Oxford Poverty and Human Development Initiative's Multidimensional Poverty Index, which is available on a regional basis. They find that in the four countries they cover, aid in Nigeria and Honduras is well correlated with the worst-off sub-national areas, while in Bangladesh and Afghanistan the correlation is the inverse (Figure 4).

10 Notable donors that had not published data include multilateral development banks (MDBs) such as the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB) and the International Finance Corporation (IFC), in addition to large bilateral donors such as Japan and Germany.

11 Although aid through budget support is rare these days, the degree to which this type of aid is LNOB-aligned obviously depends on how the recipient government allocates the funds. And the transparency of these allocations varies by country. See Owori (2018) for an example of an assessment of the pro-poor targeting in Uganda's 2018/19 budget.

Figure 4 Sub-national aid flows in Nigeria compared to sub-national variance in luminosity



Source: Desai and Greenhill (2017)

In a similar study, Marty et al. (2017) find that aid spending in the health sector in Malawi was not targeted at the areas with the worst health outcomes, but that the health aid *was* flowing to poorer areas, and towards areas with better health infrastructure. This highlights the importance of specifying exactly which aspect of LNOB one is looking at.

Refining this type of methodology further, Briggs (2017) analyses 50 x 50 km cells, rather than administrative regions, to assess World Bank and African Development Bank aid programmes in Africa. Comparing the geographical location of such programmes with various estimates of poverty at the cell level,[12] he finds that, on average, aid flows to the better-off cells rather than those that are worst-off.

3.4 Sectoral allocations

Assessing sectoral allocations builds on the assumption that vulnerable groups disproportionately benefit from some sectors more than others. While social sectors such as health, education and social protection receive a lot of attention in this context, supporting these sectors is not sufficient to ensure better outcomes (Greenhill and Rabinowitz, 2017). Sub-sectoral allocations also matter. However, again, it is important to note that these broad trends cannot substitute for a detailed understanding of local contexts in areas where donors operate, as these can vary from place to place.

3.4.1 Health: primary, universal health care

Within the health sector, studies have shown that providing universal health care improves health outcomes for poor people to a greater degree than it does for the average citizen. This is because the poor are more likely to rely on public health care than better-off citizens, who can afford to pay for private medicine (Moreno-Serra and Smith, 2012). Poorer groups also disproportionately benefit from primary health care, as opposed to tertiary treatment. For example, they are more likely to need treatment for common ailments, as opposed to specialised services by hospitals (Davoodi et al., 2012). The poor are also, by definition, less likely to be able to afford out-of-pocket expenditures. Additionally, in certain aspects of health, such as sexual and reproductive health, costs tend to be higher for women, which leads to further discrimination of an already vulnerable group (IPPF, 2017).

Aid to primary health care represents a fairly small share of overall ODA. In 2014-2016, 4% of sectoral allocable aid[13] was in the primary health care sector – but this amounts to more than 40% of total health funding, which is positive from an LNOB perspective.[14] However, some donors are more active in this area than others. GAVI, the Vaccine Alliance, is by far the largest donor, and is also the donor most focused on this area, with 99% of its aid being classified as primary health care. Among the large bilateral donors, Canada (with 7% of sector allocable aid classified as primary health care) and the UK (5%) are significant players. Figure 5 shows the share of aid flowing to health and primary health among the largest donors.

3.4.2 Education: primary/early childhood education

Echoing the focus on primary health care, evidence also suggests that primary and pre-primary education is more beneficial for vulnerable groups than secondary and tertiary education. Because much of the foundation for future learning is established during the early years, primary and pre-primary education is a core sector for improving equity and equality in

12 Night-time luminosity, mean travel time from cell to major city, distance from the center of the cell to the recipient's capital city, and cell-level estimates of child malnutrition and infant mortality.

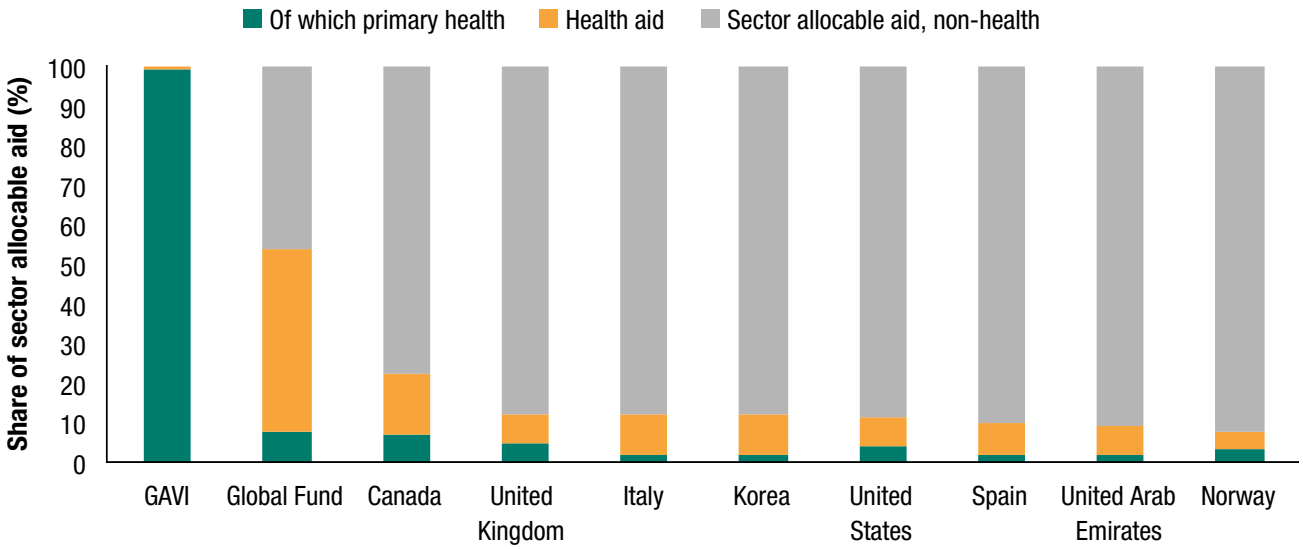
13 Sectoral allocable aid refers to programmable aid that is used for sectoral projects in recipient countries. It excludes budget support, humanitarian assistance and debt-related aid. In the CRS database it includes purpose codes 110** through 430**.

14 Health care here is narrowly defined as CRS purpose codes 121** (Health, general) and 122** (Basic health). As such, it excludes population policies and reproductive health, as well as sanitation-related projects. Primary health care is here narrowly defined as CRS purpose codes 12220 (Basic health care) and 12250 (Infectious disease control). Different definitions of aid to health care and primary health would yield different results.

outcomes later in life (Heckman, 2013; Rose et al., 2016; Blampied et al., 2018). Furthermore, poor and marginalised groups are more likely to attend and complete primary education compared to secondary or tertiary education (Davoodi et al., 2012; Alcott and Rose, 2015).

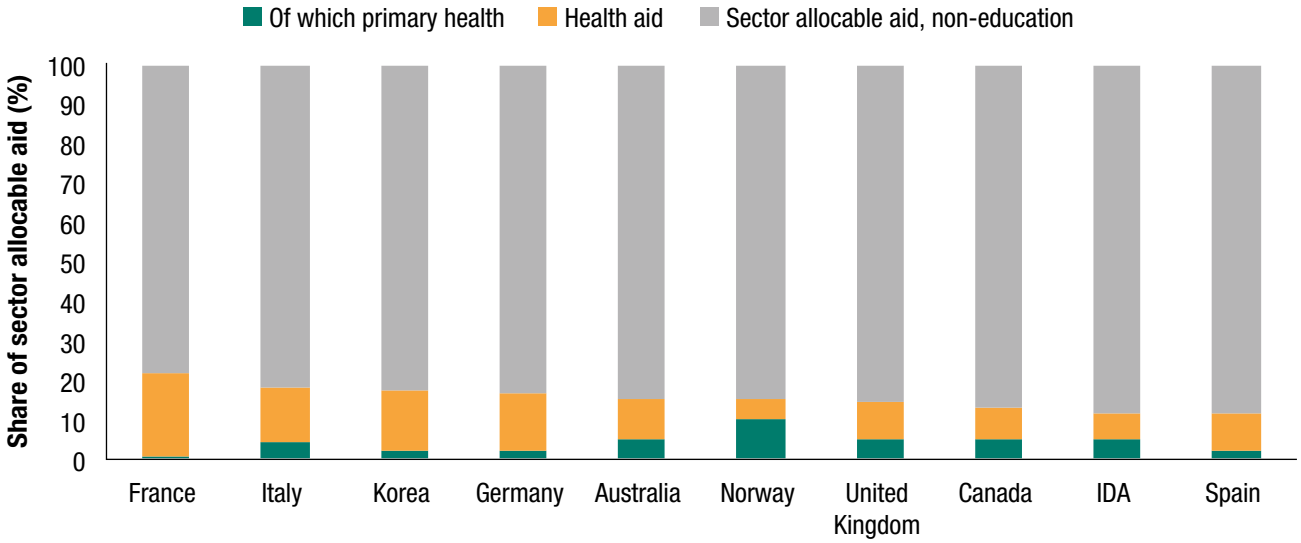
Compared to the health sector, a smaller share of education aid is directed at the primary level – 29% of total education aid in 2014-2016. Figure 6 shows the top 10 donors in terms of contributions to education and primary education.[15] Norway stands out as having an

Figure 5 Top 10 donors of ODA to health and primary health (2014–2016) as a share of sector allocable aid



Note: Top 10 largest donors in health aid, among the largest 25 donors in total (ODA) aid.
Source: OECD CRS.

Figure 6 Top 10 donors of ODA to education and primary education (2014-2016) as a share of sector allocable aid



Note: Top 10 largest donors in education and primary education, among the largest 25 donors in total (ODA) aid.
Source: OECD CRS.

15 Education here is defined as purpose codes 11*** (Education) in the OECD CRS dataset. Primary education is defined as purpose codes 11220 (Primary education), 11230 (Basic life skills for youth and adults) and 11240 (Early childhood education).

especially strong focus on primary education, both within its education spending and in terms of its total aid budget. Almost 10% of its sectoral allocable aid is directed at primary education, which amounts to 67% of its total education funding. This fact is noted in a 2018 review of Norwegian aid's alignment with LNOB, which also further commends Norway's aid policy for promoting education spending on particularly vulnerable groups such as girls, and its focus on education in emergencies (Greenhill and Engen, 2018).

3.4.3 Productive sectors: smallholder agriculture and micro, small and medium-sized enterprises

Because jobs and livelihoods are of crucial importance to any population – including vulnerable groups – it is important not to dismiss the value of aid to productive sectors in an LNOB context. However, this type of aid can be targeted at vulnerable LNOB groups to a greater or lesser degree. Typically, inclusive approaches involve targeting labour-intensive, small-scale ventures such as smallholder agriculture and micro, small and medium-sized enterprises (MSMEs).

Estimates show that 70% of the 1.4 billion people living in extreme poverty reside in rural areas, mainly working as smallholder farmers as opposed to on large-scale industrial farms (UNCTAD, 2015). Small-scale farms tend to be less technologically advanced and more labour-intensive than larger-scale agriculture, which results in more employment for vulnerable rural populations. Furthermore, aid to smallholder farmers can be beneficial not just for sustaining the livelihood of the farmers, but also because of its impact on food security – a major issue for many LNOB groups. Finally, the agriculture sector in general, and primitive smallholder farms in particular, are vulnerable to the negative effects of climate change, which leaves them in a fragile situation.

Aid to agriculture has been slowly decreasing in both absolute terms and as a share of total aid since the 1980s (Islam, 2011). From a peak of above 20% in the early 1980s, only 4% of total ODA went to the agriculture sector in the period 2014-2016.[16] However, analyses of the sub-sectoral trends show that small-scale farming has received increasing attention, with donors moving away from large-scale irrigation projects – a move that should be welcomed in light of the high proportion of the extreme poor who work in smallholder farming (ibid.). Looking more broadly at agricultural support, donor interventions to support smallholder farmers range from rural infrastructure and functioning rural markets to supporting technological upgrading and value-chain integration (Jaffee et al., 2011; UNCTAD, 2015).

However, not all employment in rural areas is in agriculture. While a majority of the poor live in rural areas, rapid urbanisation has led to a large number of people moving into employment in urban areas. In this context, a similar argument to the smallholder farmers has been made, but this time emphasising the importance of supporting MSMEs (both urban and rural) that, compared to larger-scale companies, are more labour-intensive and so support more employment. MSMEs also tend to require lower-skilled labour and are less rigid in structure, enabling them to offer employment on less formal terms. Taken together, this makes employment in MSMEs more available to vulnerable groups, which is why supporting such firms could bring a greater benefit to these groups.

While ODA to the industrial sector in general (1-2% of total ODA) – including that to SMEs (49% of ODA to industry) – is very low, most donor support to industrialisation and the private sector goes through DFIs.[17] Although most of the largest DFIs have activities involving SMEs, it is hard to tell whether the support reaches the most vulnerable groups; because DFIs deal with

16 Author's calculations based on OECD CRS data. Agriculture is defined as CRS purpose code 311**. Note that this captures a narrow scope of what is considered aid to agriculture (see Cabral and Howell, 2012).

17 Data from OECD CRS. Share of sectoral allocable ODA, 2014-2016, from the 25 largest donors. Industrial sector refers to purpose codes 32110-32182. SMEs refers to purpose codes 32130 (Small and medium-sized enterprises (SME) development) and 32140 (Cottage industries and handicraft).

private corporations, transparency is usually worse than for traditional aid, with less strict reporting standards. While supporting MSMEs is likely to have a positive impact in LNOB terms, studies have shown that DFI allocation in general is less focused on LICs than ODA (Attridge and Engen, forthcoming). Furthermore, it is common for DFIs to operate with a mandate of reaching a certain rate of return, which makes them less able to take risky investments in the most challenging areas – a reality that is at odds with the LNOB agenda (ibid.).

4 LNOB in a value-for-money context

Key takeaways:

1. LNOB programmes tend to have higher costs, but it is difficult to assess their cost-effectiveness because there are subtle benefits that accrue from targeting marginalised populations.
2. Donors should ensure that total costs and benefits, including indirect benefits of programmes are captured in initial specifications to allow for more realistic cost-benefit analyses.
3. Donors can also apply distributional weights to cost-effectiveness analyses to capture non-monetary equity aspects of targeting left-behind groups.

In addition to the practical concerns of where to direct allocations to reach the groups and individuals most at risk, donors can face difficulties justifying the higher marginal costs of an LNOB focus in a value-for-money (VfM) context. Here, the focus is on getting the maximum development impact for the least amount of aid spending. This section discusses how these two objectives interact, and what considerations donors should pay attention to.

4.1 How to justify LNOB compared to more cost-effective spending?

The principle of 'is the development spending and investment achieving value for money' has many names in different development and donor contexts. But the underlying concept is the same, namely to demonstrate that the investment to improve beneficiaries' well-being is resulting in outcomes and impacts on the ground that are worth the spending. Some organisations attempt to value these outcomes and impacts, while others simply count the results of a given investment. For most donors, VfM is an important concept to ensure there will be sustained resources allocated to aid spending and to demonstrate to shareholders/taxpayers that their money is being well spent.

In the context of budget constraints, an organisation normally accepts that a basic theory of distributive justice means that sometimes a relatively better-off beneficiary should give up something, or not receive an intervention, in order to improve the situation of a relatively worse-off beneficiary. In other words, goods provided to someone in great need is valued higher than if it is provided to someone who is relatively better-off. In political philosophy terms, this can be referred to as *prioritarianism*.

Such prioritisation of the relatively worst-off recipients is a core tenet of the LNOB agenda (Stuart et al., 2016). In practice, this can mean that a donor targets its resources solely to programmes that reach the most marginalised, or it can mean providing universal programmes with enhancements to those who are vulnerable.

Both of these approaches that go beyond the 'standard' project are associated with additional support or provision of services, and therefore greater project costs. The question, then becomes, how do donors justify the increased costs of LNOB projects, when they also have to demonstrate value for money in their spending?

There are two broad approaches to implementing this *prioritarian* principle to demonstrate value for money of LNOB programmes (whether this means bespoke LNOB programmes for the marginalised, or broader

programmes that are expected to achieve parity of outcomes for the marginalised): 1) LNOB *as a principle* and 2) LNOB *as a goal*.

LNOB as a principle frames the SDG LNOB commitment as a moral or a rights-based principle strictly outside any budget constraint or comparative considerations. The fact that a programme targets a vulnerable group is justification in itself, and the value for money of the programme does not need to match that of a non-LNOB programme. Furthermore, there is no need to compare the results between different marginalised groups, which themselves exhibit very distinct needs.

However, development organisations that take this as a starting point can still focus on ensuring that a given LNOB programme is implemented in the most cost-effective way and that it achieves the best value for money possible. In this context, the budget will be exhausted through a first-come-first-served principle, whereby all programmes are funded as long as they meet certain general criteria (for example, it must focus adequately on marginalised groups, must use an evidence-based approach to reach these groups etc.), until there is no budget left. In this case, VfM considerations also apply, but only as far as to take account of which *delivery mechanism* provides the best value for money or the most cost-effective option within an already agreed programme.

In contrast, LNOB as a goal views LNOB programmes as a sub-set of other types of development programmes, to be implemented within existing frameworks and budgetary mechanisms. LNOB programmes compete for funds with other (non-LNOB) development programmes and need to demonstrate why there is inherent value for money in reaching those who are worse-off in some way. They must prove why the *value* part of an LNOB programme is higher than a non-LNOB programme, in order to justify why the *money* part is higher. For example, whether it is better to reach five children who meet the definition of poverty versus one marginalised and extremely poor child.

Despite the potentially higher costs, LNOB does not need to be incompatible with VfM. However, it is not simply about achieving the greatest impact or the lowest cost: specific considerations need to be made when applying VfM concepts to LNOB programmes.

The standard approach to assess value for money (as set out, for example, by the UK's National Audit Office (NAO, n.d.)) is to consider the link between resources, inputs, outputs and outcomes. Three main criteria are used to assess this:

- **Economy:** minimising the cost of resources used or required inputs – **spending less**
- **Efficiency:** the relationship between the output from goods and services and the resources to produce them – **spending well**
- **Effectiveness:** the relationship between the intended and actual results of public spending (outcomes) – **spending wisely.**

In some cases, a further criterion of **equity** (**spending fairly**) is used: namely, the extent to which services are available to and reach all people that they are intended to. It is this dimension of equity that is central to LNOB programmes, and the SDG commitment prescribes that the equity dimension must cut across all three traditional measures of value for money.

For organisations with an LNOB-as-a-principle approach, limited concern for budget constraints and programmes that are solely focused on LNOB groups can mean simply applying the three VfM dimensions *within* each LNOB programme. That is, ensuring each programme in isolation demonstrates principles of economy, efficiency and effectiveness. This can work if there is no desire to compare LNOB programmes with others, or if there is only a need to compare with similar LNOB programmes and the programme itself is so focused and targeted (by common agreement and principle) that it only reaches a specific marginalised group.

As an approach, LNOB as a principle is simple and convenient but it also has some risks. It assumes that everyone agrees both on the prioritarian allocation of funds, and that the targeted group is indeed in need of special consideration. Additionally, if the aid climate changes, it could be easy to challenge the cost-effectiveness, worth and value for money of LNOB programmes and the need to reach those who are worst off if no credible assessment of the true costs and benefits is made.

For organisations that take an LNOB-as-a-goal approach, with programmes that seek to reach wider populations than LNOB, it is not adequate only to consider the internal value for money of each LNOB programme. Working within the standard VfM framework and without adequate identification of the full costs and benefits of these programmes would likely result in strong LNOB programmes. But they would likely compare poorly to development programmes that seek to work with easier-to-reach populations where benefits are easier to demonstrate and costs are lower in terms of targeting and resource requirements. There is a risk here that LNOB programmes will be perceived as less efficient, less effective and more costly, and therefore discourage investment. Again, whether the programme compares favourably to a more cost-effective non-LNOB programme in a VfM analysis, depends on what *value* you are measuring compared to *money*.

4.2 The economic costs and benefits of LNOB

In the previous sub-section we assumed that LNOB projects were inevitably more expensive than non-LNOB projects. There are a number of reasons for this, including the targeting of programmes themselves, as well as the higher costs of providing a service or incentive for an LNOB beneficiary to access. Many of the well-targeted programmes require complex methods and high levels of institutional capacity for appropriate identification of the targeted groups, as well as the provision of services to these groups (Dutrey, 2007).

There are studies that look at the costs of targeting services to the poorest, which may be a consideration for larger development schemes. Undertaking simulations of safety-net transfers in LICs, Smith and Subbarao (2003) calculated total administrative costs for targeting programmes at 30% of programme value (compared with 15% for universal programmes). A separate evaluation of employment guarantee schemes in three Indian states found the cost per daily job to be between 200 and 300 rupees, while the benefit for the recipient was just between 35 and 50 rupees (Weiss, 2004).

A report from the Education Policy Development Center and UNESCO estimates that it costs approximately 33% more per beneficiary to provide incentives such as school meals and conditional cash transfers to a marginalised adolescent, or programmes to attract teachers to rural and remote schools, but that this sort of targeted investment has a higher economic rate of return (EPDC, 2009).

However, in many cases, the appropriate assessment of costs of highly targeted projects and programmes is hampered by a lack of cost data, which is not routinely collected by many donor M&E systems. This makes full cost-effectiveness analysis of different development programmes very difficult.

While the available evidence suggests increased costs, demonstrating comparable benefits of LNOB programmes can be even more challenging as the benefits can be difficult to identify and quantify. In addition to data-collection challenges, there are also issues regarding the valuation of benefits to members of LNOB populations. They are perceived to be not only more difficult to identify and count, but also take longer to manifest themselves (for example, disabled children may miss school and therefore demonstrate lower short-term educational outcomes).

Indeed, a problem with VfM assessments (or any other cost-effectiveness assessments) is the challenge of capturing the full benefits of development programmes. Indirect benefits are often left out in particular (for example, freeing a caregiver to work when a disabled child is included in schooling), or insufficient time is left for the benefits to manifest themselves. Therefore, as part of any assessment of value for money, it is important to consider what the counterfactual is of not reaching the poorest or the most marginalised. This means looking at what would happen over an appropriately long timeframe if no investment is made to reach marginalised populations, and what impacts this will have not only on the marginalised populations but the surrounding communities as well. There is evidence that once the full economic benefits of reaching some of the marginalised groups are included, these programmes can be shown to provide good value for money (Carrera et al., 2012).

Box 4 Girls' Education Challenge (GEC)

The UK's GEC is a multi-project global fund aimed at improving girls' access to education. It is an example of where a donor has reflected on equity, and has explicitly selected interventions that reach the most marginalised groups, despite having high unit costs.

The average cost per girl per year in the GEC is around £100, albeit with a wide variation between projects (from £30 to around £800). GEC is investing in girls in many different ways, and there are numerous reasons why costs differ across projects: for example, projects are carrying out different interventions applicable to the local conditions and levels of marginalisation; or projects are buying different inputs and prices vary by location. Projects are also working with different beneficiaries. Two GEC projects work only with girls with disabilities. They target a small number of girls, and provide in-depth, individually targeted support. Their economy (cost-per-girl) metric is therefore high.

Ignoring equity considerations could lead to the conclusion that these projects do not represent good value for money. However, in the context of GEC, the higher costs per girl are accepted given the significantly higher costs of achieving learning outcomes for the most marginalised beneficiaries. As part of the project selection process, GEC phase 1 used a unit-cost metric. This was, however, a small criterion in the process and was primarily used to ensure that proposals were reasonable. The 'results and impact' criteria (i.e. an applicant's ability to achieve the programme objective of delivering learning for marginalised girls) were weighted much higher than economy metrics.

Source: DFID (2013).

There is also evidence that equity-enhancing approaches can deliver substantial returns. For example, a UNICEF (2017) report notes that equity-enhancing approaches, although more costly, deliver a substantially greater return in terms of lives saved, compared to equivalent levels of investment among non-poor groups. Further, it shows strong evidence of a welcome trend towards greater equity in many countries that have a high burden of under-five mortality. Carrera et al. (2012) also show through modelling that for the same level of investment, prioritising marginalised and deprived communities results in greater reductions in child mortality and stunting and better cost-effectiveness than for programmes targeting non-marginalised groups.

A systematic review by the London School of Hygiene and Tropical Medicine (LSHTM) identifies multiple pathways under the three domains of education, work and health through which economic impacts arise from exclusion or inclusion of the disabled in LICs and MICs. It identifies a wealth of evidence on the economic costs of excluding the disabled from these opportunities and services and, conversely, describes evidence of economic gains from their inclusion (see Box 5).

This evidence focuses solely on people with disabilities, but some of the studies could be extrapolated to the costs of inclusion or exclusion of marginalised groups from productive opportunities, and could be used when considering the economic costs and benefits of reaching marginalised groups. The studies also show the creativity in including a full range of true economic costs and benefits from supporting marginalised groups. These full economic benefits from inclusion and disadvantages of exclusion should be included in all assessments of cost-effectiveness.

Working within the existing VfM framework means identifying and counting the costs of working with LNOB groups, but also valuing *all* the benefits, including indirect benefits, to these groups. When this is done appropriately, it may be possible to show that many LNOB programmes do indeed result in greater benefits or value for money than non-LNOB programmes (see Box 6 on examples of the benefits of programmes targeting women and girls).

Box 5 Key findings from the LSHTM review on global impacts of disability

- The global annual productivity cost of blindness was estimated at US$168 billion in 1993. Unaccommodated blindness and low vision cost $42 billion in 2000, but when the productivity loss from caregivers of blind individuals is also included, the total productivity loss increases by a further $10 billion.
- Economic losses from lower productivity among people with disabilities across all LICs and MICs amounted to between $473.9 billion and $672.2 billion a year in 1996-1997. For 10 LICs and MICs, costs from lower labour productivity amounted to approximately 1-7% of gross domestic product (GDP).
- Education can close the poverty gap between people with and without disabilities: across 13 LICs and MICs, each additional year of schooling completed by an adult with a disability reduced the probability by 25% that his/her household belonged to the poorest two wealth quintiles.
- In Bangladesh,
  - reductions in wage earnings attributed to lower levels of education among people with disabilities and their child caregivers cost the economy $54 million per year.
  - exclusion of people with disabilities from the labour market has resulted in a total loss of $891 million per year; income losses among adult caregivers adds an additional loss of $234 million per year.
  - children who were provided with assistive devices (e.g. hearing aids or wheelchairs) were more likely to have completed primary school compared to those who did not receive any support.
- In Nepal, the inclusion of people with sensory or physical impairments in schools generated wage returns of 20% in 2008.
- In China,
  - each additional year of schooling for people with disabilities led to a wage increase of 5% for rural areas and 8% for urban areas.
  - a randomised control trial from 1994 involving individuals with schizophrenia found that those who received individualised family-based interventions (consisting of counselling and drug supervision) worked 2.6 months more per year than those who did not receive the treatment.
- In Morocco, lost income due to exclusion from work resulted in national-level losses of 9.2 billion dirhams (approximately $1.1 billion).
- In South Africa, lost earnings averaged $4,798 per adult with severe depression or anxiety disorder per year between 2002-2004 (about half of GDP per capita), totalling $3.6 billion when aggregated to the national level.
- In the Philippines, excess unemployment among individuals with unrepaired cleft lips and palates cost the government between $8-9.8 million dollars in lost tax revenue in 2012.
- In the United States, concerted efforts by the major companies Walgreens and Verizon to employ significant numbers of people with disabilities saw gains of a 20% increase in productivity and a 67% return on investment, respectively.

Source: Banks and Polack (2014).
Note: All figures are given in US dollars unless stated otherwise.

Box 6 Benefits of targeting women and girls

There is relatively strong evidence on the benefits of targeting girls and women – partly because sex is an easily identifiable characteristic (and therefore is easy to measure), and partly because gender inequality has been on the donor agenda for longer than other types of inequalities.

Girls who are provided with education or second-chance opportunities for education are likely to make important economic contributions to their local and national economies, as well as to their own families. In a recent overview of the literature, Sperling and Winthrop (2016) show that targeting women has benefits in a range of areas, from women's earnings and employment, to maternal and infant health, and to educational outcomes for children. For example, data from nine countries across Africa, Asia and Latin America have shown that completion of primary education increases girls' earnings from 5% to 15% over their lifetime, while boys experience a rate of return of between 4% and 8%. Additionally, increasing girls' secondary education by 1% results in an annual income increase of 0.3% per capita (Chaaban and Cunningham, 2011).

While a Population Council report on the cost of reaching the most disadvantaged girls using programmatic evidence from six countries (Egypt, Ethiopia, Guatemala, Kenya, South Africa and Uganda) finds that the costs of reaching the most marginalised can be higher, the study shows that there are significant benefits of doing this, and that the returns can outweigh the costs of investment (Sewall-Menon and Bruce, 2012).

4.3 Factoring in distributional objectives of LNOB

In addition, but separately, to identifying and valuing all benefits that accrue to LNOB groups and communities, it is also useful to consider whether the distributional objective of the SDG commitment should also be included explicitly in VfM and cost-effectiveness assessments.

Accepting the SDG commitment and the prioritarian principle implies that equity should be integrated into VfM and cost-effectiveness considerations explicitly. In practice, this means acknowledging that each unit of benefit that accrues to a marginalised individual is valued more highly than if the equivalent benefit were to accrue to a non-marginalised individual. These distributional objectives can be explicitly adjusted for in economic analysis and when making VfM assessments. Indeed, economic tools and mechanisms are already being used in non-development sectors to make explicit statements about distributional valuations.

4.3.1 Cost-effectiveness analysis

One of the most common tools that is used to assess value for money is *cost-effectiveness analysis* (CEA), which can be relatively easily adapted to include explicit distributional considerations to reflect donors' or decision-makers' value judgments. CEA does not provide information on whether a programme should or should not take place, but rather it is a tool to assess how much value for money each programme is providing, and is a useful instrument to identify and value different options under consideration. It is often used to make comparisons or as an absolute test in health care settings, where programmes may be funded as long as cost-effectiveness ratios are above an agreed figure.

The standard approach to cost-effectiveness calculates the average cost associated with the average impact, which can be measured in terms of specific outcomes (e.g. years at school and certain health outcomes). Cost-benefit analysis (CBA) does exactly the same, but the benefit is monetised. For the rest of this paper, the term CEA is used in place of CBA, as most of the same considerations apply to both. Also, in practice, CEA is more commonly applicable in the development context due to the challenges in monetising and valuing benefits.

CEA is preferable to unit-cost comparisons (e.g. US$ per student) when valuing donor programmes, as the latter only emphasise the higher cost of LNOB programmes over non-LNOB programmes. However, the benefit-side

of the equation is also very important to value appropriately, as the kinds of benefits to individuals, groups and the wider society – and the rate at which these benefits occur – are likely to be different for more marginalised groups.

Standard CEA is indeed an improvement to unit-cost comparisons, but it still does not account for the fact that the benefits may accrue more slowly or at a lower rate for marginalised groups, or simply that a society may place a higher value on benefits to the more marginalised (as is the case within the LNOB agenda, and in many societies more generally, i.e. in health care settings in many European countries). This means that additional adjustments such as weighting should be made to standard CEA – or altogether different methods should be considered to ensure that this distributional objective can be incorporated.

4.3.2 Distributional weights

CEA is itself insensitive to distributional considerations. However, there is an extensive literature from the past 60 years describing the use of *distributional weights*, and possible ways to measure them (see Adler (2016) for an overview). The purpose of distributional weights is to weigh the benefits that accrue to individuals in certain groups (in our case vulnerable LNOB groups) more heavily than those individuals who are classified as outside these groupings. A relatively straightforward indicator used to weigh distributions is income, as it is easily measured and is relatively objective (see Box 7).

Distributional weights could be – and are already being – applied to other programming areas and in the development sector to adjust gains from income and consumption. The approach can also be amended to apply to non-income characteristics (for example, health status, or level of marginalisation – provided that these can be measured). Takeuchi (2014) separates between normative weights (equal weighting), elicited weights (reflecting people's perspectives) and data-driven weights, each with their own benefits and weaknesses. It is important to note that weighting would not be done on the basis of declining marginal utility (i.e. the expectation that an additional year of good health is valued differently by different income groups), however, but on the clear basis of the SDG commitment where the outcomes for the most marginalised are valued more highly.

One of the difficulties with this approach is that it requires significant and explicit assumptions to be made about the appropriate weights. This is not an argument for not using the weights, only that the assumptions that are made are transparent and clear. It is also important to note that equity-weighting also requires that all costs and benefits are aggregated into a common metric to which weights can be applied (e.g. life years, risk of morbidity). This makes the approach particularly applicable to health interventions, where it is commonly used (see Box 8).

Another difficulty with equity-sensitive CEAs is the significant data requirements. However,

Box 7 Distributional weights and income

A common use of distributional weights is to give benefits to individuals based on their income. The theoretical rationale derives from the law of diminishing marginal utility, which states that an extra dollar for the very wealthy produces lower benefits from additional consumption than an extra dollar to a very poor person. Empirically, however, the evidence is inconclusive (Easterlin, 2004; Layard et al., 2008; Stevenson and Wolfers, 2013).

For a real-life example, the UK Government's official guidance on appraising and evaluating policies and projects uses a framework for standard CEA with distributional weights for income (HM Treasury, 2013). After costs and benefits have been identified, any distributional impacts (the effects of interventions on different parts of society) should be taken into account, and the guidance explicitly recommends that impacts on various groups of society should be considered. It is expected that the distributional weights are used in government appraisal, and a decision not to use them must be justified.

Box 8 Distributional weights in the health sector

Most examples of the application of distributional weights come from the health sector, which is data rich and has a long tradition of measuring and valuing health benefits under budget constraints. Studies in developed countries have shown the willingness of the public to accept a trade-off to improve the health of those who are worse off (in terms of health), and to reduce health inequality even if it comes at a cost to overall welfare (Hernæs et al., 2017).

An interesting and relatively simple practical example of skewing CEA in favour of relatively worse-off individuals in the health sector has been applied in Norway. Here, the Official Committee on Priority Setting in the Health Sector proposed an explicit framework for integrating distributional weights into CEAs (which was endorsed by Parliament in 2016). The Committee proposed that when considering health benefits and incremental cost-effectiveness, greater weight is given to health gains, the greater the future health loss due to disease. That is, those who are worse-off in terms of health, should benefit more than those who are relatively better-off through a relatively simple formula – individuals are weighted one, two or three depending on their expected future health status (Norwegian Ministry of Health and Care Services, 2017).

they do not have to be complex to implement. The identification of weights requires a valuation exercise, but could at minimum be a crude judgment of 'those who are classified as marginalised should benefit twice as much', or 'those who have less than the average share of the benefit should receive proportionally more of it'. Weighting can be done as a continuous marginal weighting function (i.e. depending on the identified benefits, the weights change for each outcome/condition), or categorically (i.e. one group gets one weight, while another group gets another). The latter is perhaps more crude, but has the benefit of being simpler and easier to communicate.

It is worth noting that assumptions about weights are of course already regularly made in standard economic analysis. Indeed, not including any distributional weights is itself a value judgment. The most conservative approach would be to vary the weights between different groups and to undertake sensitivity analysis using different weights to the same situation (or no weights at all). The results of this could then be used to help decision-making and to consider the different trade-offs and value judgments that are being made.

In summary, the question of how complicated the distributional analysis should be is relevant. On the one hand, the economic tools available can be adapted to take into account multiple dimensions, and to include a refined analysis of different individual characteristics based on existing evidence (e.g. marginal utility of consumption). While on the other hand, they can be conceptually very simple where a unit of benefit is simply valued more highly if it accrues to a some-way marginalised individual. Annex A describes distributional analysis in greater detail.

For projects adopting a form of distributional analysis or weights, the method for calculating these weights should be explicitly and transparently explained, and the assumptions underpinning the choice of the weights should be clearly stated. This should also be built into standard M&E requirements, as these calculations have high data requirements (both in terms of quality and specificity) that are not always available from the administrative data systems. Any consideration of the changes in equality and relative inequality requires an assessment of the distribution of the level of inequality at baseline, as relative inequality impacts depend on the baseline levels, as well as the absolute changes. These considerations can be included when designing donor M&E systems, which could be adapted to provide the information to enable equity-sensitive CEAs to be performed.

In the longer run, applying different distributional weights could lead to the creation of *equity benchmarks*. These could be shared among a range of stakeholders and beneficiaries for

consultation to ensure there is country ownership, as well as wider acceptance of the value that donors place on the LNOB agenda and the different distributional weights that are applied.

Finally, it is useful to acknowledge that while these approaches provide the technical tools to address equity and help support decision-making, they don't in themselves provide any final answers.

5 Institutional set-up

What does an LNOB donor look like institutionally? Little research has been done on the role that institutional set-up plays in enabling a donor, or a donor agency specifically, to carry out the recommendations set out above and to enact LNOB-focused policies and activities. However, some assumptions can be drawn from the above discussions.

1. An LNOB donor would be well-served having some degree of autonomy from wider domestic political debates. As outlined in this paper, depending on how you assess the impact, donors may have to accept a lower return on their aid in a VfM context. This type of risk-taking and experimentation – and, perhaps, in the public's view, less impressive results – requires a certain autonomy on the part of the donor agency (Gulrajani, 2015). This is particularly true in an age where the aid industry faces pressure to serve national interests and a myriad of other objectives than LNOB (Gulrajani, 2017). In contexts where they don't have this autonomy (and perhaps also in the above circumstances too), donors will have to work harder to make the case that helping the poorest and most marginalised, and those who have already been left behind from progress, is the very goal that aid is supposed to achieve.
2. As LNOB is a cross-cutting issue that is not limited to any one region or sector, donors with already functioning cross-cutting focus areas will potentially have less difficulty implementing such an LNOB focus. To our knowledge, no donor yet has a specific LNOB section or even formal policy position, but (once again) the mainstreaming of gender can provide some guidance. For example, the Swedish International Development Cooperation Agency (Sida) points out that internal human resource practices have to be aligned with programme goals; if the gender balance among Sida's decision-makers and implementers is unequal, it could make partners doubt their commitment (Sida, 1998). Furthermore, it highlights the responsibility of individual staff members to be trained in and aware of the pervasiveness of gender imbalances, even those who are not at first glance involved in gender-related projects (ibid). These are lessons that could be transferred to other areas of the LNOB agenda.
3. Reflecting the aid allocations discussed in section 3, it can be assumed that donors with a greater presence in fragile (and otherwise left-behind) countries are better suited to target populations at risk of being left behind. Donors vary in the extent to which they are present in such situations, which partly reflects institutional set-up (Gulrajani and Honig, 2016). Further, certain agencies, such as DFIs and MDBs have mandates requiring them to maintain certain rates of returns, which can exclude them from doing work in the most difficult situations and thus from reaching populations most at risk of being left behind (Attridge and Engen, forthcoming).

While these overall considerations give a brief outline of what is conducive to leaving no one behind, further research is warranted on this topic.

6 Conclusion

It is clear that to realise the commitment to leave no one behind requires an adapted approach to measurement and M&E, and to the assessment of cost-effectiveness and value for money when making allocation decisions. Whether a donor or a development organisation approaches *LNOB as a principle* (and thereby accepts that it is a programming area that must be done regardless of the costs and benefits), or views *LNOB as a goal* (and needs to justify the investment in comparison to other potential investments), it is important to be able to demonstrate the value for money of LNOB programmes and investments.

Interventions that offer the greatest increase in the desired outcome (whether for health, education or another benefit) do not necessarily improve the distribution of this benefit. Equally, programmes that offer the most equal distribution of benefits don't necessarily result in the greatest increase in overall development outcomes. There will be trade-offs and it is useful to be transparent about these and to quantify and qualify them where possible.

Regardless of the approach that is adopted to measuring VfM, the first step must be to **identify and define the groups that are considered to be part of the LNOB population.** This varies from one organisation to the next, but each organisation developing a results chain or a theory of change should clearly identify who are the LNOB groups that their intervention is trying to capture, or who is likely to be involved.

The next step is to count these people, and this means **ensuring data is collected – in an ethical and sensitive way – that allows for disaggregation** and measurement of results, outcomes and impacts for LNOB groups and individuals, as distinct from non-LNOB groups and national or regional averages. This is complicated, but bespoke M&E systems should be able to do this, and it is often already done for more commonly known groups (for example, women and girls).

In lieu of detailed disaggregated data, there are groups and categories that are more likely to be falling behind. **Targeting the most likely left-behind groups can be a cost-effective, if imperfect, way of allocating resources.** This includes targeting groups such as women, children and people with disabilities, those in poor and fragile countries, relatively worse-off regions within countries, and primary services such as in health and education that vulnerable groups are more likely to benefit from. While this does not solve all the problems in identifying left-behind *individuals*, it can be considered a relatively simple and cost-effective stepping stone.

Only once the individuals and groups have been identified and counted, can their benefits and subsequent impacts be measured. Part of the equation is costs, however unit costs are not often collected for many standard development interventions and populations – let alone the more marginalised groups – in a way that allows for appropriate cost-effectiveness assessment. **To assess the costs of delivering interventions to LNOB groups, detailed disaggregation of the costs of delivering the interventions to these groups should be undertaken.**

Having identified, defined, counted and measured, there is a need to undertake **the most controversial but crucial step of assigning value to the benefits for LNOB populations.** At a minimum, care should be taken to value all the benefits – and crucially also the indirect benefits – that arise from reaching LNOB populations, such as wider societal benefits from increased productivity and better health and educational outcomes (depending on the specific intervention), while ensuring that an appropriate timeframe is used to allow for the benefits to materialise. This may require a level of creativity and additional formative research to fully understand how the lives of those belonging to a marginalised group are affected, and what the true benefits are for individuals and to society from improving the lives of LNOB groups.

An approach that builds in equity impact assessment and weights the outcomes differently, will allow decision-makers to **scrutinise the trade-offs and identify if benefits are being appropriately distributed.** This can be done through explicit definition and application of equity weights that assign a greater value to the results and benefits for left-behind groups, as compared to non-LNOB populations.

Finally, the institutional setup for donors to allow all of the above is not well explored in the literature. But it is safe to assume that higher degrees of autonomy to allow risk-taking and experimentation, and structures and mandates that allow for working in difficult contexts, are **positive aspects for institutional set-up that will enable donors to engage with the LNOB agenda**.

We have provided here only a handful of considerations for donors, and there are undoubtedly important aspects not covered in this working paper. Furthermore, as the LNOB agenda is being put into action by donors, new issues and solutions are likely to emerge. For the LNOB objectives set out in the SDGs to be more than lofty ambitions and to be translated into action, it is paramount that discussions in this area continue.

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Annex A Distributional analysis in decision-making

Economic analysis can address equity in different ways, and there is considerable evidence how this has been implemented in the health sector (in both developed- and developing-country settings). Table A1 sets out three approaches for considering how equity can be incorporated into economic analysis in order to consider trade-offs in spending.

These approaches are a variation on the same theme, but conceptualise equity slightly differently, and use the same tools of analysis to produce different metrics and answer different questions. All approaches ultimately support decision-making where there are budget constraints and questions over fairness versus overall allocation of resources. Equity impact analysis simply measures who are the winners and losers from one intervention. This has been incorporated into a form of CEA called Extended CEA (ECEA, described below), but can be undertaken outside CEA to look at changes in behaviour or utilisation.

The second approach suggests posing an 'equity constraint' to decision-making. The analysis is structured to measure the cost of choosing a more equitable but less cost-effective option through 'equity weights' for health benefits that apply to people with different characteristics. The loss that is associated with the fairer (more equitable) option then provides an estimation of the value that is placed on the equity constraint. This approach can be implemented in standard CEAs that compare options under a budget constraint or by using more complex mathematical modelling to compare choices involving different amounts of expenditure on different programmes. The criticism is that this approach places equity as a constraint to the results rather than as a goal in its own right.

Table 1 Three approaches for using CEA to incorporate equity

Approach	Description	Questions answered
1. Equity impact analysis	Disaggregation of the relevant costs and benefits by different groups, providing a dashboard of results.	How much do different groups gain or lose? This may be in terms of money, health services, health outcomes or other outcomes related to ill-health and access to affordable health services, such as financial risk protection.
2. Equity constraint analysis	Calculation of the health opportunity cost of choosing a fairer option rather than a more cost-effective option.	How much total health benefit is foregone if a more cost-effective option is ruled out on equity grounds?
3. Equity weighting analysis	Sensitivity analysis around the value of health equity impacts, based on different concepts of inequality, and the strength of concern for reducing health inequality.	How large is the health equity impact in terms of standard summary metrics of inequality? How much concern for health equity is required to choose a more equitable option compared with a more cost-effective option?

Source: Adapted from Cookson et al. (2016).

The third approach quantifies the total impact through sensitivity analysis to identify what value is placed on equity to recommend a fairer option rather than the option that maximises benefits.

There are three practical derivations of the standard CEA methods that have been developed in recent years in the health care setting. These build in a form of equity-sensitive CEA and equity constraint within a broader economic valuation, and therefore incorporate elements of the three broader approaches to equity (Cookson et al., 2016). Although initially complicated to implement, they demonstrate that economic analysis can be adapted to explicitly build in an equity-focused approach, when working with non-monetary benefits (like health). There are limited applications outside the health sector, but in principle it would be possible to build them into development assessments to enable decision-makers to value the benefits of reducing inequality within the targeted populations (i.e. allowing the LNOB groups to catch up) versus focusing on total benefits for the beneficiary population as a whole.

The University of York has developed a specific framework for equity-sensitive analysis in health care settings in developed countries, namely, distributional CEA (DCEA) (ibid.). This method focuses on the distribution of health effects and the distribution of health opportunity costs from displaced expenditure within a fixed health care budget using quality-adjusted life years (QALYs) and disability-adjusted life years (DALYs) as the common metrics. Asaria et al. (2015) used the DCEA method to examine the distributional health impacts – by social deprivation, ethnicity and sex – of targeted versus universal reminder strategies for increasing uptake of bowel cancer screening. They demonstrate that the analysis can work, but find that the targeted strategy delivered a smaller gain in total health but a larger reduction in health inequality.

DCEA combines multiple inequality impacts on different social groups in the same analysis and compares them in size. It also aggregates all costs and effects into the common metric of net health benefits and presents findings in a disaggregated form. This equity impact metric could then be weighed against a standard cost-effectiveness metric using an overall equity-weighted index of social welfare that combines concern for both equity and cost-effectiveness.

Another variation of CEA in health care settings is ECEA, developed by the Disease Control Priorities DCP3 project.[18] The ECEA approach studies the social distribution of costs, health impacts and financial risk protection (poverty reduction) effects.

A third variation of distributional equity impact analysis is known as benefit-incidence analysis (Kruse et al., 2012). This analysis focuses on the benefits of public health care spending as a whole for different social groups. It looks at the average benefits of current expenditure rather than the marginal benefits of potential future changes in expenditure, and looks at health care consumption and coverage. Some recent benefit-incidence analyses have also used data on regional variation and change in expenditure and outcomes to estimate the health outcomes of marginal changes in spending. This approach could be adapted to inform investments in development health care settings.

The skills required to undertake any form of equity-sensitive CEA are the same as for standard CEA. However, the data requirements are more significant as averages cannot be used and information on social distribution of key indicators is required. Although these newer methods have been developed and largely tested in developed-country settings, there is evidence they can work in developing-country settings too. For example, the DCP3 project used UNICEF's MICS and ICF International's DHS to undertake ECEA.

18 See www.dcp-3.org

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